

ANECDOTES OF A LIFETIME

Memoirs of a Professional Geologist



As Recalled by

MICHAEL D. CAMPBELL, P.G., PH.

With Daniel Moore

Anecdotes of a Lifetime

Memoir of a Professional Geologist



As Recalled By

Michael D. Campbell, P.G., P.H.

A Professional Geologist and Hydrogeologist

and

Husband, Father and Grandfather

with **Daniel Moore**, Journalist and Writer

Second Edition (PDF)

Dedicated to My Children and Grandchildren

Cover Design by Jessica Campbell Bludau

Editing by: Roger W. Lee, Ph.D., P.G.

Jessica C. Bludau

and

Mary Wiley Campbell, C.G.

Second Edition
May 1, 2024

Offered via the Kindle Version (as PDF).

Copyright© 2023 by Michael D. Campbell

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted copyright law.

Printed in the United State of America

Library of Congress Control Number: 2023931894

ISBN E-Book (PDF) 979-8-88887-196-6

I2M Press
25707 Madison Falls
Lane Katy, Texas 77494
I2MCorporation.com

Table of Contents

	<u>Pages</u>
Preface	4
Introduction	5
Chapter One, 1941, World Wars to Win	9
Chapter Two, 1946, A Country to Build and Others to Help Recover	18
Chapter Three, 1956, A Family Member Goes Down but Recovers	40
Chapter Four, 1959, The First Born Trials, Tribulations, and Successes	71
Chapter Five, 1962, The Training, A Bump, and the Beginning	106
Chapter Six, 1963, Retooling and Realizations	125
Chapter Seven, 1966, Heading for Australia and Beyond	163
Chapter Eight, 1969, The Return to the States and Onward	238
Chapter Nine, 1973, Heading for Rice University and Forward	266
Chapter Ten, 1976, A Settled Life Begins with Travel & Gold Mines	287
Chapter Eleven, 1988, Corporate Management & Industry Geoscience	333
Chapter Twelve, 1993, A Change in Direction with Private Practice & DNA	353
Chapter Thirteen, 2016, Viruses of the Mind and Body	399
Chapter Fourteen, 2022, Conclusions and Reflections	410
Chapter Fifteen, Epilogue	421
Chapter Sixteen, Acknowledgements	422
Chapter Seventeen, Fields of Activities, Major Reports & Publications	423
Index	451
Last Page	456

Preface

An Extended Audio Version of Preface ([here](#))



Preface by Daniel Moore, Journalist and Writer

Gliding down from 8,000 feet over the high rocky hills of northeastern Sudan, the pilot guided the small, bright orange, high-wing plane with big tires to a bumpy, dusty landing on a dry streambed along the contested border with Egypt. A tall, thin professional geologist with a wide-brimmed hat and sun-glasses and his assistant dug through the rocky outcrops searching for key geological indications to gold, uranium, and other mineral deposits that could result in mines to provide revenue for his client's mining company and royalties for this poor African nation's future. They collected rock samples to be analyzed for their elemental content and monitored for anomalous radioactivity along the way, but the energy minister called off the hunt. He insisted at the last minute on new rooms of imported furniture for his mansion as part of the deal with the client. The client refused and pulled the plug as the President, who was enroute to Khartoum to sign the deal, turned the corporate jet around and returned to Houston.

He was a long way—physically and culturally—from Lancaster, the small industrial town in Ohio's Appalachian foothills where he was born and raised to maturity during the 1940s and 1950s. It's perhaps no surprise that he, who forged a work ethic and scientific curiosity there, later became a successful and well-recognized geologist of our time. In his memoirs, *Anecdotes of a Lifetime*, he tells the story of his rise to prominence in exploring for and developing the Earth's natural resources with an environmental consciousness that drives modern society today.

His Sudan trip in the early 1980s came amid a flurry of journeys to other far-flung lands that were to continue for 40 years, such as France, Germany, Tanzania, Palau, Vietnam, Hong Kong, Japan, Sri Lanka, India, Italy, Sweden, South Africa, Zambia, Mexico, Canada, and many trips to Australia, the latter from the mid-1960s to the 2010s. He traveled on projects for the United Nations and UNESCO for developing or improving groundwater supplies and for mining companies developing other critical natural resources, many with his son, who is also a geologist. In the United States, he criss-crossed the country staking mining claims from New Mexico, Utah, Wyoming to Alaska and contributed to understanding the need for transition to cleaner, abundant sources of energy. He pressed for U.S. energy and mineral independence by embracing nuclear power and critical minerals, such as those containing uranium and rare-earth elements, and by preparing for the mining of the resources of the future from off-world sources to come.

Along the way, he met a coterie of characters that personify 20th-Century America: associates, mentors, professors, girlfriends, two wives, four children, his high-school golfing friends into the 21st Century, and numerous other colleagues and employers over the years. He recalls them in vivid detail as the country moved from post-WW2 idealism to the paranoia and rising divisions of the Cold War, Vietnam War, and recent fascist period. Motivated by a desire to give his family a better life, he climbed the corporate geoscience ladders, working for Conoco, Law Engineering, ENSR, DuPont, Teton Exploration, Div. United Nuclear Corporation, and formed several companies and mining ventures. He published three technical books (one by McGraw-Hill) and hundreds of papers and reports; served as an expert witness in some 40 cases; sat on the editorial boards of a number of prestigious scientific journals; and served as the uranium committee chair for 17 years in a prominent geoscientific association. He was elected its President (2010-2011) and over the years he has been designated as a Fellow in prominent geoscientific societies (and as a long-term Officer) in the U.S., Australia, and the UK.

With a commitment to following the geoscientific facts, *Anecdotes of a Lifetime* imparts wisdom gained over his 80 years of personal and professional experience striving to understand the world and its geology and to harness and manage its natural resources. He takes the reader on a humorous, personal, touching, dangerous, life-threatening, and ultimately triumphant adventure, documenting the turning points, the mistakes, and life-shaping lessons he learned—ultimately understanding the sustaining value of family and friendship and how outright luck was clearly in play throughout his life.

Introduction



The Oldest Building on the Ohio State University Campus. Winter, 1965

This book chronicles the struggles of a boy of the 1940s from a middle class family in central Ohio in becoming years later a prominent professional geologist well known in the U.S. and around the world. His memoirs are a testament of one person's commitment to moving forward with one's life, to learning more about the world around him, to confronting serious impediments while still following his interests. Pure luck, combined with an accumulated coterie of risk-adverse responses, offered with the support and encouragement of his mother and father, by his grade-school principal, by his high-school friends and teachers, by some of his college professors, by many of his employers, and by his wives' unerring support, by his son's invaluable capabilities in the field and with computer systems, and with the moral support of his daughters and his sister and brother, altogether allowed him to go after his dreams of traveling the world in worthwhile pursuits, documented for the purpose of making a paper and digital record to be available to his family's future generations. Before embarking on the adventure of reading this book, an audio recording highlighting the author's abbreviated biography will introduce you to the main character ([here](#)).

His story provides incentives to those coming from families less well off in American society, where commitment builds confidence, which overcomes failures and fosters success. This is the principal thread throughout the story of a little boy growing into manhood and professional maturity illustrated by anecdotes of mistakes and successes along the way that impacted and reinforced his thinking and behavior throughout his life as a professional geologist, husband, father and grandfather.

The author recalls, in 3rd-person prose, his memories in context with world events beginning when he was born into a world of fascist political explosions in the early 1940s as London was under bombardment by the Germans and the Japanese had committed to attacking Pearl Harbor only a few months after his birth. He recounts the stories of his parents as they rose to the occasion with the ability to help their country go to war against the fascist outbreak in the world by working for the War Department and aircraft manufacturers in Ohio.

His mother, Maxine, was born in 1920 from German and English heritage and was raised in a very small town in NE Oklahoma and eventually moved to Chillicothe, Ohio, for high school. Her mother was a nurse at the local hospital. Maxine selected an unassuming, quiet man as his father, who was born in 1913 and

raised in the Bremen, Ohio, area. His Dad and his brothers spent many years in the Children's Home in Lancaster, Ohio, because his Dad's father was in prison and his Dad's mother most likely thought that she did not have the means to raise three sons alone during the early 1900s.

This is also a story about how Maxine, who served as a bookkeeper for a local hardware store and a Cub Scout Den Mother, encouraged and provided opportunities for him to study music in his early years and how his father, Clarence, who served as a Boy Scout leader and the coach of his little league baseball team, which won the championship that year. In his early years, his family lived near a rough neighborhood of bullies and he had to learn to defend himself, guided by his father, who operated a pool hall down the street. He was not aware that his family was not well off at the time because in that grade school everyone was the same. It is also a story of how his parents steadily increased their family income to the point they could eventually move to a less hostile Catholic area of town, although he also had to establish his position as the only Protestant in the neighborhood with the local Catholic boys through sports such as baseball and tennis, and an occasional fist fight.

As he progressed through high school, his mother became a significant force in the town's politics by serving on the school board and helping to promote bond issues to build more schools and attract and hire qualified teachers. She dealt successfully with throat cancer (a one in a thousand chance of recovery, said the doctors involved in her treatment), while his parents continued to create a loving home environment that supported his budding interest in the sciences in his basement laboratory and science club at school.

He also had to defend himself from earlier grievances of the bully-boys now in high school, which could easily have been deadly for him or for one of his attackers, he recalled. One of many close calls to disaster, an accident occurred in 1957 that involved an explosion during one of his many test firings of a rocket engine he had built that sent shrapnel out in all directions, one of which came within less than an inch of tearing out the side of his ribs while penetrating the upper bone of his left arm, only to be re-constructed and saved by a skilled surgeon using PVC glue, who just happened to be at the hospital when he arrived unconscious and bleeding badly. That was his Vietnam war and he later received a 1-Y rating that precluded him having to go to Vietnam five years later. He fully recovered and contributed significantly to the success of his varsity baseball team, winning the championship the next year.

He survived high school and prepared for college by turning to local employment opportunities at Anchor Hocking Glass Corporation, Diamond Power, and Diamond Electronics to earn money for college. He turned down an appointment to the U.S. Naval Academy in Annapolis, MD, because he was not keen on working in a hostile ocean environment which was a risk too far, although he had passed the Red Cross swim tests. But the offer clearly was a favor rendered in return for his mother's commitment to the local schools and as an inducement to her to consider a future offer of an appointment to fill a looming vacancy to the U.S. Congress, which she turned down because she felt she needed to look after her children.

During this period, his mother re-opened her dormant contact with her father, a strident Alcoholics Anonymous member living in California. They had learned that he could enter college tuition-free if he moved to California. He made the move and subsequently had great experiences in college classes, in fraternity life, and in the care-free years of the California hippy movement of the early 1960s. He also learned a lot about having passionate relationships with the ladies and about cleaning up his central Ohio accent at only minimal costs to his self-respect, thanks to his fraternity brothers.

He also identified his passion for geology because it involved all the physical and biological sciences, from astronomy to xenobiology. His professional experiences in the decades that followed, combined with his earlier experiences as a Boy Scout and at summer camp, allowed him to overcome the potentially deadly environments in the Outback of Australia, the language issues while in many countries in Europe, and the potential political issues prevalent in Africa, and even in Vietnam many years after the Vietnam War ended.

As a result, he became a well-known leader in geology and hydrogeology in the mining industry and in the environmental engineering industry, finishing with DuPont. During those years he had to deal with ethical and criminal issues in the mining industry, involving the ACLU at one time and the Mafia at another time, and ethical and managerial issues in the environmental industry at later times. He soon focused on geological research because it seeks to establish the physical characteristics and conditions of the Earth's natural resources and reveals the impact on the environment created by nature and/or by human systems.

He recounts how he went into private practice with his son, who had just graduated with a degree in geology and biology. This was about the time that America was showing the early signs of Fascism developing from the far right in the politics of the early 1990s that was to quietly expand unrest over the ensuing decades. This was exacerbated by the rapid development of technology that was to increase communications via the Internet and cell phones, while increasing the pace of living and working. All this resulted in an unprecedented growth in the economy, although the "trickle down" theory was a Republican fabrication that created new American oligarchs, with little help for the working classes, as pleasant and charitable as some oligarchs may be.

As he was swept along with this upturn in the economy by making sure his family had the means to move up into to an upper-middle class environment, he focused on the responsibilities his profession required of him with the result that his family saw less of him than most fathers who held 9-to-5 jobs. Earlier in his career, he had produced a major textbook published by McGraw-Hill (1973) with the assistance of one of his college professors that sold some 40,000 copies worldwide and then later encouraged him to produce many scientific papers, reports, another book and book chapters, together numbering more than 200 by last count on subjects of interest to him.

He soon became very marketable because of his skills as a bonafide hydrogeologist allowing for substantial signing bonuses from three environmental engineering companies. He devoted his time to managing his employees and contributing with associates to professional societies. Apparently, his particular Myers-Briggs personality type, in addition to his resume of experience, indicated his fitness to lead geoscience professionals.

He also recounts that he served as an expert witness in some forty cases, and that each case had its own backstory, some sad, some with happy outcomes, but only one that created issues for him to confront. He became embroiled in a complex, multi-year case where his client-attorney assumed that he was a "hired gun," which he was clearly not, as he testified fairly and squarely against many oil and gas company attorneys and experts over the many years of that project. After the long run-in with a questionable justice system in Oklahoma, he joined a long-term friend in Washington in a new consulting venture and soon became quite busy again with projects in the U.S. and with increasing mining evaluations and environmental investigations.

Through the years, he traveled for projects extensively throughout the U.S. and the world to such places as: Australia, India, Sri Lanka, Tanzania, Zambia, South Africa, Sudan, Sweden, Japan, Vietnam, Palau, Sardinia, Italy, France, Germany, Mexico, Canada, United Kingdom, and other countries on projects for the United Nations and UNESCO for developing or improving ground-water supplies and for large and small mining companies developing other natural resources, e.g., phosphate and potash, gold and silver, uranium, and other mineral resources. He also was beginning to be recognized by his geological associates with many awards, appointments, and elections for his technical expertise, managerial direction, and leadership.

His children too began to blossom in their careers over the years and later his grandsons began their march through their own trials, tribulations, and successes. All of his children distinguished themselves with college degrees, e.g., in geology, education, psychology, fine-arts, archaeology, and in medicine (radiology).

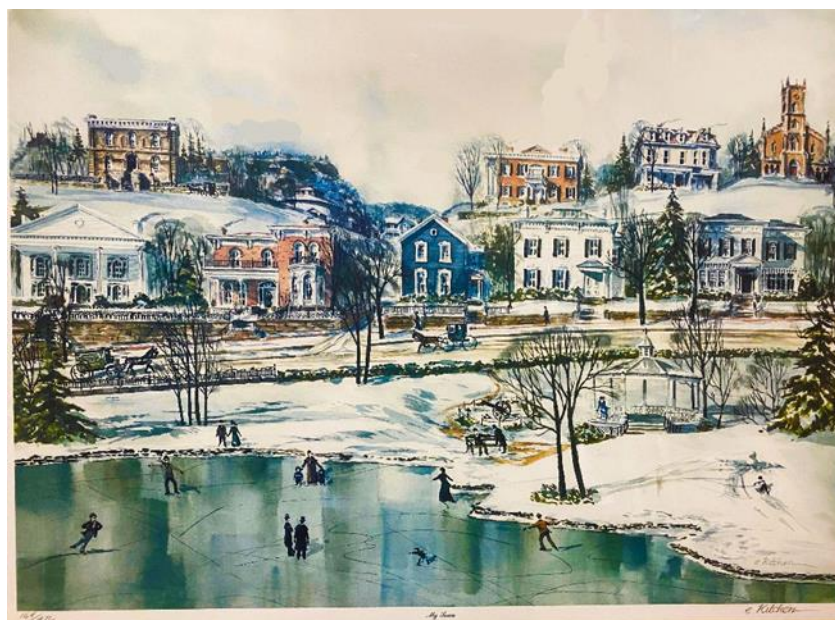
In political matters, he recounts that although he never considered himself a Liberal, he had to confront right-wing ideologies from time to time that he believed unjust, and he supported many Liberal programs to aid the less fortunate and to facilitate improving lives through education. He considered himself a Centrist, but not omitting assistance for those citizens in need, while being against the accumulation of great wealth by citizens without paying a fair share to fund reasonable government programs in a multicultural society.

This book is a chronicle of anecdotes linked together with tangential memories, many footnoted with Internet links to additional information (for use directly in the E-Book version) and of digressions that convey the rest of the context of the story in his idiomatic speaking style and stream of conscious recollections that those who have enjoyed his lectures will recognize and appreciate while, in the process, sharing poignant and refreshing insights on the incredible world of geoscience around him.



Chapter One

1941, World Wars to Win



Watercolor of Early Lancaster at Rising Park and Representative Buildings by Lancaster Son, Ed Kitchen¹

A first son, Micheal D. Campbell, was born and certified around 8:00 AM on August 8, 1941, in Lancaster, Ohio, while far away, England was being heavily bombed by fascist Germany and the Japanese warships were on their way to Pearl Harbor. President Roosevelt was trying to keep the United States out of the fray, for a while, primarily because of the very large German population scattered around the U.S., but also because WW1 was still in the memory of adult Americans and an anti-war feeling was widespread in the country. [The American German Bund](#) held grandiose political rallies in *Madison Square Garden* in New York City and elsewhere around the country to garner political support for Germany in the U.S.²²⁹ Also, the wealthy families of the U.S. northeast had strong, decades-long business ties to German industries. Some of the families encouraged President Roosevelt to lay off opposing Germany, although he knew the war was imminent but did not have sufficient political support to respond to Hitler's aggression as yet. Roosevelt was helping England as much as he could with "Lend-Lease" programs and other unofficial support.

But all that would change following the Declaration of War on Japan on December 8, after the Japanese conducted a sneak attack on Pearl Harbor in Hawaii on Sunday morning around 8:00 AM on December 7th, "the day that will live in infamy in American history." The other Axis nations of Germany and Mussolini's fascist Italy immediately declared war on the United States. The U.S. Congress responded,

¹ <http://edkitchenpaintings.blogspot.com/> Also see: <https://lilyfest.com/ed-kitchen/>

formally declaring a state of war with Germany in a joint unanimous resolution on December 11, 1941, and so the Americans were in a position of confronting a shooting war with two fascist, heavily armed countries coming after Southeast Asia, Europe, the United Kingdom, his clan, and Democracy in general from two ends of the Earth.

His mother, Billy Maxine Davis, was born in 1920 not long after WW1 in Delaware, Oklahoma. Her mother, his grandmother, Lucille Myers Davis, was born in Illinois to German (with long DNA lines in the Studebaker family back to Germany) and English parents (with DNA lines in Ireland, Scotland, and England).

Clarence and Maxine,
Bob, Brother to Maxine, Maxine's Mom, Lucille,
Wilbert, Husband to her Sister, Carolyn



She became a registered nurse and settled in Chillicothe, Ohio, for many decades after divorcing her husband Robert Davis, who was a notorious gambler and salesman of cast-iron pot-belly stoves all over the central U.S. from Texas to Illinois. As was common in those days of the 1920s, alcohol of a variety of types had become a social necessity during the long train rides on the road selling his pot-belly stoves, for which he made good money until the Stock Market Crash of 1929 and the onset of the effects of the Depression. By then, he had become a full-blown alcoholic and that's when Grandma parted ways with Grandpa. He moved to California, but he was soon rescued by friends in *Alcoholics Anonymous* (AA) and became a lifetime member ... with the help of God, he always said.

Lucille had two other children, an older sister, and a brother to Maxine, being the youngest in the family. With the family break-up as the 1930s Depression began, Maxine lived with cousins in Nowata, Oklahoma, (near Delaware) bus stop some 60 miles south of Coffeyville, Kansas. She often spoke of her pre-teen years as being great fun living on a treeless plain that was so flat you could see forever, she said. She also remembered how easy it was to watch far-off developing weather and the occasional tornadoes in that part of "Tornado Alley" in the U.S. She said that the family made her the "chief watcher" for approaching tornados to alert everyone when it was time to head for the shelter that was dug into the soil in front of their one-story, wooden-frame house that was otherwise used to store canned food and other supplies.

There were five in the family, so it was "nice and snug," she said. Years later, she would say that she was never afraid. She remembered vividly, however, two occasions when a tornado passed directly overhead, making a racket and everyone's ears hurt from the drastic pressure decline; one time she could look through the cracks in the door when she swore it had slowed momentarily overhead and she could see way up the middle of that tornado, while dust and dirt were flying in and out of the cracks in the door that had to be held tightly by everyone with ropes nailed to the inside of the door to keep it from flying open.

As the years passed in the 1930s, the family was subsequently reassembled in Chillicothe, where Lucille had been living while working as a nurse at the local hospital. Maxine's older sister, Carolyn, who had graduated high school, was in secretary college, while her older brother, Bob, was still in high school. Maxine was just beginning high school. Being on the short side of average height, she made up for that by her enthusiasm, quickness of mind, and loquaciousness, which persisted throughout her long life.

She loved sports, among which were archery, softball, fishing, and swimming. She had many friends and was affectionately called “Tudy.” She graduated from Chillicothe High School in 1939.

She had a special friend who lived down the street from her, Art Gossett. His parents died in an auto accident a few years before. She loved to ride the big motorcycles with her friends, but above all, she genuinely liked people and thought poorly of very few. She would have made a great politician. But by late 1940, her friends were preparing for WW2 by joining up with the Army and Navy, including Art, and her girlfriends were going to work in the various war production industries that were springing up around Ohio and elsewhere. She went on to attend college at the local branch of Ohio State University in accounting and business courses but dropped out and went to work at a shoe factory as WW2 was finally breaking out around the world.

His dad, Clarence Edward Campbell, was born in 1913 to Grover and Retta Work Campbell in Bremen, Ohio. By all accounts, they were people of very little means. Grover had a troubled upbringing and was a day laborer. When he grew up, he couldn’t find work in the central Ohio area. On numerous occasions, he spent multiple periods in the state prison for robbery and assault. But they had three sons. Henry was the oldest, Clarence was next, and Russell was the youngest. It was during one of the periods that Grover was serving an extended prison sentence that Retta could no longer look after the boys, so she put them up for adoption at the Lancaster Children’s Home located east of town when Clarence was about 6 years old. The oldest son was soon adopted by a well-to-do family and had a good life as far as is known.

Clarence and Russ remained at the Home for about 6 years before Retta was able to retrieve them and provide a small home near Bremen on the main road to Lancaster near the cemetery, where ironically both Clarence and Maxine were to come to rest many decades later. Retta made ends meet by taking in laundry and serving as a housekeeper in Bremen households of the well-to-do. The boys attended grade school, but Clarence quit after the 8th grade. Clarence was missing his right hand at birth, and he was very embarrassed by it and was basically a very shy person because of it. It was also troublesome that he was naturally righthanded and never learned to write left-handed; it was painful to watch him try to write a check at the grocery. He used to get frustrated and give up and turn to whoever was with him to write it. Clarence had some issues when he filled out birth certificates because he didn’t know how to spell his son’s first name. “Micheal” became his legal name until he changed it years later in grade school when the name Micheal was broadcast a few times over the school’s loudspeaker in every schoolroom (pronounced “Mike E-al”). This caused him great embarrassment and at least two fistfights in the schoolyard created by the ridicule and teasing thereupon by budding bully boys, who became the first of five later in high school.



Some 70 years later, his dad was still very handsome, and looked like a movie star, ala William Holden. Dad wasn't short but not tall either. He had long dark-brown hair that he combed from front to back. He



was picked out of the crowd one day in the bustling downtown Lancaster by a young movie-casting lady who was visiting Lancaster in the 1970s and asked if he would like to be in a Robert Redford movie that was being shot near Nelsonville, Ohio at the old prison. He did it and it was great fun, he said. The family went to watch the shooting as well as the movie. There was only one scene where they could briefly see Clarence off in the distance. So much for his movie career, to Hollywood's loss. He

nevertheless had that look of a star. Dad and one of the cast members in the movie *Brubaker*² are shown in the photo.



In the late 1930s, during his 20s, he “worked” for Brownie, the well-known local kingpin who managed all sorts of business, some legal, some not so much. Brownie had a malformed leg at birth and got around with a large crutch under his arm; the leg was not much help. His “office” was at the large front window seat of a beer joint / pool hall where he entertained “business” visitors and friends a few stores west of the Lyric Theater in downtown Lancaster, Ohio. There were rumors that Brownie may have been involved in the “hot ham” scandal that rolled around Lancaster a few years, where truckloads of ham meat products



were being highjacked between Columbus and Lancaster until the “gang” was caught, convicted, and sent to prison. Brownie always said that he knew nothing about that. Clarence made a living and was good at the pool, and he was a snappy dresser. He helped Brownie to keep order in his bar/pool room. On occasions, he would ride the “free” rails to Columbus to see the big bands and orchestras of the time and to dance with the ladies. Over the years, he became less and less shy in social gatherings in the local bars and poolrooms and became well known around Lancaster as “Penny,” for reasons that have been lost. He was a warm-hearted, kind person and shy, of course, and it was through the early years of their marriage that Maxine took him in hand and convinced him to feel OK about his stub. He eventually became comfortable when meeting people and no longer was hesitant to shake hands with people; when someone he would meet would take his “hand” in shock, he would always say with a big smile, “yes, I was left out when they were passing out right hands” which instantly made people smile back and squeeze his stub a little harder.

² <https://en.wikipedia.org/wiki/Brubaker>

In early 1941, his parents were married in a family gathering, and Michael was present as well, although not yet officially. During her pregnancy, he needed much from her, including calcium for his bones. She lost most of her teeth while she was pregnant. The dentist said that her teeth just melted away as she gave up her calcium to her developing son. He was delivered by the doctor and midwife at home in a large brick two-story house next to the main U.



S. Post office on Chestnut Street, across the street from the Sheriff's Office. The photo is after baptism at the Methodist church.

With the war breaking out, there were good jobs to be had in Columbus at the Army Depot. Maxine and Clarence and their new son moved to Columbus near the new Army Depot. She worked in the procurement department, and then later

for *Curtis Wright* building planes. She was selected to be an efficiency monitor, looking for ways to increase production rates in construction practices in the airplanes' assembly lines, and she was good at it. She worked again for the Army Depot (aka DCSC) years later in the 1960s and 70s when she purchased bombs, bullets, concertina wire, etc. for the government during the Vietnam war.



Clarence worked in the Army Depot's warehouses stocking and re-stocking the supplies for the war overseas in the Pacific and Europe. One day, he brought home two prisms used in binoculars for his young son to play with. This was great fun and he spent many hours breaking the white sunlight coming through the window refracting through the prism into its component colors. A mystery of mysteries, he thought, which was an early memory during those early days. Maxine liked to shop in Columbus at one of the big department stores of the time. Lazarus was a bustling, multi-floor store. She often took him by the hand leading him around the giant people.

He and his first friend, Roger Miller, lived up the street.

Occasionally, she would release his hand to look at something, and he would wander around looking at the ceiling and the patterns on the floor, mostly because he could only see legs and dresses, but couldn't see above the counters yet. He would find his mother and hold on to her leg. One time, he was trying to hold on, when Maxine heard a scream from a lady standing next to her, a scream that also knocked him back and to the floor when the lady swirled around to see who had hold of her leg under her skirt. He sat there bewildered as to exactly what had just happened. The lady finally looked down at him sitting there and soon calmed down and began to laugh as she told Maxine what all the commotion was about. Apparently, he had found the wrong leg and because of his short stature, had placed his little hand up the lady's leg. All the ladies upon hearing of the matter gathered around to see what was up; they began to laugh too, all while he was still sitting on the floor with all the ladies looking at him with big smiles.



One of the ladies bent over and asked, "What's your name, little man?" He was always dressed up when he went with his mother to the stores. His shorts always had creases, he remembered. He looked up at the lady and said, "My name is Mikie Campbell, with the wrinkled knees." Everyone standing around was saying to Maxine what a clever little boy he was, which together sounded like clucking to him. When they arrived home that afternoon, Maxine told his Dad what had happened at Lazarus, he turned to look at him and said with a hint of a smile "How did that happen?" To which he replied, "There were a lot of people and legs," and that was that. He still avoids crowded ladies' departments in such stores, if possible.

He and his new friend, Teddy, wanted to go inside.



A few months later, one of those great central Ohio thunderstorms arrived one night, he remembers. It had been hot that summer day and his dad had decided that they would sleep on blankets that night in front of the open door behind the screen door. There were no air conditioner units available in those days. They settled in after a while, and then all of sudden a very bright light filled the room and was instantly followed by a loud crack of lightning practically bounced them out of their sleep. "Wow," Dad said. "That was close." His son's eyes were the size of silver dollars.

They lay there watching through the screen door as more lightning strikes hit around the neighborhood and heard thunder cracking and rumbling for a considerable time. Then, on one of the lightning flashes, a huge figure was suddenly silhouetted in front of their screen door, making strange noises as thunder filled the room. That was the first he ever knew of absolute, instant fear. His Dad, unafraid, quickly got up and went through the screen door and took hold of this monstrous figure and brought it out of the pouring down rain. He returned holding what appeared to be a small woman, soaking wet, and smelling of alcohol, he remembered. Turned out that she was a neighbor lady who lived a few houses down the street and had gotten into a disagreement with her husband and took a walk to cool off, only to get caught out by the thunderstorms. Maxine heard the commotion and came downstairs and helped the lady dry off. He stood there watching but was soon shooed off to bed and out of the way so that they could take care of grown-up matters.

The other early memories occurred some months later in the same house. He awoke one night and went downstairs to find something to eat. He opened the new refrigerator and the light went on. He saw nothing but the butter, so he sat down in front of the refrigerator with the door open to eat one stick and then was starting on another when his mother appeared around the door saying ..."Michael, what are you doing?" He was startled and spit out the butter down the front of his pajamas. "All that butter will make you sick," she said. But it didn't make him sick, and he became a lifelong fan of excessive butter (and salt) on everything he ate. Years later during high school, he once even made \$40.00 in a betting pool with his friends betting that he could not eat four sticks. He did, collected the money, and had no repercussions.

As the two wars were coming to an end by American and Allied forces grinding down the Italian and German armies in Africa, Italy, France, and the other German-occupied countries of Europe and Scandinavia, and by outmaneuvering finally flattening the recalcitrant Japanese Empire with two atomic bombs, Maxine and Clarence wanted to move back to what had been considered their home before the war, sleepy Lancaster. Maxine's brother, Bob, and her sister's husband, Wilbert, made it through the wars.

Uncle Bob drove an ambulance truck on Guadalcanal in the south Pacific but suffered severe “shell-shock” syndrome for years after coming home. He calmed his nerves with alcohol but still carried on a “normal” life well into his 70s. Uncle Wilbert served in the Navy as a gunner’s mate on two ships in the Pacific. Wilbert also calmed his nerves with alcohol after the war but maintained a well-paying job at Mead Paper in Chillicothe for years later. This only caused the occasional problem.

The only reason he looked forward to the occasional road trip from Lancaster to Chillicothe was that there was a chance they would see tortoises along the highway. ‘You never can have too many of those cool critters,’ he always thought. During one of these family gatherings in Chillicothe at Lucille’s house on Water Street, he followed the two uncles and his Dad behind the garage where small bottles of alcohol of some sort appeared. Everyone had a gulp. He wanted one too. So, Uncle Bob administered one to him, upon which he choked and sneezed and it all seemed funny to the uncles and Dad.



Maxine’s Family: (l to r) Maxine, Clarence, Uncle Wilbert, Aunt Carolyn, Aunt Darlene, Uncle Bob and Lucile (His Grandmother)

They cleaned him up and admonished him not to tell the ladies. After a while, they all ambled back into the house, and he was trying to look normal but he had forgotten to never enter a room where Maxine, her sister, Carolyn, and his Grandmother Lucille were sitting talking, because they would stop talking turn all their attention to him and give him the dreaded “Third-Degree” ... “what was he up to this time, what has he been doing, did he see the white peonies out back, they are in bloom” kinds of talking points. But the jig was up because the ladies all had exquisite noses and did not approve of drinking hard liquor. The uncles and Dad had taken “Sen-Sen” tablets to kill the smell of alcohol and tobacco on their breaths, but they forgot about him. The ladies instantly smelled each of the men’s breath ... nothing, and then Lucille, his Grandmother, came to him and smelled, quickly followed by the other two ladies... she loudly said “Michael, where did you get that alcohol?” For help, he glanced over at Uncle Bob and the jig was really up. All the ladies were yelling at all the men and him “How could you do that to him?”

Years later, he often wondered whether that episode could be why he never drank alcohol much over the years. In fact, Maxine remained on alert for years later when he came home after drinking in high school with the guys and would say, “You haven’t been drinking hard liquor have you, son?” He always said, “No Ma, just a few beers.”

Later that day, after the ladies had calmed down, the family was all listening to the radio playing music by one of the big bands in the large living room sprawled out on two big sofas and two big comfortable lounge chairs, and on the thick rug. Uncle Wilbert had given him a small shiny, heavy steel marble to play with (aka a “steely” in marbles terminology). He was wondering how it felt rolling around in his mouth, but as he put it in his mouth, Maxine looked over at him and instantly lunged at him to keep him from putting it in his mouth, but it was too late. He was startled and swallowed the marble. Well, that stirred up the ladies again; Wilbert got blamed for a second time. Off to the side, Uncle Bob and Dad were laughing at all the hubbub, until Maxine gave him a dirty look. Dad got up and approached the ladies and announced, “Don’t worry, that won’t get stuck in him; it will appear again in a few days, so quit worrying about it. We used to do that all the time when I was his age.” The ladies reacted to this with Oooos and yucks, and consternation. Dad shrugged and left the room smiling and shaking his head.

That seemed to quiet the ladies once again, but not for him because all of a sudden he considered where that marble might get stuck in him and that gave him a sense of foreboding that he had never felt before. After they returned to Lancaster (without new tortoises) the next few days consisted of a daily very public bathroom session where his mom and dad accompanied him to the bathroom when he had to go #2. The first day... nothing. The second day ... nothing.... but then on the third day, the sound they had been hoping for finally was heard it was more of “ding” than “plunk” as that steel marble hit the porcelain bottom of the toilet bowl. He finished his business and stood up. They all three peered into the toilet bowl, and there it was. His Dad reached in and retrieved that marble all bright and shiny, and pitched it into the lavatory bowl and turned on the hot water to apparently purify the marble as it rolled around the bowl.

He never saw that marble again and later wondered what had become of it. He never asked his Dad, just like he never asked him the whereabouts of his pet duck just after that Thanksgiving.



Feeding a Squirrel in the Park.

A few years later, Maxine and Clarence and he often drove to Columbus to spend a day and an evening with Dan and Mary Burden. Dan was a professional bowler and they attended more than one bowling event where Dan was a participant. Dan made it to the finals on three or four occasions. The bowling alleys were very popular he remembered, full of people dressed in Sunday clothes in those days.



Dan and Mary in the Park (with guard?)

Dan had a number of golden trophies on his mantle at home. He was a specialist in duckpin bowling. Duckpins are shorter and squattier than the pins used in ten-pin bowling. The bowling ball was smaller, about twice the size of a softball, than that of a standard bowling ball. One Christmas, Dan gave him a duckpin and a regular pin and he cherished them for years, always had them in prominent positions in his room at home.



Regina with his New Sailboat

The family also visited Regina and her husband in Columbus. She was one of Maxine’s high-school friends from Chillicothe who also had worked for *Curtis Wright* with Maxine. Regina later taught gym classes in a high school in Columbus and normally wore big, round glasses. Her husband, Lloyd, was a senior engineer for one of the major railroads that passed through Columbus. Lloyd took Dad and he down to the trainyards one Saturday to see his new diesel engine that was just produced; he was one of the engineers who operated it on runs to Chicago, Cleveland and elsewhere.



His Special Bowling Pin and his Dog, Ol Pal.

When they approached the brand new diesel engine, he could feel a low-frequency vibration in his feet, legs, and then all over him, especially in his teeth and jaws. When he was invited to be carried up into the

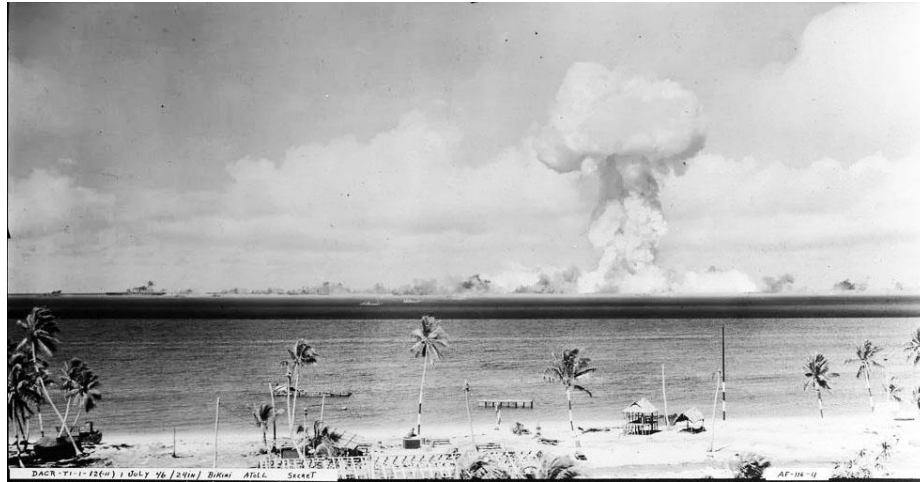
inside of the cab, he would have nothing to do with that. He sensed an overwhelming danger. His Dad tried to pick him up but he refused. Dad gave up and climbed up the ladder into the cab and waved through the side window as the engine was revving up. That was too much and he turned and ran into the nearby office and sat down on a bench.

When the fellows came back a few minutes later, they tried to cheer him up. But it was probably the first time in his life that he was totally bummed out. Later, they relayed his refusal to climb up into the engine cab to the ladies and laughed about it. Maxine was not pleased with Dad and Regina's husband, not about their trying to convince him, but for laughing at him for refusing.



Chapter Two

1946, A Country to Build and Others to Help Recover



Atomic Testing in the South Pacific, 1946 ³

After D-Day in June, 1944 and subsequent victory in Europe and then Japan, life began to return to normal. The Campbell family moved back to Lancaster to the same old, quaint red-brick house next to U.S. Post Office on Chestnut Street. The family lived in the back half of the house this time, rather than the front half where he was born. He remembered the nice thick rugs in the living rooms and bedrooms, and he sat in front of the Zenith console radio for hours on end. The New York Yankees beat the Dodgers again that year. He listened to [Captain Midnight](#), [The Shadow](#), and other serial radio shows of the day and the news from around the world. Present Truman was supporting peace treaties that were signed



in Paris and the Marshall Plan was proposed to help Europe recover after being flattened by the invading German and Italian armies and the countries caught between, and then even more so by the U.S. and Allies to eject them from Africa, France, Belgium, Norway, and other invaded lands and to punish their homelands for falling for the fascist lies of Hitler and Mussolini. By 1946, he had heard on the radio about his country conducting atomic testing of bigger bombs in case they needed them, but even years later in grade school, he was never fearful. He just knew his government would protect him, his family and the rest of the country. He would spend time dialing through the radio frequencies listening for foreign language broadcasts of news and music and to the associated static, some caused by far-away thunderstorms, he was told, but he was also hearing the static from the beginning of time itself, which he did not learn (nor did others) until years later. His Dad, his Dad's mother, Retta (styling in her early 1900s clothes and hat) and he in his Sunday-best are shown in the photo. Dad was always a sharp dresser.

³ <https://www.smithsonianmag.com/smart-news/crazy-story-1946-bikini-atoll-nuclear-tests-180963833/>

At some point during this period, it was time to begin school. He attended South School, which was only a few blocks away, and the few memories surviving included those of his 1st Grade. The students were beginning to read, but he developed a problem, or so said the teacher to his parents, Maxine and Clarence. She said that their son needed a speech tutor for after regular school time. Seems he would create havoc in class when he would recite such words as “rabbit,” which would come out as “wabbit,” oddly not unlike Elmer Fudd of *Bugs Bunny* fame in cartoons he had watched so often. The class would burst out laughing when he would make such pronouncements. So, he took a half-year of such lessons with a nice, young-lady teacher after school. One thing he remembered about her was that she smelled nice.

By the end of that school year, his “Elmer Fudd” speech had gone. What he couldn’t know at the time was that he would be learning from his parents and his classmates a regional accent that wouldn’t be identified until he went to college in California years later in the 1960s. His active fraternity brothers required him as a pledge to speak a created jingle whenever called upon that contained offending speech. This related to the long-vowel conversion that was apparent in the local accent of the mid-west, south of Columbus, Ohio. He soon corrected that in speech as well, but he always had issues with pronouncing “Ls” with any roll. He certainly couldn’t roll “Rs” either.

In the second grade, he became friends with Sue, a girl he would walk home with from school. They spent a lot of time together talking about all manner of things. Her dad, the Sheriff, had ambulances parked in the garage behind the Sherriff’s office and her house, which was just across the street from his house. They often would go there and climb in. She wanted to pretend to be a doctor and patient, but one day, Maxine caught them kissing at his house, saying she wanted to go to the grocery and wanted him to go with her. One thing became clear. He was not allowed to play with Sue again, but, in any event, she moved shortly thereafter, only because the Sheriff was voted out of office and had to move. It wasn’t until years later that he would again see her in the hallways of high school, but they never discussed the matter. He often wondered how that might have affected her in later life and her attitudes toward doctors and nurses. He thought it was fun, and a serious business of kissing a girl for some reason. Decades later, they met at a class reunion for the first time and they hugged briefly, they shared all-genuine knowing smiles. That was the answer to his concerns.



He would be playing with Roger M. again on Chestnut Street. But the Campbell family moved about this time as he finished 2nd Grade to the West side, to Washington Avenue. Anchor Hocking’s main plant hovered over the western horizon. The company was one of the premier glass makers in the world at that time making clear baking bowls, drinking glasses, and all sorts of hobnail glassware. Little did he know that he would work there, for a while, and at Plant #2 across town on the eastern edge of Lancaster city limits during periods making money to keep himself in school at Ohio State. He would be playing with Roger again.

The southern parts of Washington Avenue had accumulated several families that were producing bully boys that he had to contend with then and again later during early high school. At the other end, toward the intersection with 6th Avenue, were average middle-class families. His family lived between the two ends about halfway between. [His house](#) was a two-story, wood-frame house that would sway in high winds. In his room, plastic airplanes and rocket ships and planets strung by a string attached to a pin in



the ceiling board, swung slowly back and forth in an arc of about 5 inches when the wind was blowing hard. Normally they would move about an inch or so on normal slightly windy days and nights. Maxine was hired as the bookkeeper for Harpster & Helser Hardware in downtown Main Street of Lancaster. It was an 8 to 6 job, and she also helped the staff with sales and assisted customers in a variety of ways. She was climbing the corporate ladder and making more salary every year.

A few years later, his brother Steve C. was born at home with the help of the attending doctor and a lady named Helber who lived across the street from their new home on Washington Ave. Helber was later engaged to provide room and board for Retta, Clarence's aging mother, and to provide some supervision of the boys.

He collected all manner of animals and insects, ranging from praying mantis (or mantid) to turtles (no snakes). He especially liked to collect turtles, actually land tortoises, reptiles of the family *Testudinidae* of the order *Testudines*. When taking a trip, the family would always look for tortoises along the roadside, and sometimes in the middle of the road. In those days, there were only single-lane highways. Once cited, Dad would stop the car and Maxine and he would jump out and corral the tortoise after checking to make sure it was healthy and unhurt by trying to cross the busy highway, usually between Lancaster and Chillicothe. He figured they saved a lot of those creatures from death by auto. At one point, he cared for and fed, and studied nine tortoises in a pen in his backyard. He was intrigued by how different their behaviors were. Some were pliant, some appeared to be terrified, some looked calm, and some snapped at fingers given the chance. On only one occasion did one of his captives, the one with the red eyes, snap at one of his fingers while feeding him lettuce. He was evaluating that one's patience by jerking the lettuce away at the last minute a couple of times. That must have PO'ed Mr. Red Eye. At the next offering, Mr. Red Eye lunged at his fingers holding the lettuce, but he did not pull it away this time and Mr. Red Eye nailed a finger at the knuckle, but that lunge slid right off, with just a nick. Mr. Red Eye got the lettuce and he did not tease the tortoise again. Tortoises practice some kind of magic he learned about that time. He was always running out of tortoises; one by one they would disappear from the circular wire pen in the backyard. Yes, he could tell the difference between male and female by the carapace-plate arrangements on their back undersides.

Tortoises were favorites of Maxine too. In her later years after Dad died, she purchased a pleasant little house in Albuquerque to be close to her daughter, Carolyn Sue, a chief operating room nurse of many years, and her family. She had a side yard and at some point decided to raise some tortoises, or more likely, she saw one along the roadway that needed rescuing, and then another. Every morning, she would feed her gang until winter set in, at which time they would dig in for a nap of hibernation of about four months or so. They would reappear in the Spring, looking to Maxine for food and water.

Dan, Carolyn Sue's husband, was a medical doctor who helped to pioneer laparoscopic surgery in the U.S., and a delightful fellow, popular with about everyone. Their son Josh, like his Dad, achieved Eagle Scout

status and later graduated from West Point near the top of his class and flew Chinook helicopters for the Special Operations Aviation Regiment-160th flying multiple undisclosed missions on several continents.

Caity, Josh's sister, was a member of the H2O Polo team and a graduate of the University of Texas at Austin, spending a year abroad in India in high school and again in college. She also spent her post-graduate year in Thailand, teaching, and is fluent in Hindi.



But his incident with the tortoise got him thinking about that the old adage, "...If a turtle bites you, it will hold on until it thunders" is not true, at least for his land tortoises; He suspected that the adage was referring to snapping turtles who live under the banks of creeks. His Dad probably told him about it because Dad and Russ used to go turtle hunting in the creeks around their home. He once explained that this was done by laying on your belly over the edge of a creek and reaching under the bank at or just below the water line, feeling for openings, and then reaching further into the openings feeling for tails; if you feel one then you grab tightly and pull on the tail quickly lifting the turtle out of its den and the water onto the bank with your foot on the back of the turtle.

These turtles can be rather large and heavy and will be mad as hell for disturbing their slumber But, Dad said, if you feel something other than a tail, pull your hand out very slowly, or the turtle will snap at anything moving fast. He said he knew kids who had lost fingers from turtle feeling. He said that he had heard "that if you got bitten by one of these turtles you would play hell getting the turtle to turn you lose". The rest of what he told was rather gruesome and required killing the turtle to get your mangled finger back. So, he always presumed that the adage was more or less true, although more metaphorical than literal. Turtle soup used to be popular.

After the family moved to the West side, Clarence was offered the job of managing Whitey Snoke's Pool Hall, which was located around the southern end of Washington Ave., east about a half a block along Fair Avenue. This happened under the auspices of Brownie, who owned a part of the Pool Hall, and he found out years later that Brownie had been designated as his Godfather. The pool hall was a stand-alone cinder-block white building that remained warm in the winter and cool in the summer. It was a place of serious gambling. Cards and pool. Dad was good at both, but his job was to keep the place in order, cook up the burgers and fries, and push "the Board" around the place. Paying \$5.00 gets the metal tool to push out a rolled-up piece of paper with numbers on it. That number is compared to a master list mounted on the wall to see if the player had won anything. Mostly not, sometimes up to \$100.00. In other words, that was part of the number's games, which was mostly illegal or overlooked in those days.

Dad would occasionally take him to Whitey's on days and some evenings when school was out. He would sit him on the edge of the counter and the "Board" was his responsibility to sit on until someone asked to look at the board. One time, while Maxine was visiting her sick mother (Grandma) in Chillicothe, Clarence took him to work one evening which was unusual for Dad to work at night. After having one of Dad's great hamburgers and fries, he sat him up on the counter as usual.

It was a Saturday evening and was cold outside and he could tell something was special about that evening because he had never seen so many guys and a couple of women in Whitey's before. It was almost standing room only. After a while, three large black cars pulled up outside. Only four guys came in, the others stayed outside in the cold around the cars, as if they were guarding them. The first guy through the door was a very large, pleasant-looking fellow with a very expensive-looking long black coat that nearly touched the floor. Dad cleared the way by moving people aside and out of the way and greeted him; he could hear the guy say with a big smile, "How you doing, Penny. Good to see you again." They shook hands for an unusually long time, while he put his arm around Dad in a big hug saying things he couldn't hear. They laughed and the big one walked over to the line of fancy coat hooks and stopped. One of the other guys wearing expensive-looking shiny suits and beautiful ties that had followed him helped the big one take off his coat. He then looked over his way and walked over to the counter where he sat down. Dad came over and said the big guy's name but he couldn't hear that, ", this is my son Michael."



The big one said, "so this is your boy. He's growing up fast, Penny." Dad nodded with "Sure is." The big one put his hand out to shake his, but when he did, he felt some paper between his hand and the big one's When he took his hand away, he saw that it was a \$100 dollar bill. The big guy said, "Have your Dad go with you to buy a good BB gun." In recalling that, he always thought it was some sort of code words to my Dad, but nothing was ever said. He gave the money to Dad and the family had a good Christmas later that year, but one could tell that Maxine didn't like taking money from the big guy, whatever his name was.

He then turned to Dad and asked if someone, the name he couldn't hear, was there yet. Dad said no. He then said, "I'll wait one hour only", and turned to walk into the areas with the pool tables in the far back that apparently had been cleared for the big one to use. There were about 10 tables in that pool hall.

After about 30 minutes, another group of guys came through the door. All of them were well dressed and could have been bankers. Dad knew the first one and they spoke and then they all took off their coats, hung them up, and all but one sat down at the counter next to him or leaned up against the wall smoking and drinking beer. They did not mix with the others.

The new one walked back to the big one and they shook hands and commenced to roll balls around. Each of them took out their pool sticks and carefully screwed them together, looked down their lengths, and rolled them flat on the pool table, checking for any deviations in condition. Dad told him to not move and went to the back table and gathered up what looked from a distance like one hell of a lot of money that the big one and the new one had laid out. He counted it, made notes on a clipboard, and then sat down in a highchair just off the middle of the pool table. He figured his Dad was just watching the game, but years later he told him that he was the manager (or referee) of the game and could call fouls if he observed any rule violations. The table area was surrounded by people standing two deep, so all he could see from the counter were guys and hear an occasional moan or applaud. But the proceedings were very orderly and quiet. Even those playing cards were speaking hushed tones, obviously not wanting to interfere with the game that night.

As time passed, a bathroom break was called, and Dad came back to where he was perched and asked how he was doing. He told him that he had sold out the Board and both his pockets were nearly full of folding money. He said, "that's good," and went back to the game. It was about 11:00 PM when he heard a final roar and applause, and he figured the game was over. The noise then increased considerably.

throughout the house, and everyone began to talk louder and mill around. Guys asked him for the Board, but he told them it was empty. He noticed the new one was pushing his way through the crowd toward the coat racks, as did his people. They left rapidly in one group; the new one looked very angry and disappeared out the door. He heard some yelling outside, and he figured the big one's people were giving the new one's people the razz for losing.

Not long after, the big one walked back through the crowd, with many people patting gently on his back and saying things he couldn't hear. He went over to the coat rack and stopped while the same guy as before grabbed his coat and helped it on the big guy. He said, "You still awake, son?" He said meekly "sure". Dad appeared with a bag (of the winnings, he supposed) that the big one concealed in his coat somehow. He shook Dad's hand and said, "You run a fine game, Penny. See you next time," and slipped some folding money into Dad's shirt pocket.

After a year or so, he remembers hearing Maxine talking to Clarence about getting a different job.

"One day," she said, "you are going to get yourself into trouble."

During this period, he developed a number of friends up Washington Avenue, some of which were to become life-long buddies. Dennis S. and Gary B. had much in common, but they went on different paths. Dennis lived up the street with his mother, Francis. She was one of the chief telephone operators in the Lancaster *Ohio Bell* system. Telephones were monitored by voltage to make sure no one had a telephone that they weren't paying for in the customer's monthly bill. He had acquired an extra phone that wasn't registered. Once the two wires were connected to house line, the voltage would increase on the master boards of the Bell Company. When a house line showed excessive voltage, that would be reported to the chief operator of the shift. During the 1950s, rogue telephones were becoming more widely available than before. On more than one occasion, Francis would call him, or interrupt his conversation, if it was with one of the guys she could recognize, by saying, "Excuse me Gentleman, but Michael, you need to disconnect," to advise him that the signals were getting too obvious on their boards. She also would advise him to at least disconnect them after you complete the call. She would remind him that if any of the other operators notice your line, they will report it to the Bell accounting and they will charge your family for a new phone, which was not inexpensive. The guys thought it was hilarious that while they were talking to him on the phone, Dennis's mother would cut in to give him polite hell for having a pirated phone. After a while in the early 1960s, the Bell System changed procedures, so the number of phones was no longer monitored.

Dennis's father had died or departed early in Dennis's life. He never knew what the story was, but it was none of his business, in any event, so he never asked. In the 3rd grade at West School, Dennis took up the drums, on an expensive drum set, with bass and multiple cymbals. He used to go to his house to be entertained by Dennis practicing his drums. When he got tired of practicing, they would go to the alley in back of Dennis's house and play marbles. When going to Dennis's house he would also carry his marble bag just in case a game was on. Dennis looked around for others to join them and often at least a couple other boys were around to join them at the ring in the dirt for marbles. Most of the time he went home without a marble to his name, except his shooters of course. When he showed up, Maxine would ask "What's the long face, son?" His reply was always "Dennis won all of my marbles again Can I have 50 cents to get some new ones?" "Maybe I'll find a better shooter," he thought. That special marble that would stick spinning in the ring as it knocked others out would allow additional turns to win even more marbles from the players.... Dennis did that all the time, it seemed, he thought.

Dennis was certainly good at clearing the ring and winning all the marbles from everyone in the neighborhood. He remembered one day after marbles Dennis invited him to come see his marble vault. He went through the backdoor of Dennis's house and there was trap door in the floor of the screened-in porch. Dennis bent over and pulled the attached rope to open the door. This revealed steps leading down into a dark cellar. Dennis went down the steps and turned on a small light. He followed. It instantly smelled of fresh earth and Dennis turned on the other light. To my incredible surprise, Dennis had thousands of marbles. There appeared to be hundreds of cans brimming full of marbles all categorized by color, size, type (shooters), steelies of at least three sizes for anti-ups. Their bright colors and #11 size and smaller cans filled with shining glass-colored orbs of assorted sizes looked like large treasure against the deep brown earthen walls of the cellar. He said something like "Holy cow, Dennis, these are all your winnings?" He said rather matter of factly, "Guess so."

He didn't know whether the neighborhood knew but this had to make him the King of Marbles. He wasn't sure but he was only one of very few who had ever seen Dennis's treasure. It may still be there. Now buried forever waiting for rediscovery by an archeologist of the distant future to find this treasure of little glass and steel balls that will no doubt mystify future historians as to their purpose and meaning, which was, of course, just for the fun of young boys.

In the 3rd Grade, this was the time that his learning began to accelerate rapidly in many areas of interest as well as his size. Along with the regular subjects, he decided that he wanted to learn to play the cornet. Maxine and Clarence bought him a very expensive cornet and paid for lessons from the music teacher, Mr. Kearney. As the years passed, he was getting pretty good and sat in first Chair in the West School Band. Gary took up the trumpet and sat next to him in second chair. As First Chair, that made him the back-up band leader when the music teacher was late in the morning. It was great fun, he remembered, to lead with the baton while the band practiced the music. He almost decided to be a band leader when he grew up but decided later in high school that it was more fun to be good at baseball and basketball than playing and marching around in bands and playing classical music in orchestras and such. But he did take two courses in classical music history in college, which confirmed his interest in listening to classical music for the rest of his life.

Later that year in 3rd grade, his eyes weren't what they should be. He let the teacher know that he could not read what was on the blackboard. She sent him to the nurse's office; the dreaded place people were sent when that were found to have lice, he heard. Such checks were often in his school, he knew people, mostly boys, who had had lice, and he would never forget who they were. So going to the nurse's office was not good. But he went quickly. The nurse sat him down and told him to look at the wall that had a light spot on it and to tell her what direction the E at the top of the chart was pointing. He said, "What E?" She asked if he was kidding. He said no. She then wrote a note, put it in an envelope with his family name on it, To Mr. & Mrs. Campbell.

When his folks returned home that evening, he gave his mother the note.

She read it to him,

“Your son, Michael, has just had his eyes tested and has scored greater 200/20 and needs glasses badly. It would be good if you could get him fitted with glasses. I am sorry, Nurse”



Needless to say, he got glasses. After going to the eye doctor, the issue was confirmed, and he received his glasses in a few weeks (black-rimmed, with round lenses). Going to school that first day with glasses was not fun, he remembered, because everyone looked and either smiled or laughed out loud. Sharon M. and Joyce R. did not laugh and told him that he looked very smart and said to not let the boys bother him. He was surprised at Sharon's comment because he thought she was still mad at him from putting a fishworm he had brought to school from his tortoise pen and slipped it down the back of her dress. She had run home across the street from the school crying and slapping the back of her dress, which likely made a total mess on her back or lower. He liked Sharon M. and Joyce R.

A few weeks later he couldn't take it any longer, he vowed to himself that the next boy that said anything about his glasses would get punched in the jaw. Roger P., one of the lower Washington Avenue boys, made a crack and he walked up to him and hit him hard right in the middle of his face and Roger went down, nose bleeding, and he walked away. After the bell rang for the end of recess, he returned to his classroom. Once everyone came to order, he heard loud and clear over the school's loudspeaker on the wall, "Attention, Attention. Will "Micheal" Campbell, please come to the Principal's office Immediately? Thank You." Click. Of course, everyone turned to look at him when he rose to leave the room to go to the Principal's office.

A few minutes later he was in Mr. Kane's office, the principal, and his secretary asked him to take a seat. After some time, she said, "You can go in now." Dwight Kane was a tall and pleasant-looking man. Mr. Kane asked him if he knew why he called him to his office. He said, "yes, for punching Roger for making fun of me for wearing glasses" and he went on tell Mr. Kane in great detail about the boys who were making fun of him.

Mr. Kane said, "Son, I understand the problem. I will be talking to Roger and will try to explain the facts to him and hope he quits making fun of you because one day he may have to wear glasses too."

The weeks went by and the boys did quit making cracks so whatever Mr. Kane said worked. And that was the last fight he had in grade school. But that was not the last time he was sent to the Principal's office that year. My 3rd grade teacher was Mrs. Baines. She must have been more than 60 years old and wore a lot of clothes, and a tight bun hairdo. He could see quite well now and was beginning to notice many things he had never seen before, the hands on the clock in the classroom, blouses, and sweaters that girls were wearing. While the class was silent studying and reading an assignment, he dropped his pencil, and bent down and reached back looking for it and turned his head where he could see shoes. Karen A. was seated at the desk immediately behind him. All of sudden he wanted to see more. He found his pencil and returned to his reading. That night, he began to consider the matter. He needed mirrors that he could cut-and-paste to the back of his shoes, which could be aimed just the right direction to see all of her shoes.

In a couple of days, he was ready. On the first recess, he went to the restroom and attached the mirrors to the backs of his shoes. He went to his next class when the bell rang. It was still Mrs. Baines' classroom. After a while, he dropped his pencil and bent as far as he could and aimed the mirrors on his shoes as well as he could.... And there they were, wow, what nice shoes, he thought. Then getting up he rotated his

head back slightly when he saw two black high-laced shoes of none other than Mrs. Baines standing no more than a foot away from him. He was just about to straighten up when she grabbed him by the scruff of his collar and pulled him out of his chair and she practically carried him on tip-toes out of the classroom and into the hallway. She shoved him up against the wall hard, and said, "I know what you were doing..." and she began to slap him across face maybe five or more times. "Never do that again, Mister!", as if next time she was going to kill me, he thought at the time. "Now," she said, "go back to your seat and I don't want hear a peep out of you the rest of the class." For the rest of the afternoon, I don't remember talking to anyone.

He went home that afternoon concerned about what Maxine and Clarence were going to think of his day, about which they were bound to hear. Mother walked in the door and he was trying to figure out her mood but there was nothing unusual. They sat down to eat that night. She kept looking at him, and finally reached over and touched his cheek with her fingertips. She said, "Dad, his face is swollen." Dad took a square look at him and said, "Yes, his face is swollen, like someone slapped him around." He teared up and said, "I'm in trouble at school." "How so?" she said. "You mean fighting the boys again?" "No," he said, blurting all out. "I put mirrors on the back of my shoes to look at Karen's shoes, and Mrs. Baines caught and dragged me into the hallway up against the wall and slapped the dickens out of me."

His mother sat there thinking this out. Dad burst out loud laughing, and said, "Well, I've heard everything now. Didn't you know that you were going to caught?" He replied that it was important to look, for some reason" Dad turned to Maxine and said, "What do you think of that Mac?" She said, "We are going to see what's going on at the school first thing tomorrow."

The next morning Maxine and he went to school. First to the Principal's office. She knew Mr. Kane from working on school bond issues with him over the years and she was known to have been a major force in getting the new school bonds passed that previous year. They sat down to wait for Mr. Kane to come in that morning. Right at 8:00 AM, he walks in. He said, "Hi Maxine, How are you and what's up?" She said, "Dwight, have you heard what happened yesterday?" He said, "No.." She said, "Let's talk about it in your office." They disappeared into his office. After about ten minutes they reappeared. She said, "Mr. Kane is going to speak to you about this matter." He said, "OK." She left and went on to work.

Mr. Kane asked him to come into his office and he shut the door and he sat down behind his desk and indicated for him to sit as well. In looking out the window, he said,

"Son, I have two problems in this matter. One is that you should not have been trying to look at the girl's shoes that way, the other is that Mrs. Baines was wrong in punishing you the way she did. So, on the one hand, I and your folks have to be careful not to make you feel odd about your interest in shoes, while on the other hand, Mrs. Baine is a good teacher and they are hard to find these days. So here is what I am going to do. I am going to discuss the matter with Mrs. Baines and if her response is not satisfactory, I will retire Mrs. Baines today, with her full pension. And from you I want you to promise me here and now that you will not do anything like that again. Can you do that?"

He replied, "Yes, Sir. I guess that was a pretty dumb thing to do." Mr. Kane then asked him to apologize to Kathleen. He said he would and did, a few days later in the school yard. She said she thought it was pretty weird for him to do that but she had heard that boys were pretty strange in any event.

The next day, he went to school and Mrs. Baines was nowhere to be seen. Everyone knew what happened. No one spoke of it again. The new teacher was young and just graduated from college.



About a year later, when 4th grade was upon him, with fractions and state and capital names, one Saturday around noon he had just come back from visiting a stand of trees that was a few miles by bike from the house. There were about 10 or 15 trees all about the same age, but of varied species, there were oaks, maples, elms, and a couple of poplar trees. He was learning about trees and collecting samples and working on more merit patches for Cub Scouts, for which Maxine was the Den Mother for his den. Earlier, she helped managed a large Girl Scout Troop on the west side of town.



There were big bushes that he didn't see because he was looking up and stumbled into the bushes over his head. He got scratches on his face and arms. But he got up muttering, cut a few branches, and took them home to look at in greater detail and under the little microscope he had received for Christmas the year before. He also took a few branches of the bush he didn't recognize. Retta was the only one home. When he came in, he laid the samples on the kitchen table, sat down across from her and began to handle the leaves. She reached over and carefully picked-up one of the leaves and looked at it through the bifocals of her rimless glasses perched down her nose a bit. She said, "Boy, you know what you have here?" He said, "No, that's why I brought a bunch of leaves home to look up. It's from a big bush I fell into."

She said, "Well, I'll tell you what this is, it's Poison Oak, and from the look of your arms all scratched up, that bush must have been all Poison Oak. Look at your arms. They are already getting red, and the side of your face," as she put her hand up to my face and turned it so she could see it in the better lighting" He said, "I can feel the heat now." Grandma Retta said, "I'll fix you right up" and got up from the table and began to carefully select a few branches and went over to the kitchen sink. She pulled out a knife and began to chop up the stems and leaves into little pieces, like she was making a salad. She got a pan out from under the cupboard and filled it with water and added some salt and other things he didn't recognize from the spice tray. Then she dumped the chopped-up pile into the pot and began to stir. After a while it began to boil, and the color of the water was turning reddish brown. While she was stirring, she said, "I did this for Clarence and Russ a couple of times, once for Poison Oak but also once for Poison Ivy that they got into, like you."

After about 15 minutes of stirring the boiling water, she stopped and shook the spoon over the pot and put it in the sink. She got a wooden spoon from the drawer and began to ladle about 15 spoonfuls into a small bowl. "There," she said, "Let's let that cool down a bit." He said, "That looks like soup." After a few minutes, she picked up the wooden spoon, dipped into the bowl, and filled the spoon, and with one hand holding the spoon and the other under in case she dripped, she turned to him and said, "Open your mouth," which he did, only because she was his Grandma and she appeared to know what she was doing. The taste was something like warm root beer, but oily. She said, "Three should do it." she said, "I would wrap up the branches and put them away for a few days before you handled them." And that was that.

That evening he was feeling a little warm and his arms were getting blotchy with red streaks from the scratches, but otherwise he felt fine. When Maxine got home that night, he was watching television. Clarence wasn't home yet. She came into the living room, put her purse down on the chair and turned to me and said, "How are you doing, son?" He looked over at her and said, "Just fine." Then she came over in front of him and said, "What in the world is wrong with your face and arms? You are all scratched up?" He said, "It's nothing, I just got into some Poison Oak when I was getting some tree samples for Cub Scouts. But Grandma fixed me up, so it should be gone by morning." Maxine asked, "How so?" He then told her about how Grandma went about cutting up some of my bush samples and boiling it in water and salt and things and he said that he took spoonful's of the soup medicine and that it didn't taste that bad.

Maxine took hold of his arms and looking very closely. She said, "Let me see your "samples," so he went upstairs and retrieved the wrapped-up samples of the bush from his room. He came back and laid it down on the kitchen table. She leaned over and inspected the leaves with a pencil and turning over the leaves and went through the ceiling, so to speak. She asked, "How many spoonful's did your grandmother give you?" He said, "Three" She then said, "What?" She put her hand on his forehead and said, "You are running a fever!" This was something she knew about having worked for the Red Cross just after high school years earlier. About that time, Clarence pulled up in front from work. He came in the door and Maxine, in a very loud voice, said, "Do you know what your Mother has done to our son?" "No, what?" he asked. She said, "She has boiled up one of her concoctions with Poison Oak stems and leaves and gave him three tablespoonfuls, because he got into some Poison Oak in some bushes he fell into when playing this afternoon. Look at his arms and face" He did, and shook his head. "I remember having her fixes and couple of times when I was young," he said.

She went into the hallway and picked up the phone and called their doctor and asked his advice on what should be done. After listening for a bit, she thanked him and said goodbye. She turned and said that the doctor advised that she should watch his temperature, skin color, and make him drink a lot of water, and if he gets higher than 101 degrees and/or looks pale tonight, then she was to call him and then take him to the hospital, and he'll meet them there.



In all the excitement, he was getting concerned after he had heard his mother talking to the doctor about hospitals and such, so he went to bed that night not knowing what to think. He did remember that Maxine woke him up four or five times during the night by turning the light on next to his bed and taking his temperature, but by the next morning after he awoke, he felt fine. Later that day he heard mother yelling sternly at Grandma, but I never heard another thing about it and it was forgotten.

As the years passed, he has climbed through jungles, temperate forests, and associated bushes, and never once had evidence of Poison Oak or Ivy, or Sumac. He often wondered whether he had some immunity. Probably not, he thought. In the meantime, a sister had arrived a couple of years earlier, but Helber (the lady from across the street who had been hired as a babysitter) looked after her during the day so his mother could go to work downtown.

The months passed by until one day with him being out of marbles, tired of practicing his horn, and knowing Steve wasn't big enough yet to play pitch and catch, and having nothing better to do, he set about with an idea to make some noise, since it was close to the 4th of July, by creating his first experiment. His Dad and he would go shoot cans out at the local dump with his Remington 22-caliber rifle.

The rifle had a clip of about 20 rounds that if the trigger was held in just the right way, the rifle fired all 20 in a matter of seconds. They later learned that this was a flawed design and it wasn't supposed to do that, but they enjoyed that aspect anyway, and one-by-one shooting as well. Remington had a recall out for that gun, but who knew in those days? He would save the expended shells during each outing, so he had a small box full of empty shell casings. He would go hunting a few years later that was the last time he would shoot at big black vultures.

The concept of his idea crystalized when he realized that if he cut off the tip of the wooden matches he had from his kitchen, he could cram the tip material into an empty shell casing, and then, with the pinched-noised pliers, he could crimp the top and squeeze shut the top of the shell casing. For the pièce de résistance, a standard ball bat was held vertically above the shell casing laying on the cement sidewalk in front of his house and he allowed it to slide through his hand down to hit the casing with the full force of the bat's weight. The first experiment created a huge explosion, far bigger than a large firecracker and with a deeper sound of the explosion. The bat was propelled upward, and he had to grab it or it was going to fly off over his head and out of control. He learned to control the bat and fired off a few more. Pretty soon the neighbors began to appear on their porches with hands on their hips, which meant they weren't pleased with all the noise. He decided to quit that day and went inside. The next day, Steve was playing in the front yard and he asked Steve if he would like to hear a big firecracker go off. He said yes with a lot of excitement. So, he put a prepared casing on the sidewalk. He asked Steve to go stand by the fence of their property about 20 to 30 steps away. While he was walking away and had his back to him, he released the bat, and "Boom" off it went. He was watching for Steve to jump out of his socks to surprise him. Instead, just after it went off, he saw Steve grab the side of his head, jumping around in place. By the time he rushed up to him, there was blood everywhere. He was sure that a casing fragment must have hit him in the head. Helber was watching for some reason from across the street at her house and came running.



She has taken off her apron and put it to Steve's head muttering to him, "What the hell were you thinking?" After a few minutes, as she mopped up the blood, she finally said, "OK, look at Steve's ear, it has a little hole clean through it; that's where the blood is coming from," Neighbors had also gathered around looking at Steve's ear and feeling elsewhere on his head. Everyone now heard what had happened and were glaring at him. Helber took Steve to her house to clean him up before Maxine and Clarence got home from work. He went in the house and sobbed privately in a towel for a while, relieved that he didn't hurt his brother badly.

Helber, as she left with Steve, told him, "You could have killed Steve, messed up his brain, or put out an eye. Steve and you are very lucky all around."

When Maxine and Clarence arrived home a few hours later, he saw out the upstairs window of his room Helber and his parents and Steve talking, she still holding a towel to the side of his face with ice he presumed.

"He did what?" he heard his mother say as she looked at Steve's ear. The next thing he heard after she went into the house, was "Michael David, you get down here right this minute."

That was that last spanking he received from "the board" she had for just such occasions. She did not believe in sparing the rod. The next day he privately apologized to Steve and gave him a big hug.

He never made other explosions like that one again because he then understood that shrapnel can be released with such devices, but it wasn't the last time that he created another, much bigger explosion by mistake in 1957 when he was a Junior in high school.

After a week or so passed and Steve's ear healed with only a small scar. Other things were happening in the neighborhood. The bullies down the street showed up one day. There were about four of them, wearing scruffy clothes and their faces weren't all that clean, he remembered. He thought they may have come looking for trouble. They came to find what actually happened to Steve. One of them said, "I hear you almost killed your brother. Did you shoot him with a gun, or what? We have been hearing a lot of gun fire up this way." He explained the device he had constructed, and they were very impressed. They asked if he could make some of the devices for them, but he said that they could have his pitched-nose pliers and the box of empty shell casings, and a box of kitchen matches, if they like, and could make the devices themselves. They were pleased and parted having a new friend up Washington Avenue for a few years at least.

It was not long after this that he made the school's newsletter, which may explain the reason for the above. In science class, his teacher was discussing what it was like up in space. She turned to him and asked, "Please define vacuum for us, Michael." (She knew how to pronounce his real name.) He thought a few seconds and then said, "I have it right here in my head and it's nothing." Of course, the class exploded into laughter, and even the teacher was surprised by his answer and turned away laughing. After a few moments, she quieted the class down, and then said, "Michael, would you like to rephrase your answer?" He said, "OK, A space without matter," and then went on to discuss the lack of pressure, extremely cold when not in direct sunlight. The teacher said, "That is correct," and the class broke out into clapping. This episode was recaptured and reported in the *West School Green Newsletter* and will no doubt last through eternity, he thought after he read the summary account.



The family lived next to Blackie's Grocery and Hardware which was in a very old wood-frame building. Maxine didn't trust the food at Blackie's, so they didn't shop there. Blackie and his son lived in the back of the store. His son was a friend of Marvin H., who lived a block away. Marvin asked him once in front of his house if he would like to see Marvin's new shotgun. He went with Marvin to his house and up to his room. Marvin reached into his closet to bring out the gun and in the process, it went off and blew a 6-inch hole in Marvin's ceiling. He turned and ran down the stairs and back to his house and never played with Marvin again. That decision was sound because

Marvin and Blackie's son were part of the gang stealing hubcaps and car-hood ornaments. Blackie's son was rather overweight and more than five years older than him. He never hung around with him. One night the family was awakened by flashing red police lights in front of the store. It wasn't until the next morning that they found out what happened. Heber found out from a friend in the local newspaper that Blackie's son and his friend Marvin had been arrested for robbery, and that Blackie had a heart attack and died on the spot when the police arrested his son. Apparently, car-hub caps and hood ornaments were being stolen for months all over town. Months later, the guys were tried, convicted, and sent to state prison for five years.

The years rolled on and in no time grade school was about over. He lettered in basketball and football for West School during the 7th and 8th Grades. Butch G., Dennis S., and he spent a lot of time together. He was elected to the Fire Petrol. Butch was well-liked by everyone and was very good in basketball and baseball. But he didn't play football because his parents didn't want him to get hurt by the big boys.

In the summer after the 7th Grade, he was awarded an academic-sportsman scholarship to Camp Arrowhead sponsored by Dwight Kane, Principal of West School, the same Mr. Kane who got him off the hook during the that 3rd Grade incident with the mirrors, was no doubt trying to find ways to thank Maxine for her work with the Lancaster School Board and the many school bond taxes she helped to get passed by a hesitant voter population in those days. It was during that period that Maxine told him that Dwight had a major influence within the Freemasons of central Ohio, who were the bankers, the politicians, and many others, all were Freemasons, because he was the highest Mason in Ohio with 32nd Degree. In Dwight Kane's high school years, he was the world record holder in the low-hurdles and came to believe that sports and academics had to go hand in hand to build strong character. He also was the driving force behind the building of the impressive Masonic Lodge adjacent to the Catholic Church on South High Street in Lancaster, where he and his guys participated a few years later in the DeMolay leadership development fraternity in high school for a while, but then lost interest.

He is Second Row. Third from Left.

Camp Arrowhead, located near Jackson, Ohio, offered boys from all over the Midwest U.S. concentrated coaching during six weeks of the summer of 1954.⁴ During the award ceremony, he remembered that Mr. Kane came down from the speakers' table where he has just earlier announced the awards that year and pulled up an empty chair to their table.



He said in front of his parents that he was very pleased to support the award to their son, and that he would like for him to join the DeMolay, the young men's organization that leads to involvement in the Masons.

He remembered thinking when he first heard about the award at the time that Butch should have received that scholarship. He also thought that his music experience likely tipped the scale because the Camp needed a Bugler for Reveille, daily flag-raising ceremonies, and for Evening Taps. Camp Arrow was very expensive and lasted for 6 weeks and consisted of all white boys. In fact, he was very dark that year and every summer because he tanned very quickly in playing baseball outside for hours on end. He had a minor thought that maybe he was also selected because he was darker than a lot of people of color. The Camp was great fun, but he also had some tough times. The great fun was because professional players active in the major and minor baseball leagues would visit by rotation for a few days at a time and provide the on-site training in baseball. Homer Eddington was his favorite, and he spent a lot of time hitting



⁴ <https://lhs59.org/earlyhist.htm> Scroll down to 1954.

and running bases and sliding practice with Homer demonstrating and instructing on the techniques associated therewith including some of the head games that were played in baseball especially. There was a photo taken of Homer with him. Being summertime, they both were very darkly tanned. He later found out that Jon N. was also at the camp that year, but he heard that that Jon stayed pretty much by himself in those days. He wished he had known him then. Maybe he could have turned him into a baseball player.

That was challenging work, but they all grew to be better players and had a better understanding of the game. They played a few night games under the lights in a small stadium in Jackson against surrounding junior varsity teams. During one game, he was doing especially well at the plate and was batting 3 for 3 of two doubles and a single, hitting the ball very hard through the infield. The 4th time he went to the plate, the pitcher was very tall and specialized in fastballs, which he thought also curved, which made it difficult to hit. But he had hit him three times in a row this evening. He could tell that the pitcher was not going to let that happen again. The first pitch was a fastball on the inside. He had to raise his elbow and it crossed the edge of the plate as the umpire called "Strike One" loudly. The next pitch was also a fastball, by way inside that he had to rotate quickly to keep getting hit with that sizzler. "Ball" quipped the umpire. His coach called a time out and had a conversation with the umpire and pointed toward the pitcher a couple of times.



When that got settled, whatever it was, he remembered stepping back into the box readying himself for the next pitch. It came and it was another sizzler. He rotated, but this one was way inside and it struck him with full force, meaning everyone saw that he stopped the 100-mph ball with his body, in the middle of his back around the kidney area. It was also evident that the pitcher was meaning to hit him and thought he could get away with it because he was on home turf, or so he thought. As the ball hit him, he went down in pain and actually saw stars. While lying flat over the home plate for a little while, he could hear yelling and swearing; there was a crowd of boys on the pitcher's mound throwing punches and grabbing and throwing one another around until the lone policeman weighed into the crowd of young boys and broke up the fights.

The boys went back to their respective benches, but the pitcher was still on the ground, face down. One of his teammates was beckoning to his coach to come. At the plate, the Camp's coach and umpire helped him to stand up, but he couldn't stand up straight because his back was still really hurting. He heard someone say the game was over and the pitcher was being taken to the nearby hospital to be checked out. The coach said that his boy should be checked too, to see if the kidney was damaged.

So, he spent the next few hours getting checked out with an X-ray, while the bus waited to take the boys back to the Camp some 25 miles from Jackson. Later, someone on the bus said the pitcher had a broken jaw and other injuries, but he didn't hear anything more. The boys on the bus were happy campers and were singing songs like "Take me out to the ball game" and other camp songs. He didn't feel like singing because his back was hurting. The Chief Counselor thought it best that he stayed in the Medical Cabin at Camp that night, which was adjacent to his house, so "we could keep an eye on you in case you start running a fever, or something." During the period, he never showed blood in his urine while peeing and that was a good sign the kidneys hadn't been damaged, just bruised apparently.

To his surprise and all the boys' surprise at the Camp, the nurse was a candy-striper, but more importantly, she was the Chief Counselor's daughter, 16 years old and very pretty. None of them knew she was around.

That night she brought him aspirin, water, and a nice smile. She also smelled nice and she lived at the Camp all that summer. He couldn't do taps that night or Reveille at 6:00 AM, but by 9:00 AM, he was ready to do the flag-raising "to the Colors" piece, which was always fun to play on his cornet.



Later the next day, when he returned to his cabin, "Mouse" Icenogle, the first baseman of their team (from Chicago, he remembered), and his cabin-mate for the duration, he told Mouse about the daughter. He said, "I guess we should take a walk that way after you do Taps." They did on two or three occasions, but she was buttoned up and was not allowed to fraternize with the boys or with the older ball players who came to the Camp for visits and to give instruction. So, the Chief Counselor was keeping her under wraps, as it were. It would only stir up the boys who were just beginning to get interested in girls.

Mouse was an important part of his summer at Camp Arrowhead in 1954 (He is front row, five from left in the Camp Arrow group photo above. John N. is also shown in the second row, 6th from left). But the first day at camp, they instantly took an intense dislike for one another, which a few days later after some pushing and shoving, more by Mouse he remembered. He never allowed anyone to push him around. So, one day a full-blown fight broke out among them, strictly Marquess of Queensberry Rules only, no wrestling. Both weighed in about 120, maybe 130 when wet. Both were connecting heavily, Mouse's nose was bleeding, and he had a scuff on the side of his face. Other campers were flocking to see the fight. Later, someone said they came to fight because someone said that someone "had picked a fight with the Camp Bugler, Let's go."

There must have been 20 boys around after a while, no Counselors, of course. They fought on for about 15 minutes, edging little by little around the back of the cabin getting nearer the latrine. All of a sudden, Mouse gave up fighting and came at him to wrestle, which only made him even angrier. And all of a sudden, they splashed into the latrine and fell down, sputtering, spitting, and swearing could be heard from the latrine as two 13-year-old boys got up and walked out the latrine looking, let's say, not so good. Mouse had a bloody nose, a split lip, and he had a cut on his cheek, but otherwise OK. They stood there in the middle of the circle of boys that had crowded around them. Then Mouse stuck out his hand to shake hands and they shook hands and patted one another their respective backs. The crowd made a big noise that lasted two to three minutes of whooping and hollering.

About that time, one of the counselors came into the group pushing the boys aside wanting to know what all the hooting was about. No one replied. Then someone said they were all just playing around. No one mentioned fighting. The counselor came up to Mouse and him and looked at them closely, smelled them, and then said, "OK, I know what's going on," and told the boys to go get cleaned up and report to the Chief Counselor's office, which had a distant ring to him of yesteryear. He then remembered Mr. Kane.

After taking showers and getting cleaned up it was time to see the Chief Counselor, as instructed. The boys were met in the office by, yes, the Candy-Striper, in all her glory. She had a tray with a bunch of pills and two hypodermic needles. An older gentleman came from the back of the office. "Hi Boys, I'm Dr. Johnson," I hear that you two fell into the latrine and bashed your faces on the rocks." Mouse stuttered "Y-Y-Yes, that's right." He nodded in agreement. "We are going to have to give you shots and medicine in case there are bugs that you may have picked up in the latrine." "We received permission from your respective parents just a few minutes ago. So, here you go."

The boys had to take antibiotics for a week. That meant they got to see the Candy-Striper every day for a week. They got to know her pretty well. They at least began to learn how to talk to a pretty girl, somewhat. Mouse and he got to be good friends over the rest of the summer camp.

Every morning he would play reveille, and then the flag-raising, and at night, Taps. But Mouse and he never went to bed until midnight. They played cards, and chess, and just talked about all sorts of things. Mouse told him that night that he was the one that riled up the boys who were watching the game and led them after that pitcher that tried to bean you. As soon as it happened, Mouse said, "We were off to the pitcher's mound, and I got in the first punch right into that SOB's jaw. Then everyone took their punches at him and no wonder he ended up on the ground, and with a broken jaw, (they heard later and other things). He deserved it..." He told Mouse that he assumed that he was in the middle of that but didn't know that he had led the charge. Mouse said, "Well, let's keep that part, between us, OK?" He agreed.

In the 4th week at Camp Arrowhead, someone decided that they had a free day, meaning they could do anything they wanted. Someone mentioned going to a place he knew had a big tree and so-called "grapevine" that they could swing across a ravine and back. That sounded good to them. He and Mouse and about three others were off to find the big tree. After about half an hour of clambering their way through the dense undergrowth, the big tree appeared, and it was a very big Oak tree. Rumors were true, it had a couple of inch-thick "grape vines" hanging down. They all stood there for a moment seeing who would go first. As usual, he took this on. Piece of pie. He backed up holding the vine calculating the angles and the release points. He took 3 or 4 steps, and he was off, the arc was as expected, but then he heard the overhead branches breaking up near the top of a big tree. In an instant, he was in free fall over the middle of the ravine. He, along with the loose vine, fell in into a deep collection of dry, dead leaves. At first, it was like a feather bed, he thought for a few seconds. But then, the buzzing, and the stinging pain in his legs, and then arms, and then head and ears. He was in real trouble now, he remembered thinking. He tried to get his footing because he had to get up and out soon. He finally got to the edge of the ravine and the boys, Mouse included, were trying to grab his arms to pull him out of the ravine. Then, Mouse was next to him swearing like a trooper as he began to get stung. He pushed himself higher so the others could get a good hold and not only drag him out of the ravine but they kept dragging him off into the underbrush to get far away from the Yellowjackets, which they turned out to be.

By the time they got him out of the ravine, he was almost unconscious. Mouse was in pretty bad shape as well, but he could walk at least. The boys carried him back to camp fighting their way through the underbrush, running across the open field heading for the Medical Cabin when one of the boys tripped and fell as the boy-ambulance collapsed into a heap. They picked him up again and made it to the cabin, and the boy in front kicked in the door with splintering wood and glass everywhere, then moved past the reception room to the patient room and placed him down on the bed as gently as they could. Some of them were dancing around in place because they too had gotten stung as well. A couple of boys holding Mouse up brought him in and sat him next to the bed where he lay.

The doctor and the Candy-Striper appeared as soon as they first broke through the door. He had taken a look at what was going on and was calling for a couple of doctors to come from town to consult on how to manage the handful of boys with "bee" stings with two in pretty bad shape. As best as he remembers, he and Mouse were given anaphylactic shots to ward off potentially life-threatening allergic reactions from the stings, but additional medicine was coming from Jackson. But there were other problems.

The doctor had to call three of the boys' parents, two of them for the second time this summer, and asked about their allergy history and for permission to treat them appropriately. He got their approval. As the moments passed, Mouse was also barely conscious as well and he was lifted by some counselors that had arrived to help and moved him into the patient room next door.

After a few hours, he was still in tremendous pain, and a fever had appeared, which he knew because he was feeling increasingly hot and beginning to sweat. They shoved needles into both arms and hung bottles upside down from a stand looking very serious. All he could see was a blur about this time. The doctor kept asking how he was feeling now, but he responded that he felt OK, but he really wasn't. After a while, other doctors showed up and went to work on him. Inspecting everywhere. All of a sudden one of the attackers was buzzing around in the patient room. One of the doctors barked, "Would one of you get that son-of-a bitch?" The counselor took care of the Yellow Jacket hitchhiker.

He fell asleep for a while, he didn't know for a how long, and then awoke and was feeling a lot better. The Candy-Striper was sitting next to his bed. She stood up and felt his forehead with her cool hand. She said, "Good, your fever is going down. I'll go tell the doctor, and he will want to talk to you." she disappeared around the corner.

He shifted around in bed and realized that he had unfamiliar problems. Something was between his legs. He lifted up the sheet...and said, "What the hell is this?" About that time the doctor came in without the Candy Striper. He said something to the effect that you probably noticed now that you are awake that your balls are the size of softballs. He said, "Yes."

The doctor said that the swelling will go down in a day or two as your system flushes the Yellow Jacket venom-like substances into your urinary tract and you expel it. He also said that he will now give him a diuretic to help his kidneys produce more urine to move it more quickly.

Then the specialist doctor said, "Son, you need to know that this incident may have eliminated your ability to have children when you grow up **or** there is also evidence that this incident could give you hyperspermia and which could give you, as you go through puberty in the next few years, a very high sperm count. I want you to be prepared either way. I'll talk with your parents in a few days after you are more fully recovered and we get the last of the venom out of your system. So, relax, you'll be fine. I'll see you tomorrow." And he departed out the front door of the medical center.

The Camp doctor came in a few minutes later and said that everyone was glad he made it through the worst part of the attacks. He said, "Your mother wanted me to ask you if you wanted to go home," He said, "Tell her I feel fine, and that I prefer to stay at the Camp since there were only a few weeks remaining," The doctor said, "Fine, I'll do that. Do you need anything special? Charlette will bring your dinner in a bit. In the meantime, pee as much as can into the bottle. I'll give your medicine to Charlette to give you before you eat, OK? "

He said, "OK."

The biggest news of that day was not that his balls were the size of softballs, but that they now have the name of the Candy-Striper, ... Charlotte.

He started to get visitors a few hours later. Charlotte brought his dinner and sat in the chair next to his bed and chatted. He was wondering whether she knew about his balls and his 50-50 chances.

After a while, Mouse came in. He had calamine lotion patched all over him as did he. He said, "Mouse, you look funny." Mouse said in typical Mouse talk with a big smile, "You look funny too, and what is this I hear about your balls being the size of melons?" Charlotte grimaced and got up and said, "You boys are nuts." She said she would be back in a while and left. Mouse was all cranked up on what she had just said. Mouse said, "Do you suppose she meant something about us being Nuts?"

He didn't respond, but asked Mouse how he was feeling. He said, "I'm fine, I didn't get it in the "Nuts" as you did," and both of the boys laughed. He said, "Do you know we now know her name?" Mouse said, "Yes, I was here yesterday to see you, but you were still out. She was sitting there next to you and we chatted and I asked her name." He was out longer than he thought.

Over the next few days, he recovered, balls and all. By then he was ready to get back to his bugling and practicing baseball workouts, etc., because he had become pretty weak, which lasted for the rest of his time at Camp. It was pretty sad the last day at Camp. Many of the baseball big-leaguers showed up. Homer spent a lot of time with Maxine and Clarence. In the closing ceremony with all the parents, family, and boys, the Chief Camp Counselor recounted all of the highlights of the 1954 Year at Camp Arrowhead.

He said, "We will probably never again have such an accomplished bugler at Camp Arrowhead. Thank you very much, Michael D. Campbell from Lancaster, Ohio." During the applause, he stood and waved to the some 200 or so parents and staff who were in attendance.

The Camp Counselor spoke for another 10 or 15 minutes on how diversity makes everyone better prepared to manage their troubles. He hoped the boys would remember their days at Camp Arrowhead and maybe make a point of sending their children to Camp Arrowhead when they grow up and have families.

Based on how well Mouse could speak, he would have bet that Mouse was going to be an attorney too, like his Dad in Chicago. But, unless he gained a lot of weight, he doubted if Mouse was going to make football, but you never know at Notre Dame As the years went by, he wondered how Mouse turned out.

They all said their goodbyes. The Chief Camp Counselor came by where the family was sitting and shook everyone's hands, even his brother Steve's and his new little sister, Carolyn Sue's, and went on about how much of a pleasure it was to have had Michael that year. Maxine looked at him very proudly. He privately rolled his eyes. As they drove by the Medical Cabin on the way out of the Camp, Charlotte was sitting in a rocking chair on the little porch. He stuck his head out of the window of the car and waved at her. She recognized him and stood and waved excitedly. He watched her and she watched him until they turned onto the main road north to Lancaster.

Maxine turned to him and said, "What's going on with her? You two must be good friends?"

He said, "I guess so, but she's too old for me." Mom and Dad both laughed.

After they arrived home an hour or so later, Maxine and Clarence wanted a full-up briefing on what had transpired at Camp Arrowhead. Maxine asked him to drop in on Mr. Kane to let him know how Camp went. He said he would in a week or two after school started in September.

After school started and during football practice that fall, the 8th Grade team was scrimmaging against the junior varsity football players. During the season, the team played several Catholic and other schools in the general area. He was bigger than Butch but not even close to the size of some of the bigger boys that played. His position was right Defensive End and his job was not to allow a ball carrier to get around his area. One play, he saw a right-end sweep developing in his direction and saw the fellow by the name of LeRoy F. was carrying the ball. He was already well known to be a potentially great running back for Lancaster High School in a few years. He fought through one blocker and saw LeRoy coming at him. He lowered his shoulders and charged right at him. They crashed into each other and both of them went down, with him still holding to LeRoy's legs after being dragged a few yards down the field. LeRoy got up bitching about him spearing him, which he didn't even know what that was at the time. LeRoy pointed and yelled at his coach, who was standing nearby. The coach was chuckling. LeRoy said something to the effect that he'll get even with him one day. A year later, one of his supplicants got even.



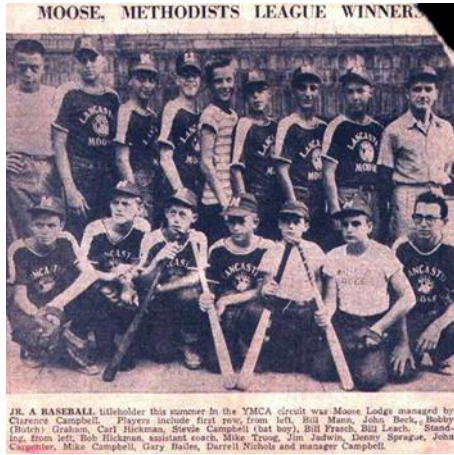
He continued to spend a lot of time practicing his cornet and playing in the band. Being in First Chair required him to be Conductor for the band when the music teacher was out or late for practice. It was always fun and elicited a feeling of great power with that baton in hand; when the music teacher arrived, he would wave and finish the piece, and then hand over the baton backwards with a bow. It was getting to be a lot of fun. From all accounts, Mr. Karney was a good music teacher. The subject topics were getting more interesting, and before long, grade school was just about over. He also sang in the West School Choir, last soloing at a city-wide 8th Grade Sing that spring when he wore a long royal blue robe down to the floor. But one surprise occurred during that event. When it was his time to sing, the announcer's voice sounded familiar and the closer he looked from backstage was when he realized that it was none other than the Chief Counselor from Camp Arrowhead.

He introduced him by saying, "Next up is the very talented young man, who plays the cornet, and is a renowned bugler, band leader for the West School Band, outstanding baseball, football, and basketball player, and tonight's singer, Professor Michael D. Campbell, in *A Cappella* "Swing Low, Sweet Chariot," if you will...."

And then silence he began to sing but was so nervous that he could feel his kneecaps jumping up and down, and he was wondering at the time whether anyone noticed. But he finished, even the trailing last note, although everyone later said that they loved it, he did not. Everyone clapped immediately and for fairly long, but he vowed at that very moment that he would never sing again. He kept thinking how odd it was for humans to make songs with their voices, and he felt that way for the rest of his life. In the Methodist Church and at baseball games, he could only muster mouthing the words of hymns and the national anthem. He allowed only one exception, which began at the Fire Tower south of Lancaster with his friends a year or so later. Of course, a few beers would assuage his concerns.

That summer after graduation he played baseball as shortstop for the Moose Lodge team, coached by his father, Clarence. The team won the 1955 Jr. A Baseball Championship in Lancaster.⁵ Dad was a great coach, loved professional baseball (Cleveland Indians), and the boys really responded to his enthusiasm.

⁵ <https://lhs59.org/images/Baseball55Clippings.jpg>



He spent hours and hours hitting grounders to the infielders and fly balls to the outfielders, all of which made them better players and a better team. Dad had learned to hit the ball when he was a young boy. He would position the bat under his left armpit and then throw the ball up and then quickly grab the bat with his good hand and swing it around in time to hit the ball. It was a very smooth move. And he only rarely missed the ball, as anyone would do sometimes. That year his team even beat Herman's Mfg., considered the "Yankees" in Lancaster over the years because of their coach's successful recruiting in Lancaster and surrounding smaller towns. Chuck A. played for Hermans and was a very good player, as catcher. A year later, the two became friends in high school as part of an exceptional group of guys.

He was able to field some of Chuck's hard hits in his direction at shortstop only because he wasn't a very fast runner and he had plenty of time to throw him out. But in that game, he had many balls hit hard in his direction of 3rd base and shortstop and he booted a few as well that were probably called errors, maybe not, but to compensate he did very well that game by hitting a couple of doubles that scored in a low-score game, 2-1 Moose Lodge over Hermans. That next week's game also made up for booting a few difficult grounders by hitting a home run and a triple and scoring 4 runs himself that broke the game wide open with runs, which led to beating Baltimore in their first league loss, 14-6, Moose Lodge over Baltimore. His Dad had the unusual habit of, when one of the boys would get a hit, he would run from his 1st base coach's box down toward home base, catch up with the batter as he was leaving the batter's box, and run with him toward 1st base telling the runner whether to hold up at first base or keep running around toward 2nd base because Dad could see if the fielder had dropped or missed handled the ball which would clear the runner to go for second base or more.



On a few occasions, when Butch, Gary, or Dennis would hit a long ball, he helped them around 1st Base on the 2nd Base, and then ran back around home plate well behind the Umpire to the 3rd Base coach's box to guide the runner on to Home or to slide.....into 3rd base. Although this coaching behavior of Dad's seemed a bit odd, and was maybe even a rule violation, no umpire ever called him for it. Maxine took a movie of this one game, but it has been lost over the years. The family watched it over and over again. It was hilarious to see Dad do his thing.



After baseball, Dad took up training in the Boy Scouts and became an integral part of the Lancaster Boy Scouts of America for the next 20 years or so. Dad convinced him to join in the 7th Grade and he received his 10th merit badge later that year and achieved the Star Scout ranking. Dad wanted him to continue accumulating merit badges and go for the prestigious Eagle Scout Award but sports, schoolwork, girls, and the growing group of friends required all of his time. He always thought that he may have disappointed his Dad and Mr. Kane about not going on to Eagle Scout.

Anecdotes of a Lifetime

Eight-grade graduation was held in the 6th Avenue Methodist Church across the street from West School. His graduation was under Mr. Kane's watchful eye. Mr. Kearny, his band/cornet instructor, was also involved. He also knew that a few years later that he would disappoint Mr. Kearny for quitting music and playing the cornet after nine years of study.



Chapter Three

1956, A Family Member Goes Down but Recovers



Watercolor of Winter Road by Lancaster Son, Ed Kitchen

It was a time of heavy winter snows, but increasing living standards and the focus on education helped to fuel the increase in enrollments with 30% of high-school graduates going off to college, although only about 50% stayed on to graduate. Ohio State lost to Penn State, Iowa, and Michigan in football in 1956. Disposable diapers and Teflon frying pans were available in the stores. Elvis Presley appeared on the Ed Sullivan show. President Eisenhower signed the Federal-Aid Highway Act into law. The Federal Highway Act authorized the creation of the interstate system with the construction of over 41,000 miles of highways across the United States. It was the largest U.S. Public construction project to be undertaken by the government in history. President Eisenhower pushed for the creation of the interstate system, citing a benefit to national security as the highways would allow for faster and safer evacuation routes in the event of a nuclear attack. The Federal Highway Act also helped to boost the auto industry, solidifying the car's place in American culture.

His family also had moved up in the world and left the Westside behind. With increased revenue from Maxine, they bought a big, two-story house with four bedrooms upstairs and a large attic accessible by additional stairs. It was on Walnut Street directly across from the tennis courts in Elmwood Park in the southeastern part of Lancaster. Two oak trees stood guard in front of their house in the grass between the sidewalk and the curb. The park had a rough ball diamond at one end and was surrounded on two sides by a medium-size cemetery. The section along Walnut Street had many Civil War gravestones with names and dates that were hardly legible, but discernable. He, his brother Steve, and an occasional girl who was invited to the séance, spent many hours sitting on one or another of the gravestones pondering

their lives and deaths. Linda L. lived a block away and Jo Ann E. lived nearby also. There seemed to be a lot of nice-looking girls in his new neighborhood, although he did miss seeing Sharon M., Elaine A., and Joyce R., when he, Dennis S., and Gary B. rode their bicycles around that Washington Ave. neighborhood.

It was summer when they moved to Walnut Street. Retta, Dad's mother, who was about 75, moved with them from the West Side. He remembered that she didn't smoke tobacco, but she snuffed what he presumed to be some form of tobacco. He once saw in her room upstairs a very small, gold box, which she opened and took a pinch in her two fingers and inhaled the powder up her nose with a quick snort. He told Maxine about it and she said, "Well, that's pretty disgusting, isn't it?" she never being a smoker herself. He agreed.

Maxine and Retta had an odd kind of a relationship, he remembered. They seemed to tolerate each other, but Retta never said much, come to think of it, he didn't ever remember hearing her speak more than "yes," "no," or "I don't care." It wasn't until he saw the movie "Psycho" and Norman Bates' mother that he saw a striking similarity in stature between Retta and Mrs. Bates. He had the feeling that Retta was permanently angry at Maxine about something. He also remembered later that it was similar to Maxine's relationship with her own sister, Carolyn, his aunt who lived in Chillicothe. He had heard that Carolyn was also permanently upset with Maxine because, the story went, she had taken a doll baby away from Carolyn when they were very young many years before. That was probably just a coincidence, he thought.

Esther A. lived a few blocks to the west. For a few weeks that summer, he spent a fair amount of time with Esther. She was the first girl that he really liked being around because her long black flowing hair smelled so good. But that soon faded, and Jo Ann was #1 for a while; she had blond hair and was absolutely beautiful. Linda caught his attention at some time later because she was really smart and they discussed many interesting topics, like astronomy, history, and he remembered that they also had long conversations about human behavior (psychology of sorts). She wanted to be a nurse, and he hoped she did, maybe even a doctor. It seemed to him that every smart/good looking girl he knew wanted to be a nurse, he thought, probably so that they could be in a position to marry a doctor, like being an airline stewardess and airline pilots.

He had visions of becoming an astronomer to figure out all that's going on in the solar system and in the galaxy beyond. He figured the church people must know more than he did about what happens when a person dies. He was wondering too what planet or galaxy God called home. He concluded that, based on his preliminary understanding after going to the Methodist Sunday School and in discussing such subjects with his friends, he sensed that there were some misidentifications going on. For example, there was confusion between "hoping" for something in substitution for something used in religion called "praying" for something in the search for truth or understanding that relies on something called faith. He didn't understand why some people carried such religious beliefs without having credible proof.

After a few weeks on Walnut Street, he noticed boys playing baseball in the park across the street. He went down to see what was what and took his ball glove and favorite bat. He arrived where they were playing and leaned up against the backstop and watched. One of the bigger and taller guys came over after a while and said, "Are you that Bible-Banger that just moved in next to my Aunt?" He got ready for trouble. "I guess so," he replied. And for some reason he just blurted out, "You must be one of the many Fish Eaters I heard were crawling all over this neighborhood." The big guy grabbed him with both hands and said something. He shrugged off the bigger guy's grasp, backed away, and quickly kicked him squarely in the balls. The big guy went all the way down, holding his groin. He was ready for the rest to come after

him, but the next thing he heard was laughter, a lot of laughter, and finger-pointing at the big guy on the ground whimpering. The guys then came up to him in a group and patted him on the back,

“Way to go. Bob has been deserving that for a long time. He’s been picking on some of us for some time and he’s nothing but a big bully.”

Bob eventually got up and went over and sat on the bench. The rest of them began to play ball and they all figured he fit right in because he could play quite well, even if he was a Protestant. They played a lot that summer although Bob and he never became friends even though he lived only three houses down on Walnut. Bob’s Aunt Katherine, next door, told Maxine that Bob’s mother had abandoned the family a few years earlier and he and his brother were having a tough time with their father, who tended to be on the mean side, and drank a lot. She told him to be nice to him. He wasn’t.

When it was time to start 9th Grade, as a Freshman at the big high school on the hill, all the boys in the park went off to their Catholic school and he and brother Steve went off to “Protestant” schools, that being the way of things in that neighborhood. It was clearly a Catholic neighborhood, with the exception of his family and the young ladies he had just met, who, it turned out, were not Catholics. But he later became friends with some of the Catholic ladies, and some seven years later he almost married one of them.



He began high school with great expectations, but with some trepidations as well. He remembered what LeRoy F. had said last year during football, “I’ll get even with you,” meaning one way or another. He always thought that was strange of LeRoy to hold such a grudge like that, him weighing in at about 130 pounds to maybe 140 pounds and LeRoy in the upper 190 range and taller by a few inches. That meant he had to be on his toes for possible trouble, and he knew from where it would likely come. In the first few days in school, he saw Roger P., LeRoy, and another guy roaming around the halls. Some of them were the ones that lived across town on south Washington Avenue and there was one that he hadn’t seen before, who seemed to be the leader because they gathered around that guy and LeRoy. He had what appeared to be knobs or large bumps on his forehead on both sides and a permanent scowl on his face. He figured that

he must have been bounced around by his father a few times. His name turned out to be Jake H.



During his Freshman year, he occupied himself with the marching band, still playing the cornet. He was invited to join the high school orchestra as third cornet. Dennis was also one of the drummers. Gary was in the band and orchestra and was getting very good at playing his trumpet. Football season was approaching and the LHS team was going to be pretty good, primarily because they had LeRoy, who had become a really good halfback. It was about that time when he, Dennis S., Gary B., Mike P., David S., and R-Roger G. began to hang around together for reasons he never knew. David S. had an incredibly funny way about him. He had

a sharp wit and made no effort at all in entertaining us, which was by itself hilarious. By cult of personality alone, David became “the Deacon” forevermore in the growing group that came together in due course.

He had never laughed as hard over anything before then, but he soon learned that it was best to redirect the wrath of Deacon's wit away from himself and toward someone else. The Deacon became their wit leader even as his group expanded in numbers over the coming months.

The Deacon played the baritone in band and orchestra and was good enough, but in orchestra, he would slip-up and blow once in a while when he shouldn't have. The conductor would bang his baton loudly on the edge of his music podium and say on more than one occasion, staring at the Deacon, "Sir, would you mind paying attention?" Deacon would then get this look on his face that transmitted the idea, "Well, excuuuuuuse me," that would crack everyone up for some time, which would break the tension of playing serious music. But the conductor would have to make an effort to get things under control again.

The percussion section also had screw-ups from time to time. It consisted of Dennis on the snare drums and other varieties of drums and percussion devices. After decades of exposure to Dennis, Jon N. precisely characterized him,

"Dennis always marched to his own drummer, which wasn't always within hearing range to some of us; his ideas were often outside the box and were refreshing in their originality."

Jon might have added more insight had he known of Dennis's abilities in marbles and his treasures in his basement.

Mike P. was on the big drums in the orchestra and kept all of the marching in step with the big bass drum. He was the only one who had a sound knowledge of rhythms. Mike P. was also the only African American in his class and lived down the street from the high school. He lived with his mother, Nel. In those days, Mike P. and the guys would spend time together riding around with whomever could get the family car. On occasion, someone would unconsciously crack a joke about Sapphire or Amos and Andy in voice characterizations. The person would seize up, remembering Mike P. was present, and say sheepishly, "Sorry, Mike." Mike would then reply, "That's OK." None of his group thought anything of the fact that Mike P. was an African-American, in his case brown. In fact, regarding color, he was much darker in skin tone than Mike P. This was confirmed, he remembered, in the 1957-58 high-school yearbook. He and an older black fellow, Ron, were the only dark-skinned players on the team. Mike P. and the older fellow, Ron, were the only Afro-Americans he ever had seen in those days. There were never disparaging, or racist words spoken among the guys. In reflection, he figured the Washington Ave bullies likely had other views on the subject.

In less than a year, his Dad applied for and was employed by the State of Ohio as a supervising guard at the Boys Industrial School (aka the BIS) 15 or 20 miles southwest outside of Lancaster. His position did not require a gun and his assignment was to manage the boys during meals. At some stage, he began to carry a solid chrome spoon about 16-inches long. The family would join him at the BIS for Sunday dinner on occasion, and from what he saw in the boys' behavior around him, they respected and admired Dad. Dad once told him that he could speak their language, which was some kind of code, no doubt.

In the 20 years of working for the State of Ohio, he was never written up for any code violations. Occasionally, Dad would bring a boy to Sunday dinner at the family house. The family would always be respectful and engage with the young man, ... "To give them an idea of what a happy family looks like on Sunday," Dad said once when asked why he wanted to do that. Even Dad's supervisors at the BIS thought that was an excellent idea. Who knows what actual impact it had on the boys?

It was during this period that Maxine was working for the Westinghouse Appliance Center a few blocks north of downtown Lancaster. She managed the accounting and served as sales manager. George Sneed, who owned center, was also the appliance repairman for the new television sets, refrigerators, and washers and dryers. She made a lot of profit for the company and was receiving a good salary for it. But it wasn't long until Westinghouse Corporate was calling on Maxine to do national ads for them on TV.... Maxine was Betty White for a brief period, until she found out that she was ruining her voice with excessive demonstrations and presentations selling appliances.



It was about this time that Maxine also began losing weight, coughing a lot, and getting hoarse from time to time. He noticed that she was going to doctors in Columbus a lot and she was trying to be happy, but she admitted to him that she was not feeling well. A brief time later, she spent a few weeks in the hospital in Columbus. Dad, his brother Steve, and his sister Carolyn Sue carried on. Dad was a pretty good cook, especially roast beef, he remembered. She never smoked, although Dad did. She weighed 81 pounds when she came home and spent most of the time in bed for about a month. She couldn't speak for about a month and wrote notes for taking and giving instructions like, "Have you finished your schoolwork?" "Are you being nice to your brother?" She would then ask to see Steve and then Carolyn Sue for the same purpose.

Eventually, she started to gain weight, up to a hundred and then up and up slowly. At one point, she said she was allowed to try to speak. At first it was hoarse, then less so. After a while, she had regained her voice, the same voice, but not as loud and on the soft side. Over her recovery period, the doctors prescribed belladonna (as a sedative, to stop bronchial spasms) and paregoric (a form of morphine) to ease the pain and help recovery. It was his job to get Maxine's medicine on Saturdays from the drug store. One day, after many weeks had gone by and his mother was for all practical purposes well again, the pharmacist at the Rexall Drug Store near his house called him aside and asked if they could have a little chat in his office in back (away from people, he assumed).

The pharmacist said, "Michael, I have been meaning to talk to you about your mother's medicine. I understand she has recovered and is feeling fine?"

He said, "Yes, I think so."

The pharmacist said, "Well, I'll confirm with her doctors, but I believe it's time to wean her off of the narcotics. Tell you what, I'm going to slowly decrease the dosage but keep the color the same, for both the belladonna (greenish blue) and the paregoric (yellow)."

He said, "OK," not realizing that his mother had been taking narcotics.

The pharmacist said, "Be sure not to tell your mother what I was doing. It is for her own benefit. If she finds out, that might make her withdrawal a problem."

He said, "OK," and he didn't tell his Dad.

Over the next few months, he noticed her two medicine bottles still half-full from the last order.

He decided to ask Maxine about it, “You are not taking your medicine anymore?,” he asked.

She said, “No, I don’t need it.” And that was that.

The next time he was in the drug store, the pharmacist was with another customer but saw him and paused and gave him a thumbs up, with a smile. He returned the smile with an “A-OK” finger sign. He never told Maxine of the subterfuge. With the help of paregoric and belladonna to manage the pain, after a few years she was pronounced cured. One in a thousand, the doctors told Dad. She lived on to almost 94 years.

After a while, she was ready to go back to work, but not in marketing. She applied for a position at the Army Depot (they had changed the name to the Defense Supply Center Columbus [DCSC]). With her outstanding record still on file, she was welcomed back with a three-grade increase in salary, benefits, and retirement. She arranged government purchases from bombs to bullets to rolling stock. She traveled to Washington, D.C. four or five times a year for budget appropriations input to the Joint Chiefs and Congressional Committees. She mentioned in passing that she was the first woman to occupy such a position.

It was about this time that she was approached by Dwight Kane and others in Lancaster about getting into politics. There was an opening, and they wanted her to take an appointment in Congress and then to run on her own the next term, but she declined saying, “I need to stay close because someone has to look after my boys.” She would have made a great politician, of the best kind. A few years later, he turned down an appointment to the U.S. Naval Academy in Annapolis, MD because he wasn’t keen on swimming although he passed the Red Cross swim tests. The offer clearly was a favor rendered for his mother’s commitment to the local schools and as an inducement to consider a future offer of an appointment to fill another local vacancy in the U.S. Congress, which she turned down again because she felt she needed to look after her children.

It was also about this time that he was encouraged to find a weekend job to earn money for incidentals and pocket change, as his Dad called it. Maxine suggested he call the owner of a one-man landscaping company she knew in town. He did and was invited to come for an interview. He didn’t have his driver’s license yet, so she took him, but stayed out of the way in the car even though she knew the owner from when he visited the Harper & Helser Hardware store a few years earlier. She later said something about not wanting to interfere. He got the job, so he spent parts of the weekends that spring digging holes for planting roses and for a variety of bushes and small trees. He also learned to prune. He bought some roses for his mother on Mother’s Day, that year, but as time moved on, he quit the weekend work, only because he had other things he needed to do, he told his mother.

The Armory Hall was built in the 1930s for military purposes to prepare draftees and manage draft dodgers. There was a jail in the basement. But later, each week during the school year, there was a major social event on Friday night. The YMCA held a dance at the Armory for the high school kids and hired a small, rather good orchestra from out of town to play all the songs of the day. He was very impressed with these proceedings. The boys would be on one side and girls on the other side of the shiny, waxed dance floor, which was also used for basketball recreation for members of the YMCA and for those who could sneak in without being noticed.

The idea was, when the music played, a guy was to walk across the floor, and being careful not to slip if wearing hard leather soles, ask a selected girl to dance, no matter whether it was a fast dance (a form of jitterbugging he remembered) or a slow dance (one-two; one-two-three, etc.).



Nancy B. and He being mummies.

Toward the entrance of the big dance area was where boys and girls intermingled while the others were dancing. There was a lot of whispering going on because of the music. It was where some girls passed messages on to other guys to tell his friend that a particular girl wanted to dance with him. The girls, when approached, could turn an invitation down, he heard from the other guys, with such excuses as "my feet hurt," "I have to go to the ladies room," etc. But he only asked a few girls to dance and was never turned down.



Those events were called mixers, he had heard, for the purpose of mixing the boys with the girls and vice versa. After a couple of those events, he began to get the hang of them and developed a number lady friends. There were friends and then there were beauties, at least 15 of the latter. The Deacon was the bravest of their group. He would ask anyone to dance if they put him up to the challenge. But sometimes, he would go out of control and would require restraining by his friends. The photo shows one time when Dennis S., Nancy S. and Steve B. had to hold him down until the hysteria passed. They made a game out of it over the years. The Deacon calmed down after college.

Toward the end of the Freshman year, the girls would begin to get even bolder by coming across the Saturday night dance floor from their side to engage the boys on the other side by just grabbing their hand and saying, "Let's go." That really mixed everyone up, and turned on the friendships all around. While hanging out with the guys of the class outside and down the many steps, standing in front and around the two parapets of statues guarding the armory, he noticed that most of the guys were smoking. But one Friday night at the Armory, the pay-back began.

The fellows were all bunched together laughing, and pushing and shoving friendly like. But, in an instant, he was on the ground. Someone had sucker-punched him. He sprang to his feet ready to return the punch when he saw the guy named Jake H., LeRoy F.'s buddy, the one with two bumps on his round forehead, moving away with guys yelling at him and pushing him around. The police officer on duty at the Dance, who was a very large fellow, had heard the commotion and was coming to see what was up. He saw Jake

H. run smack into the cop who quickly took hold of him, as a perpetrator leaving the scene of an unspecified crime. They were directed to where he was standing attempting to put his broken glasses back on after noticing that one of the lenses was broken. One of his guys said he had a little blood running down his cheek from the corner of his eye, which he quickly rubbed off with his hand.

When the cop showed up, he asked what had happened and someone said Jake sucker-punched him with no warning and then took off. The cop looked at him and his broken glasses and turned to Jake and said, "So, you sucker punched someone, even a fellow with glasses, and then take off?" Jake had nothing to say, looking down. "You know that's called an assault, which could send you to jail." "You know," the cop said, "the judge could make it harder on you after hearing that you hit someone with glasses with no warning."

The cop turned to him and said, "Son, you want to press charges? You have 5 days to file the papers at the police station, just take names of people here who saw what happened and list them in your report." He said that he would think about it.

The cop reminded him that, "Once this kid is on file, if he does it again, or bullies you in any way, it will go to the court for possible action against him, got it?"

He said, "OK."

The cop turned to Jake and said, "You leave him alone; you are bigger than him too. Just lay off, you hear?"

He never saw Jake again, except at some distance. He remembered that he had never spoken one word to this Jake guy to piss him off, so he concluded that this was "a hit" ordered by LeRoy F. The first of four other attempts by his buddies to physically try to bully him that followed over the next two years at either of two locations, the Armory during the Friday Night Dance, and at Old Bill Baileys beer joint they frequented as he got a little older.

He eventually learned that there were two types of bullying, one physical, like fighting, and the other, mental bullying, when one says unkind things, makes fun of, and the like. One form may cause the other, all are forms of control, mostly driven by hormones he eventually concluded, not including the possible impact of parental influences.



Later that Freshman year, he played basketball. He was getting pretty good, but still a little on the short side, so he played the position of guard. After watching the tall rebounders, he soon realized that the tall guys usually had one important flaw in their game. They figured that after jumping

for the ball, while coming back down to the floor they were thinking of his next move, shoot or pass-off, but not about ball security. This was when they were vulnerable to losing the ball via a steal. He would sink back into a defensive position to get close to one of the tall guys. As soon as he hit the floor he would steal the ball and head off down the floor looking for a play. During one of the games, he had executed a steal three or maybe four times for a score down court, until one play, as the tall guy was coming down and he was reaching to grab the ball for another steal, the tall guy put both arms around the ball and turned abruptly as he came down.

This action caused the tall guy's sharp elbow to hit his front teeth and bent them back into the roof of his mouth. He stopped, held his mouth, and the blood began to run, all over his white LHS uniform and all over the floor. He slipped on the blood-covered floor and fell down. So did the referee who had come to help. The coach took off his shoes and was able to stand and bend over in his socks to assess the situation. Someone produced a towel that he stuffed in his mouth to control the blood flow at least, which after a while made him gag and cough up the swallowed blood again all over the floor. After he cleaned himself up, one of the senior coaches walked up carefully, picked him up, and took him to the coaches' office where the school nurse was waiting. She had called a dentist and arranged for the dentist to see him as soon as possible. After the blood clotted, she stuffed some gauze in his mouth and off they went to the dentist on east Main Street only a few blocks away.

Dr. Graf was his family dentist too. The problem he encountered was a real dental challenge. He said, "Well, what happened here?" He couldn't speak but the nurse filled him in, and then said, trying to lighten the mood, "And they call basketball a non-contact sport, eh?" He and the nurse both smiled and then the pain began. Dr. Graf took a look at the roof of his mouth, saying, "Ah, .., OK. Well, first let me give you a little shot (he always said "little shot") and then pulled out this very large needle attached to a chrome tube base with three fingerholes and tried to hide it as it approached his mouth. After a few "ouches" from at least three stabs of the huge needle, his upper mouth area went to sleep. After a few minutes, the nurse squeezed his arm to say she was leaving to go back to the school gym to make sure the floor and the office had been cleaned up properly. The game had been cancelled and re-scheduled.

Dr. Graf decided to try to save one of his front teeth, but the root had been broken in the other and had to be removed. He said that he thought the tooth he physically bent back into position should be OK. It lasted for about 15 years and died later while he was in Australia. A new partial had to be built there with a two-front teeth implant using a backing of Australian gold to replace the old partial plate with one tooth. Years later a subsequent dentist in Texas marveled at the "exquisite dental structure work with a load of gold."

He knew Dr. Graf's oldest son, David, who was about nine years younger. He served as the Boy Scout leader of David's Cub Scouts Den. Years later, David went into acting and became a rather famous actor, best known for his role as Sgt. Eugene Tackleberry in the *Police Academy* series of Hollywood films. Unfortunately, he died of a heart attack at age 51. He was such a nice little boy and another person from Ohio living a dream of Hollywood.

It was during that year's freshman basketball season that his group of friends came together. He, Joe C., Phil H., Chuck A., Tom H., Jon N., and Dick E. began to play lots of basketball at Joe's side-alley court and at the Armory. About the same time, Dennis, Deacon, Roger, Gary, and Mike P., and Nelson E. on occasions, joined the group along the way. The gatherings were focused on Buckeye football, World Series, poker, and golf at whichever of the homes had the largest TV, and of course, any young ladies who were invited.

The summer after their freshman year, most of his friends and he were playing tennis across the street at the tennis courts in Elmwood Park. When finished they all went to his porch to cool off. His Dad joined them on the porch, and they discussed the weather. Then someone, he didn't remember who, asked Dad about his Boy Scouts. The subject came up about canoeing and next thing he knew a canoe trip was on in a few weeks to go down the Scioto River to the Ohio River. Dad and Maxine arranged everything. There were five of them and Dad. Two cars and a trailer carrying three canoes and camping gear were off for a

week floating down the Olentangy. Maxine was to meet them at a location near the Ohio River on a certain day.

The three-canoe convoy made good time the first day and the weather was great. Nice and sunny, even a little hot, and most of them got sunburns. He always got the darkest tan during the summers. The first night, Dad's group of "city boys" sat around the campfire after a meal of fried fish and potatoes. The days and nights that followed soon became more difficult and the wear and tear of canoeing down a sluggish river would present itself in the form of aching arms and backs of the boys who had never been in a canoe before.

With only a day and a night to go before they reached the Ohio River, on the last day it began to rain and the river currents picked up some speed. Steering the canoes began to be more difficult. In rounding a wide bend, he noticed that the Deacon and Roger were heading toward some overhanging trees almost to the water's edge. Dad and he noticed an ominous form curled up on the branch just above the water. It was a Cottonmouth Water Moccasin! A big one! And the Deacon, who was steering, didn't see it. He yelled at the Deacon, pointing out the snake. They finally saw it as they tried to steer away. Both were leaning as they passed under branches. What he saw next was the snake falling into the canoe and the Deacon and Roger exiting the canoe as it rolled over, spilling camp gear, paddles, and the rest. The guys were swimming as fast as they could to get to the shore as he and Dad pulled up to the spot.

The boys were standing in the shallows with hands on their hips. Dad and he had to perform some difficult maneuvering to capture the overturned canoe and herd it toward the shore, meanwhile they saw the tarp bundle wrapping the gear with the big snake on top floating off down the river never to be seen again.

The swamped canoe was recovered near the shore by the Deacon and Roger, as all three canoes pulled up together in the shallows. One of the paddles was wedged against a tree a few yards downstream and was retrieved. Having only one paddle presented a problem. Dad soon solved the problem by roping Dad and his canoe to the Deacon's canoe and towing it, with the Deacon in the stern steering at the end of the tow. The rest of the day was spent towing and controlling the two canoes, with the third canoe moving normally alongside.

Toward the end of the day, the current was getting quite strong, which made steering even more difficult, but off in the distance they could see what appeared to be a commercial landing site. As they approached, the river was getting wider, and they could see what turned out to be the gigantic Ohio River off in the distance. They steered toward the docks and adjacent landing area as the overhead lights came on. It was the objective, the end of the trip. Arriving none the worse, losing only a couple of sleeping bags, some camp supplies, and a paddle.... With one very large snake on its way towards the Gulf of Mexico.

They had arrived a day earlier than expected so they had to find a place to pitch tents for the night. Fortunately, there was a little shop with mostly fishing supplies, but it also had pop and junk food, which was enjoyed by all. Everyone was tired and a bit bedraggled, but the spirits were good. Sitting around the last campfire many of them would ever have, they thanked Dad for his outstanding leadership in dealing with the issues encountered during the trip. The next morning, Maxine showed up driving a van pulling the empty canoe-rack trailer behind. And that was the last canoe trip he ever had. It wasn't the last campout, but the next ones would be in Australia some 10 years later.

Toward the end of summer, Maxine engineered another job for him. He was to work on a farm just north of town on the far side of the county airport. Jack Kull had a large farm, and ran beef cattle, pigs, and milk

cows. He had two sons, who both played baseball for Carroll, Ohio, a village just north of Lancaster. Jack needed help bailing hay, which he soon learned about during the dogdays of that summer. He confirmed that his mother, Maxine, made this job happen somehow. He knew that she and George Snead knew Mr. Kull as a customer while they were working at the Westinghouse Center downtown. George was the owner of the Center and was also the main TV repair man. He spent many hours watching George test and then repaired TVs and anything else that came in the store for repair. What was especially interesting was that George would narrate what he was doing, testing voltages, resistivities on ohm meters, oscilloscopes, and other testing equipment. George was one cool dude, and a Freemason.

His folks had two cars by this time, a large 4-door Packard about 5 years old, and an even older, 4-door Dodge. He learned to drive and got his temporary driving permit in the Dodge, which drove like a tank, loaded with heavy metal throughout, chrome bumpers, etc. Joe C. liked to double-date with him because the Packard had a huge back seat area.

One day during that summer, he had an urge to go hunting. The previous outing was not satisfactory because he had mistaken a chipmunk for a squirrel and blasted it into small pieces with his 10-gauge shotgun. He embarrassed himself, he recalled, and gave up squirrel hunting. He was looking for bigger game. He drove the Dodge out to a stand of tall trees a few miles east of the Ellinger Farm. He took Resa, his brother's Dachshund dog, to see if she could hunt or pick up on a scent. It was very quiet in the woods and he walked carefully, not wanting to spook any critter of interest. He then heard a sound high up in the branches of a big Oak tree. He took a bead on the area and he could see the outlines of two very large black birds, probably vultures. He stopped. Resa also knew something was afoot. She was also looking up at the birds directly overhead. Her little tail was wagging in anticipation. He had his Dad's 0.22-caliber Remington rifle with a clip that held about 20 rounds. As mentioned earlier, it was a popular rifle that had been recalled by the manufacturer because it would fire multiple rounds when the clip was engaged, like a submachine gun, when the trigger was squeezed in a certain way; it was supposed to fire only one shot at a time. He engaged the clip, aimed straight up at the birds, and pulled the trigger.

He felt the gun fire off the entire clip in a second or two as he spread the target pattern to include both birds. The next thing he heard was very loud squawking. Resa was still looking up while he was watching the commotion in the treetops. The birds were trying to take flight and then did. He then noticed that it had begun to rain on he and Resa. He wiped his eye-glasses clean of the mist with his shirt tail and noticed Resa was covered with something that made her coat shine. All of a sudden, she got an odd look on her small, little face and then took off running faster than he had ever seen her run before. He turned to follow her but she had disappeared in the direction of the Dodge so that was OK, he figured. When he arrived back at the car, she was nowhere to be seen. He spent about an hour calling for her walking up and down the dirt road. After a while, he gave up, thinking that he was in trouble now with his brother and Maxine.

He drove the few miles back to his house on Walnut Street and walked up the steps to the porch and there she was, wagging her tail, glad to see him. They went into the house and Dad was in the living room reading a book. He walked up to him and began to speak, but he was interrupted and Dad said, "What the hell have you gotten into? You smell like something rotten. Go take a shower quickly before you stink up the whole house. What's that all over Resa?" He turned to go upstairs to take a shower and he said, "I'll tell you later." Dad was moving a resistant Resa with his foot out the back door and into the yard. About 15 minutes later, he was cleaned up with new clothes and sat down to tell his Dad what happened. Dad began to laugh before he had finished.

He said, "Son, if the birds were vultures, and it sounds like they were, you should know that when vultures get startled like you caused with firing all the rounds, they naturally emptied the contents of their stomachs out in fright and to get light enough to fly away quickly. That mist that came down on you and poor Resa was vulture stomach contents and probably some vulture urine as well. Next time, you should remember never shoot straight up at vultures from below. You probably put some rounds into them with the 22, but it takes them a few days to die. You should have taken your 10-gauge shotgun. That would have fixed one of them, I'll bet."

A few hours later, Steve came back from playing with one of his friends up the street and Maxine came home from her work. As soon as she came in and walked into the living room, she said, "What's that smell, Clarence?" He looked over at the guilty party with a smile and said, "You want to tell her, or do you want me to?" He said, "You can tell her." So, Dad told the story of the hunting incident, stopping to laugh now and then. While Dad was telling her, he went out back and cleaned Resa with some dish detergent and a hose, which she was enjoying. Steve came to see what he was doing with his green soapy dog. He picked her up, wrapped her with a towel, and took her upstairs to the bathroom. He then put her into the bathtub and turned on the water and gave her a second cleaning with ivory soap. She had never been so clean after that. At dinner that night, Maxine said to Clarence and him that it was a good thing he had the job at the Kull farm and that he had too much time on his hands otherwise.

He began the new job the next week. At first, his mother would drive him to the farm and drop him off to return at about 6:00 PM to retrieve him. After a while he could drive on his own, showing up at the farm about 7:00 AM. After weeks of baling hay with the sons and Jack, one day it had rained the night before and they could not bale hay that morning. After they moved some hay bales around in the haymow of the barn, Jack took him aside and asked if he would go move a dead sow to where Jack buries dead critters and pointed in the direction of the muddy lane between fields past the corncrib. He got on the Ford tractor and off he went. As he pulled up to the dead sow, he was expecting it to smell but not that bad. He always carried a face towel to wipe the sweat from his face while baling the hay (aka alfalfa), but it also came in handy to wrap around his face across his nose.

This pig was big, he thought, contemplating how he was going to move the dead mass. Then he got an idea, somehow wrap a chain on the back of the tractor around the back legs and drag the pig with the tractor down the lane about a mile to the group of trees where Jack said he buried his dead critters. He attached the chains and got on the tractor and slowly began to move. The chain tightened and the pig began to move. Then with a jerk, the pig's legs began to separate from the pig's body. He figured he had pulled the pig's hip joints apart because the pig was bloated, and all of the tissues were rotting away. He climbed down and went around the tractor to figure out the next plan.

He pondered a few moments, and then decided to wrap the chain around the pig's head and shoulder. He did, and again got on the tractor and began to pull, and again, with a jerk, the head of the pig began to separate from the pig's body mass. This time, when he went back to see the damage, with the towel wrapped around his nose and mouth, he noticed the flies. He had exposed trillions of them, he figured, munching away on the pig's flesh. He had to wave a cloud of them away to even see the pig. He reached down to pull a leg around and he slipped and almost fell face first into the body of this big, very dead, stinky pig, aka sow. He caught himself just in time, with his face only inches from a mass of millions of squirming, writhing maggots, an image he never forgot. He noticed how much fresh maggots looked like rice that close and he could see two tiny black eyes at one end of the maggot. He leaped up and kicked the sow in the side at which time his boot penetrated the rotting skin into the sow. When he pulled his

foot out, his boot was covered in white and brown maggots. He went over to the tractor and began kicking the big tire to get the maggots off his boot.

He needed a better plan. Another idea appeared. Take the chains off the back of the tractor. That left two long metal shafts sticking out. They were controlled by hydraulics, and he could move them up and down. The new idea was to back into the pig at some speed to spear the dead mass and then lift it up hydraulically. He moved the tractor into place and rammed the dead pig. He heard the sound of breaking bones as the tractor and pig collided. With the hydraulic lever, he raised the pig as far as possible. He pulled up a bit and got off the tractor to inspect the results. There it was. The dead pig was fully impaled by the two metal bars of the tractor, and the head and back legs were still attached, barely. He got back on the tractor and off he went to the cemetery. By the time he reached the burial site, the pig's head and back two feet were being dragged by tendon, muscles, and skin along the ground, but stayed attached. He lowered the hydraulics controlling the pig and pulled away as the spears were withdrawn from the pig. He turned the tractor around and lowered the blade on the front of the tractor and pushed the dead pig down into the ravine area littered with bones and skulls of cows, and other critters. So much for that pig, he thought.

On the way back he could see Jack, his sons, and his wife watching. When he arrived and got off the tractor, everyone was patting him on the back for doing an excellent job with the dead sow. It wasn't until years later that Maxine told him the story of when Jack told her and George about that episode of her son taking care of that dead pig. Apparently, it was hilarious to watch him at a distance manhandling that dead pig, but he didn't see the humor, only remembering his resolve to never eat rice again, ever.

A few weeks later, he learned that he wasn't quite done yet with pigs at the farm. Only this time it was to help Jack neuter the small pigs. Jack demonstrated the procedure to give him an idea of what to do. He sat in the middle of the inside pen with about 25 little pigs, each about a foot and a half long. He grabbed one by the hind legs and stuffed its little head into a wooden box, exposing its little belly. Using his elbows to pin the two back feet, he took a scalpel and sliced into the belly up near the hind legs and opened an incision of about 5 inches. Then, placing his finger into the opening to feel for a cord, he pulled it up and out of the body cavity. If the cord was white, he was instructed to cut it and cut out a section of about two inches and place that section on a tray. Then do the same on the other side of the belly midline. If the cord was not white, that was an artery or vein. Put it back and feel for a white cord. Then, with an applicator from a jar with purple fluid, dab the purple fluid around freely inside and out. Then with two clamps and a pair of pliers, seal the incisions. Once done, grab the two back feet, lift the wiggling piggy out of the box, and turn it loose. The little guy was one not-so-happy little, gender-neutralized pig destined to be bacon one day.



The group of his guys had been assembled by then and they would always be on the lookout for something interesting to do other than just drink beer or watch television, even if it were in living color. One weekend, someone, maybe Joe or the Deacon, suggested they go to an old cabin one of them knew about that was in the woods south of town about a mile west of the fire-tower that they often visited. If it were abandoned, as they thought, the cabin might make a good, secret club-house for the bunch. Off they went in search of the cabin along back-county dirt roads. He remembered that the Deacon and Roger (who was the driver that day), plus Phil, Joe, Dennis, Tom, and he were present that afternoon. Years later, Dan P.

claimed that he too was present as well, but he didn't remember that, although possible, but uncharacteristic of the group to have an outsider among them during important activities.

Someone spotted the shanty about 30 yards up the hill among the trees. They parked down the road a piece and didn't want to draw attention to it in case a county policeman came by. They all climbed up and over to the cabin. It was in bad shape. They couldn't see whether anyone was in it so they started to throw small rocks up against the side of the cabin to see if anyone would emerge. Phil climbed into the cabin from the back, but he reported that the flooring was all rotted away, so it was off the list as a place of interest.

One of the guys (who will go nameless) started shaking one of the two rotted 4X4s that supported the cabin downhill, and someone else started shaking the other rotten 4X4. Someone said, "The cabin is supported by only those two legs, and it's going to start rolling downhill if they break." And, of course, with a loud snap of both rotten timbers, the whole cabin came down and began to slump and roll downhill in a cloud of dirt. Someone yelled over the noise that a car was coming down the road. He calculated that the velocity of the car and the cabin in motion were going to hit the same spot at the same time. The rolling cabin was picking up speed, and the guys were standing there yelling, "Oh no, Oh no!" Just as the car reached the calculated spot, the old cabin of rotten wood planks and boards crashed into a lone standing oak tree with a trunk diameter of about 10 inches, bringing the cabin to an abrupt, dead stop, but the dust kept moving down and then over the road and over the car. The car's brake lights came on and the guys literally hit the dirt and hid behind dead tree trunks that were all over the hillside and covered themselves with branches and loose soil to get as flat as possible and remain unseen, as the driver, a middle-aged man, got out of his dust-covered car with hands on his hips looking up the hill for the culprits. Everyone must have been well hidden because he looked around for a while, and seeing no one, he must have concluded that it was caused by natural forces. He drove away.

They all came out of hiding and hurriedly ran down the hill to their car and drove off in case the man decided to come back for a second look at the site of his good fortune and maybe write down the license number of Rogers's car, which he might have noticed. They made it back to Highway 33 and relaxed and then began to reflect on what could have just happened back there, and how some of the future professional careers of the culprits might have ended had they been arrested, charged with some criminal offense on the books, and sent to jail.

As that summer ended, his sophomore year arrived. He had gained about 15 pounds and had gained a fair amount of muscle mass in his arms and back. A few weeks in, a school science fair allowed him to present the results of his studies of rocketry to date. It was 1957 and the U.S. was having trouble getting rockets into orbit, as Russia had just put-up Sputnik and, little did they know at the time, they rushed to get to the Moon first and by doing so killed a few cosmonauts along the way, reportedly even leaving two on the Moon. The U.S. killed a few through accident on the ground and in flying the X-15 rocket plane, but that was to be expected because it was dangerous dealing with innovative technology. The Soviets, however, lost them in space, in orbit, and likely on the way to and from the Moon in their expediency to compete with the U.S. as fast as they could steal secrets from U.S. industries in order to catch up with the U.S. science and technology development.

He continued to be active in the Science Club, was elected to the Student Council that year, and continued playing the cornet. By this time, he had been promoted to first chair of the LHS Orchestra and to line/corner leader in the LHS Marching Band. He won awards during the High School Science Fairs. The

last was his rocket ship on rails that he demonstrated many times during the fair. It created a large roar and a large cloud of exhaust that kept the local fire department on standby for the duration. His chemistry teacher took him aside one day after the last Science Fair and cautioned him to be careful with the chemicals. He told him he would. He was continuing his interest in rocket propulsion systems and had all the available books on the subject that were in either the school library or the public library downtown. His teacher didn't know that he had a gas-fired laboratory and blast furnace in his basement, where he combined metals by melting and then pounding small ingots flat with a big sledgehammer to test strength, bendability, malleability, and other properties. He also conducted small, indoor firing tests by adjusting chemical proportions for optimum, clean combustion after having focused in on potassium chlorate, sucrose, and various grinds of charcoal to control the rate of burn.

On occasions, Maxine would play host in the evening to bridge, pinocle, cribbage, or one of the card games of the day. The ladies arrived wearing their best dresses and hats. Maxine told the story of how while playing a hand, one or more of the ladies started to sniff, saying, "Maxine, I think I smell smoke." The ladies all agreed in unison. Then one of them pointed to the wall, and sure enough smoke was coming up the wall from under the rug. Maxine remained seated, undisturbed, still thinking about the cards in her hand, saying matter-of-factly, "Calm down everybody, that's just my son conducting one of his experiments; there's nothing to worry about. It's just a phase he's going through." The ladies sat back down looking confused and somewhat apprehensive. When they finished the hand a few minutes later, Maxine got up from her chair and went over to the basement door, opened it, and speaking down the steps said, "Son, are you OK?" He replied "Of course, I just used too much charcoal in the formula. Sorry about the smoke." She said, "OK, but watch yourself," no doubt thinking that she should show at least some parental control in front of her lady friends.

That fall was full of activities, from running around with the newly consolidated group of friends, who came from the West Side (Dennis and Gary), East (Deacon, Roger, and Nelson), North (Joe, Phil, Chuck Tom, and Jon) and South sides of town (he, Mike P., and Dick). A veritable United Nations of Lancaster, Ohio, ranging in family economic classes from lower middle class to upper middle class to upper class. The class differences didn't seem to matter.

In Mr. Miller's Biology class that year, the time came for the students to perform surgeries on their own northern leopard frog (*Rana pipiens*, he remembered from his Boy Scout days a few years before). He was also a member of the Science Club. (Top right of the photo, to the left of Mike P.).



That day, the students arrived in the Biology classroom and found what looked like hundreds of the little green and brown critters in a long, narrow, empty fish tank in a mass piled on one another leaping up against the glass of the tank trying to escape, but making no sounds. He understood that frogs only croak for mating identification purposes, but not while in a state of fear or entrapment. He noticed that those on the bottom were already dead, likely crushed by the weight of those above. Time came to file by the fish tank to grab a frog and place it in one of the Mason jars sitting by the tank and screw on the cap. By the time they returned to their desks, the frog would be dead, killed by the poison of some type in the jar. He had taken a dead frog from the bottom of the pile. Some of the girls in the class refused to grab a frog; brave boys would help. After a few minutes, the frogs would die. Punishment for being a frog, he thought at the time. Then, for some reason, as Mr. Miller was writing instructions on how to conduct the surgery, and

the students were busily taking notes, he got up and nonchalantly went to the tank and retrieved one of the frogs from the top of the pile that seemed to be the healthiest and carefully slipped it into his jacket pocket. He was going to rescue one at least and release it at the little creek west of the Ellinger farm.

When he arrived home that evening, he retrieved the frog and put it in a bowl of water. At first he thought it hadn't survived the trip but, after a while, the frog began to move with its little legs working as before. That evening he walked the few miles to Ellinger's Creek and released the frog. He was satisfied that one of them made it out alive, at least, but his satisfaction didn't last long. The next morning after the home room class had settled in, the teacher held up a note and read, "Mr. Michael Campbell please see Principal Lowry as soon as possible." The class made "Oooo, are you in trouble" sounds. As he headed for Moose's office (the Principal's nickname the guys, probably Deacon, had assigned him). When he arrived at the office, he was conducted in by the receptionist looking somber for some reason. As he approached the desk, the Principal asked him to have a seat. He saw that David M. was sitting in the other chair. He knew of David M. as being a special student who had some disability.

Mr. Lowry then said, "It has come to my attention that you have been accused of stealing a frog from Biology class yesterday." He then turned to David M. and said, "Is this the student you saw stealing the frog?" David M. nodded, "Yes, that's him." The Principal then told him that he could return to class and he departed.

The Principal then turned to him and said, "Did you steal the frog?"

He said without thinking, "Well, I thought of it as liberating at least one frog from that mass-killing event that went on in Biology class yesterday."

Mr. Lowry then said, "Don't be smart with me Mister! We cannot have such behavior at LHS. You are dismissed from classes until I speak to your parents."

He said, "What do you mean by "dismissed?"

Mr. Lowry rose from his desk chair and in a raised angry voice and pointing toward the door said, "Get out of here. Go home!"

He missed three classes that day and went home, not saying a word to anyone on his way out.

But later that evening, he received two or three phone calls from some of his guys and from Donna W., all asking the same question, 'Is it true that you were expelled for stealing today?' He explained the whole story and they all replied in the same way, "Moose is such an AH" or some such description.

When Maxine arrived home from work, he decided that it would be best this time to tell her the whole story because this appeared to be rather serious this time ... getting expelled? He thought she would really give him hell and maybe be embarrassed about the incident, but oddly enough she didn't and wasn't. She said after hearing his account of what happened,

"Sounds to me, Son, like your Mr. Lowry overreacted a tad. I will discuss this matter with him tomorrow when I take you back to school in the morning first thing. I know how overbearing he can be sometimes."

He didn't know what to expect the next morning. Maxine and he went to the Principal's office well before classes began. They were sitting and waiting when Mr. Lawery strolled into his office and saw Maxine. He then said, "I was going to call you today about the matter."

She said with a stern face, "Let's talk about the matter now" and they disappeared into his office and shut the door.

He was left sitting in the receptionist's office when the receptionist herself came in holding her cup of morning coffee. She sat down behind her desk and leaned over a little looking at the Principal's door and listening. She turned to him and said, "Is that Maxine in with Mr. Lowry?" He said, "Yes." She said, "This ought to be good."

After hearing low voices for a while, they began to hear fragments of more heated exchanges, first from Mr. Lowry saying something about needing to have more discipline and from her saying about this not being a military academy for wayward boys and that he was overreacting with bullshit, or something like that, and then the word snitch was clearly heard, but it was difficult to hear all the discussion in context. They went at it back and forth for about 10 minutes. There was mumbling again, and then raised voices again, and then silence. After a while, she came out and said, "He wants to speak to you," and then departed without comment.

He went into Mr. Lowry's office and stood. Moose was looking at some papers on his desk, doing a power thing as some do, and then looked up and said, clearing his throat, "Seems I may have been a little rough on you over the frog matter. Can you please put the frog back?"

He said, "I released it at a little creek near my house."

Mr. Lowry said, "Will you do me a favor and quit screwing around like that?"

He said, "Yes," without further comment.

Mr. Lowry said, "OK, I'm going to let you off, and let's hear no more of this matter. I guess it's not worth damaging the school's relationship with your mother," then he waved him away with his hand.

As he was leaving, he passed by the receptionist, and she was smiling.

Basketball season was beginning in early October, and he was encouraged to go out for the varsity team. At the Armory's YMCA basketball league, he had played that summer, he was a major score-maker for the DeMolay team, but still playing the Guard position because he wasn't quite 6 feet tall yet. Practices had been going on for a few weeks and he had made the #9 or #10 spot on the roster, which meant possible road games to Zanesville, Marietta, Newark, and a couple of Columbus Catholic high schools would be in the offing. He was also elected to the Student Council again that year. See top row, right (between Dennis S. and Mike P.).

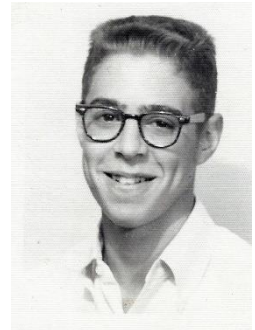
During that period, he also continued his research on rocket fuel and began to test the selected fuel (consisting of potassium chlorate, sucrose, and charcoal by varying the grind sizes and proportions) in greater volumes and built an outside test stand to keep from filling the entire house with smoke. A seamless pipe bought at the plumbing store and three sizes of reduced nozzles, capped at the other end, formed the test engine. The measured amount of fuel of recorded constituent ratios was loaded into the engine at the far end. The end cap was screwed



tight, and the engine was wired into the heavy-spring assembly. The latter had a nail attached to record the movement of the engine against the tension of the springs. Graph paper was glued on the table stand below the engine assembly to record the extent of movement of the engine during the 4-second burn period. The greater the movement, the more efficient and effective the fuel. Two thin wires separated by three kitchen matches and extended off the porcelain-covered kitchen table he had retrieved from the town dump, down to the ground, and then to a short, about two-feet high, brick-wall about 30 feet away from the table assembly. This was the safety wall he built at the request of his chemistry teacher.

When all was ready with start-up wires inserted in the nozzle of the engine, he would then go to the wall, lay flat on his stomach behind it, and, when the mirror was in place so he could watch the firing, he pressed the button making the contact to two big round batteries, which instantly created a spark at the wires in the nozzle, which ignited the engine. The roar would last about 4 seconds with a huge cloud of gray smoke rolling across his back-yard toward Katherine's back porch next door. She never complained. She was probably not even aware of the testing, he remembered, although he had conducted more than ten such tests over previous months. The smoke would drift upwards and dissipate in only a few minutes.

After each test, he would retrieve the engine from its sling after recording the thrust vector marking on the graph paper in terms of boxes; the range was 1 to 10 little squares on the graph paper, 10 being the maximum to date. With steel wool, he would clean out the oxides and carbon residues that coated the inside wall of the engine nozzle. This would require about 10 minutes to get it smooth again on the inside and ready for the next test.



One Sunday in October of 1957, he got up late after being out with the guys having a few beers and was getting ready to go to a noon basketball practice at the gym. He was ready and had some time to spare. As he retrieved the Sunday paper from the front porch, he saw Ms. Fey passing by and waved. He recalled that she was coming home from Mass at the Catholic Church not far away, but up Chestnut Street past South School. He decided he had time to run another engine test, so he went down into his basement lab. He had been heat-treating the engine nozzles (short reducer pipe fittings) in the "blast furnace," as he would call it, which was actually a high-temperature oven made of zircon bricks he had found in the dumping area behind the Anchor Hocking #2 Plant. They had been heating for a few days, so he took them out of the "oven" and quenched them in the cold-water bucket on the bench. He inspected, then selected a nozzle and assembled the engine. He looked at the logbook and measured out the next combination set of compounds and lightly ground them together in the motor with a ceramic pestle. He loaded the engine and screwed the end cap on tightly and took the engine outside to the test stand in back.

He quickly went through the set-up procedures and set the firing wires, then lay down behind the safety wall, and arranging the mirror, he pressed the button nothing. Instantly, he recalled a discussion with his chemistry teacher advisor,

"If it does not fire, do not stand up to go see what happened. Count to 30. And then go examine the cause for the misfire."

He counted to 5 and then in haste, he stood up and took a step toward the stand, when he heard a huge explosion that knocked him back off his feet about 10 feet across the safety wall knocking the bricks asunder. He remembered hearing windows breaking from all directions as he tried to get up, but something was wrong with his left arm. He slapped his right hand against upper left arm almost instantly

from the pain. This hurt his right hand, when he looked down at the left arm, there was blood everywhere all over his white tee shirt. He instantly saw that he had impaled his right hand with something looking like white-orange splinters. He realized that they were bones splinters from his arm. No more than fractions of seconds had gone by when he remembered thinking, "OK, you're in big trouble." He remembered his folks and his brother had gone off to church (Methodist, of course) and focused on the fact that Mrs. Fey was home, just two houses down the street. He knew he only had limited time before he fainted from blood loss, so began to run toward Mrs. Fey's backyard holding his left arm tightly but he had to cross two fences between the houses. He instantly knew he could jump them both, they weren't that high. He made it, without stumbling, into Mrs. Fey's backyard and hurried around the side and up her front steps. He was about to knock when he noticed the door was ajar, so he pushed the door open and yelled, "Mrs. Fey, I need your help...." He saw her moving toward him, but that was the last thing he remembered as he was fainting down onto a white rug inside Mrs. Fey's doorway.

He gained consciousness, but it was black, all blackness. Then he heard a deep, calm, pleasant voice saying, "Michael, do you hear me? Do you hear me?" He thought it was God speaking and said, "I hear you." The voice said, "Whatever you do, do not flex your muscles in your left arm. If you do, you will lose your whole left arm, do you understand me?" He responded that he did, and the voice then said that he was going to lift the cover over his eyes so you can see, but do not move. "I am Dr. Monger, and I am going to try to put your arm back together, OK?, but you need to be real still." There was something between my face and his left arm so he couldn't see what was going on. He began to watch the masked doctor at work and listen to chatter between the doctor and the nurses and another deep voice (he presumed it was another doctor). He didn't understand much of what was going on, as he started to clarify his thinking remembering what had happened.

He remembered that his right hand was hurting more than his left arm. He turned his head slowly to see his right arm laying flat with two nurses doing something to his right hand, and he then remembered why that was hurting. The nurse told him a few days later that they had to pick out small pieces of bone that had broken off in the middle of my hand when he was holding his left arm to make sure none of the tiny pieces got into his blood-stream, which could have caused big problems later, one of them said.

Then, the next thing he heard was the sound of a metal pan of some sort hitting the floor and a lot of "O My God" coming from the nurses, interrupted sternly by Dr. Monger, who said; "For Christ's sake get her out of here...." which he interpreted to mean that one of the nurses must have fainted while observing the mess my arm was in at the time. He smelled something like glue but figured it must be the gas he was taking in through the mask resting on his nose. His blood pressure must have gone up from the commotion because he fainted away, not gaining consciousness again until he was in his hospital room, with his left arm in traction of sorts. As he came around, Dr. Monger was there reminding him not to think about flexing a muscle in his arm. He asked, "By the way, how in the world did you mess up your arm like that?" Dr. Monger pulled up a chair and seemed interested, so he explained what and how he was doing the tests but couldn't explain why the engine blew up and more importantly why did he violate safety protocols by standing up prematurely. All he could figure at the time was that he was looking forward to basketball practice and overlooked something. He remembered thinking that Dr. Monger appeared to be very interested.

He spent about a month in the hospital with his left arm remaining in traction. He remembered convincing himself that he didn't have an arm so there was no reason to flex the muscles. And that worked. A few days after the surgery on his arm and his right hand, he began to have visitors. Maxine and Dad were the

first of course. She burst into tears when she hugged him. Dad's eyes were teary, but he kept his composure. She asked all the questions, e.g., what happened, why, etc. He told her what he knew. Then she said that he shouldn't have been fiddling with such dangerous things, and that she should have taken a stronger role in prohibiting such things. She went on to say, "Dr. Monger told us that if you had moved one inch over as the shrapnel was spinning out of that device at you at such a high velocity, it would have torn the left side of your body out and you would have bled to death on the spot."

As he lay in the hospital bed those weeks with his arm strapped to a device that immobilized his arm in an upward position, he began to think about the plausible causes of the incident. He might have failed to make sure the nozzle was well-cleaned and smooth on the inside. If there had been oxides still coating the throat of the nozzle, that may have allowed a quick buildup of the new burn creating turbulent flow and plugging. But he didn't think that was likely. He'd have to find the explosion fragments somewhere in the neighborhood. He considered whether metal fatigue of the engine body could have been the cause, but he was under the impression that the 5-inch engine body was made of seamless galvanized pipe. If the pipe had not been seamless, then the seam might have ruptured with repeated use. He had conducted the same engine tests 8 or 10 times before the incident. He was also thinking that he must find the engine fragments for any hope of figuring out what happened.

His folks visited every evening. After some discussion, he concluded one evening that Maxine was right; that this activity was over his head. They chatted some more and began saying goodbye for the evening, when he said, "Mom, when you get home would you be sure to turn off the gas cock-valve to the blast furnace in my lab in the basement." "Will do, son, Bye," she said with a smile.

After a few days, his friends started to visit, and Maxine would say, "Well, I'll leave you with your friends. You don't want a mother around." Barb, a developing girlfriend at the time, a blonde beauty, who was also a varsity cheerleader, was the first of my friends to show up. Shortly after, my chemistry teacher, Mr. Kessler, showed up, which was rather unsettling. He talked to Mr. Kessler about the injury.

Mr. Kessler bent over and gave him a big hug and pulled away with tears in his eyes, saying, "I should have talked you out of fooling around with such dangerous activities. I'm sorry, this is my fault. I could have prevented this."

He told Mr. Kessler, "It wasn't your fault because it was just an accident. I had done many such tests without incident and something went wrong, not you."

His folks later told him that Mr. Kessler came to the house to apologize to them for encouraging such activities.

A young man, who was a reporter from the *Lancaster Eagle Gazette*, showed up at his bedside one afternoon and asked how he was feeling and asked exactly what happened. He told the story again and after a while in the middle of discussing velocity vectors, he noticed the reporters' eyes were glazing over, so he cut to the end by saying that he was suspending such testing because he wasn't equipped to deal with the safety issues, and he was going to let the government handle the testing of rocket engines and would be concentrating on rehabilitating his arm and hand to get ready for next year's baseball season.

What he didn't tell the reporter was that while in bed contemplating life in that hospital for the past month or so, he also decided that he would be leaving the cornet behind, primarily because he could not "double tongue" or certainly not "triple tongue" as was required of all good players, but Gary could, and

was very good at that. But it was also because he could now barely move his fingers on his right hand (from the impaling), and he knew that was going to interfere with his playing as well.

He had already damaged his third finger the month before after impaling it when trying to push a glass tube through a rubber stopper when the tube broke and jammed the broken glass into the underside of his finger. At the time, he thought little of it and just picked the glass pieces out of the gash and wrapped the finger with a bandage and then wrapped that with a wooden splint to keep it immobile for a while. After about a month, he had taken off the splint and bandage to find that the two-inch cut had healed but the end joint would no longer move because he must have cut the tendon that operated that joint. These were abilities that all good classical cornet players must have in working order. They no longer were, and he was glad that Gary had serious abilities and sat next to him in 2nd chair. When he later formally departed music, Gary took over and went on from there to major in music in college, graduated, and eventually became and remained the band director at Lancaster High School for decades.

He was finally released from the hospital but had to keep his arm strapped to his chest when not undertaking certain specialized exercises designed to build back the bicep and tricep muscles that had been torn asunder in the accident. Slowly his muscles began to develop and after three months he no longer needed to strap his arm down for the night, as before.

But before he was able to remove the bandages and the strapping, something else occurred that caused even more strife than the rocket engine accident. Dad had been working on installing a ceiling light in the kitchen by taking up the two-inch, very old, dry floorboards in his room upstairs that was above the kitchen. The rug covering the floorboards was laid back, but they would just step over it without problem. One Sunday, he and his brother Steve were “roughhousing” by running around upstairs and around his room. For reasons he can’t remember, he stopped suddenly, running his foot along the edge of the floorboards. He felt like something had just stuck him. He called time out, and sat on the edge, lifted his leg up on his knee to inspect the bottom of his foot. He poked under his big toe and the next one and saw something brown and circular. He poked down his foot toward the instep and there was something hard way under the skin. Steve and he both said, “What the hell is this?” knowing of course what it was, and that it was not good. It was a very large splinter embedded all along the bottom of his foot.

He went downstairs and sat down in the kitchen where Dad was working on the ceiling light. He said, “Hey Dad, take a look at this,” as put his bare foot on the kitchen table. Maxine came in to see, and Dad bent over and poked around the bottom of his foot, then looked up and said, “Oh Max” and promptly began to faint. Maxine caught him and settled him on the floor up against the clothes dryer. She felt his pulse and said, “He has just fainted.” She got a wet towel and began to rub his face when he came around. Sheepishly, Dad said, “Did you see his foot?” She said no and turned to the foot in question. After poking around, she turned and went to the telephone and was speaking with Dr. Monger. They talked, she said, “OK,” and hung up. She turned to him and said, “We are off to the hospital.”

It was Sunday and there were few people around. When Maxine and he arrived at the Emergency Center, Dr. Monger had met them, and he was soon laying on a patient bed with three or four doctors and nurses looking and feeling the foot, discussing the matter. They were soon in agreement. Dr. Monger was discussing the matter with Maxine, who looked unusually serious. The doctor and she came back and explained to him that the doctors were going to operate to remove the 5-inch splinter and drain the foot in such a way to avoid allowing any small wood particles into his blood stream.

They prepared him with a hospital gown with his still-wrapped left arm underneath and he was on his way to the operating room; they gave him a local anesthetic for a while then was put under entirely. He awoke with his foot sticking out the bottom of the bed with a container bucket strapped below. He soon learned from the nurses that the bottom of his foot had been splayed open down the mid-line to allow blood to drip out, taking with it any small fragments and particles of wood. He had been hooked up to a bottle of blood and a second bottle with antibiotics of some kind dripping into a vein in his “good” arm. This went on for two days and nights and the pain was tremendous; they didn’t want to give him too much pain medicine or that might cause other problems. He wasn’t allowed to have visitors this time for reasons he never found out and didn’t ask for some reason. He didn’t feel like seeing anyone in any event.

After two days, they took him back into surgery to do further rinsing and inspections, using tweezers once in a while to pick multiple wood splinters out of the bottom of his foot. Finally, they closed the wound and sewed it up with a bunch of stitches. He couldn’t be released for another day or two to make sure there were no infections anywhere. Finally, he was released, and that was that. A few weeks after that, even the scar of the incision was barely noticeable. And, they had a new, fancy light hanging over the kitchen table and the rug in his room upstairs was back in place and nailed down.

By the time spring rolled around in 1958, he had built back most of the muscle strength in his arm, but his fingers in his right hand left a lot to be desired. Shaking hands with him, the Deacon once said, was like shaking with a hand of claws. But, turned out, there was a description for this condition called Dupuytren's contracture, a genetic addition of an extra tendon running between the thumb and the first finger that over time affects the rest of the fingers. This condition made for making a better fist, which he needed again in the spring. Another of the Jake’s gang came after him for an assigned dust up but left with a bloody nose after being belted pretty well with his secret weapon, his right hand. The #3 bully was missing from school for a couple of days, he heard.

But a few weeks later, another of the South Washington Avenue bullies called him out as he was entering the Old Bill Bailey beer joint, just about a block away from their South Washington Avenue houses. This one, Roger P., was bigger than the two before. After the rest of his guys had gone inside, he asked Tom if he would be a witness and hold his coat, while also watching out for anyone else who might want to get involved and into the tussle, such as Jake himself, and for any weapons, especially knives, because he figured these bullies were capable of such cowardly deeds.

There was a circle of about six guys and Tom H., who looked stern and like a referee. The fight began with Roger P. throwing the first, wild punch. He ducked it easily and knew at once he was going to clean Roger P’s. clock. He did, throwing punch after punch, all hard-right punches. He wasn’t comfortable yet with trying hard punches with his left arm, but found it useful for defensive postures and blocking incoming blows. His secret punch was all he needed. Roger P. went down four or five times and was getting up more slowly every time. Then he rushed him for a tackle which he rolled with and threw Roger P. up against the beer joint wall. He thought he might have really hurt him, but Roger P. got up with his arms hanging down. He walked up to him, and double-loaded a punch aimed squarely at his right jaw. He went down and stayed down this time. He felt like kicking him in the gut but didn’t. Roger P. sat up. He looked up and he said, “Have you had enough?” Then an idea came across his mind, “How about let’s call this quits, and I’ll let you go back into the beer joint first to sit with your bunch.” He’ll follow in a few minutes. “I suggest you go to the restroom and wipe the blood off your face. What do you say?” Roger P. said, “OK,” looking down, beaten, and then got up slowly and went up the steps into the beer joint, followed by his buddies.

He asked Tom, "How did it go?" Tom seemed satisfied, and suggested that he wiped some sweat off his face with the inside of his coat. Then Tom said, "Wow, look at your knuckles on your right hand." He did and noticed they were in fact quite bloody. He chuckled and said, "That's not my blood." They both laughed. They waited another few minutes and then went in. Tom said, "You go in first!" He did. As he opened the interior door to the joint, the previous buzz of talking in the bar all of sudden went silent with all eyes aimed at him. He instantly figured they were expecting a bloody mess, but he smiled and waved toward his guys over in the big corner booth. That satisfied the crowd, and the buzz came back, as if by a switch. He moved into the booth and sat down. Phil and Deacon were eying at him closely looking for cuts or wounds and noticed his right hand was still bloody and bleeding. He wiped his knuckles clean with some napkins that were on the table. Tom broke the silence and said, "Seems we have a political fighter here guys. He kicked Roger P.'s butt but gave him an honorable out and encouraged him to go back into the bar first." Joe looked a little worried, but Deacon and Phil looked like they approved.

A few minutes later, the bar lady appeared with six beers on a tray and said, "The guys across the way there bought you a round." He looked in their direction and locked eyes with Roger P. who held up his arm with a finger pointing upward. He returned that move with a quick hand wave and that was that.

This was the fourth of such fights he had had. Only the Deacon had had a run-in with one of bullies, he forgot which one, but it was only a warning not to date Lucretia or dance with her... just like he received warnings earlier that month not to ask Suzie to dance or date; both of them ignored the warnings nonetheless without repercussions. He was getting to know the ladies in his class, such as Barb W. who was one of his favorites. She taught him how to slow-dance....1, 2,..1,2,3. She also liked to take walks on the local golf course at night and watch the Moon and stars from #1 green next to the road. He wondered what the golfers thought the next day when they saw indentations in the green when trying to putt. In the earlier class, Julianne H. and Donna W., were his favorites in the class of 1960. He soon realized that all of his other friends in the group were untouchables with respect to trouble from the Washington Avenue bullies.



He suspected this was because each of them held a certain popularity such that if the bullies had gone after them the total politics would be against them, and they would have more to lose than to gain if they messed with them. For example, Joe, Phil, Tom, and Mike P. were Varsity Football players and/or Class Officers, and had been voted in by the class body as members of the Student Council. Dennis, Gary, Roger G. were known band members. They would have been criticized for picking on them. Jon was untouchable because his family had more money than God, his father being a well-known surgeon in town. Dick was the tall, dark and handsome Mr. Nice Guy. He was too nice and too big to pick on. That left him, although of Varsity Baseball, Student Council, and prominent bandmember, as the low man on the social-totem pole, he assumed he held the bag of honor to defend his guys and their collective reputation. They came after him based on previous charges by LeRoy F., no doubt. They only picked on the Deacon because of the minor infraction of date selection. He remembered thinking at the time that this was the human foundation of Fascism, one person's exercise of power over others, or else. There were always minions.

He fully expected Jake H. to appear eventually, and was actually looking forward to that, but then he remembered why that hadn't come to pass as yet. That police report that was filed about two years before on the potential assault charge probably kept that fellow from going to prison as yet, but he was ready

now, both physically and mentally for the horned one. Later that year, it was getting dark as he was coming out of the big high school auditorium doors with Julianne H. or Donna W., he didn't remember which, and noticed three boys leaning against trees next to the curb, all three with their arms folded, a clear indication that the bullies were back. He couldn't see who it was as they walked by them. One of them said, "Hey Butthead" or something equivalent. He stopped, asked his date to go on to where his car was parked and that he would catch up with her.

He walked back to where the boys were and the biggest of the bullies, a guy named Alan, said, "I'm going to smash you up." He was on the LHS varsity football team and must have weighed about 240 pounds or more. Clearly, this is going to be difficult, he remembered thinking. Undaunted, he replied to this big bully, "Take your best shot, Asshole." They squared up and the big one charged him like a bull looking down. He backed away pushing AH's arms downward and the big one went down with his face into the sidewalk. He got up and rubbed his face, and then looked at him and said, "You SOB" in longhand. And charged again. He noticed that his momentum was easily redirected, and he pushed him in the direction of a low chain-link fence and bushes and then stepped out of the line. He tripped over the fence and into the bushes. He turned to see what the other boys were doing. They were edging closer to him thinking of jumping him, but he said, "Watch it, or you are going to lose your balls." They changed their minds and backed off.

About that time, the big bully came at him more slowly this time. He was able to land a right on his jaw, but that just irritated him even more, but he at least put up his fists to make a fight of it instead of a wrestling match. They were circling each other when he moved to throw a punch and hit his left arm that deflected the punch, but certainly hit his arm and that hurt. He shook it off and re-engaged. They began to trade punches; most were being deflected but his punches were landing but having no apparent impact on this big fat guy. He figured he must have maybe 50 pounds of fat protecting him. Then he decided to use the ultimate weapon used in mismatches. He circled him angling to engage and then kicking him in the balls as hard as he could figuring that should slow him down. An opening appeared and he took a quick step and let fly with a kick as hard as he could, followed quickly, if he was still standing, with a right-hand blow to his nose. Both occurred but he was still standing. He charged him again and both tumbled into the bushes still grasping each other. The big fellow was trying to bear-hug, thinking that could hurt him, and he was right. He couldn't let that happen. He was on the ground pounding the big one on the side of his head, he noticed some cobbles they were on and then devised a plan to grab a fist-sized rock and bash the big one upside his head. That ought to make him turn loose of the bear hug. Just as he reached for the rock, someone else grabbed the big one and pulled him off of him and out of the bushes throwing him onto the sidewalk. He was still laying in the bushes exhausted when he heard someone yelling at the big one and calling him all sorts of names. He climbed out of the bushes and saw Coach Posey still going at the big one pushing him around. Then, he heard him say, "Now get the hell out of here and if you ever pick on someone smaller than you again and I hear about it, I'll come looking for you and kick the hell out of you until you see stars, do you hear me?"

He was sitting on the steps afterwards when Coach Posey came over and sat down beside him.

"You OK?" he asked.

He said, "I'm OK."

The coach said, "Good, we teach them to be bully rough in football, but some of them get a little crazy with power." The coach then said, "Looks like you bloodied him up pretty good."

"Yes, but he didn't go down after I hit him hard 10 or 15 times," he said.

The coach said, "We train them to get hit about the face and head, but protected by a helmet."

Then the coach said, "Why didn't you go out for football? We could have used someone like you in the defensive backfield."

He replied, "I wasn't big enough and my arm was still vulnerable."

The coach said, "That's right, you are the shortstop that had some problem with a rocket last year and losing some front teeth the year before in basketball."

"That's me," he replied.

"No wonder you are a tough cookie now," he said. The coach asked if he could drop him somewhere, but he told him that his girlfriend should be up the street in his car.

When he got to his car, his girlfriend was asleep. He opened the door to his '47 Ford Coupe, and she awoke and said, "What happened?" He replied, "Not much." And that was that.

By the time his junior and senior years came, he was unfettered by music lessons and band and orchestra and was getting immersed in his schoolwork, science club (top middle & top left of photos), and later in baseball, the former of which was getting interesting but difficult at times. Some subjects were easy, some were not. Algebra and plane geometry seemed to be pointless, while trigonometry and solid geometry made perfect sense and were useful. Somehow, he didn't remember how it happened, but Phil H. tutored him through both, still getting "C"s, while he needed no help with the latter two subjects, getting solid "A" from Mr. Aiken. He liked Chemistry, but Judy M. was a tremendous help in some parts of the subject. He got an "A" in chemistry, thanks to her.



One of the subjects was economics. He began to read the textbook and after a few pages of tables and economic data, he realized that all the data were at least 10 years old and obviously out of date, like the number of bushels of corns, wheat, etc. sold to Russia...1948. There were only a few principles, but a mass of historical data. In class one day, he went to the teacher to register his complaint. She agreed but added that the school

budgets just didn't allow them to stay up with the time considering the time it takes to prepare, go through editing and reviewing, printing, and then distributing such books. She encouraged him to go talk with the Principal about it. She handed him a pass and he skipped his next class and went to Mr. Lowry's office, the Principal. He went to his office and asked his secretary to see him, and she asked about what, and he said just about a textbook. She was being snitty, so he was snitty back. She went into his office and came out and said to go on in. He went in and stood in front of his desk. Mr. Lowry was looking down reading something, again. After about a minute, maybe less, he looked up and motioned for him to have a seat. He pushed the papers aside and said, "Ah, Michael" in his booming voice. "How is your mother, Maxine?"

He said she was getting better and gaining weight. "That is great to hear," he said, "we need her more than ever." Mr. Lowry was referring to her activities with the school board and in school-bond issues.

"What can I do for you today?" he asked with arms crossed, which instantly unsettled him because he knew Mr. Lowry was going to be difficult. He was an ex-marine my uncles' age and had a huge forehead, the biggest he had ever seen. He also had a reputation and habit when he toured the student halls and encountered him or one of my friends, he would reach up and put his hand on their shoulders and then squeeze into a pinch, which damn well hurt every time. Every fellow he saw he would do that too and then they would back away in some pain. One of us said that he wasn't being mean, that was just his way of saying, "I'm the big dog here, so don't get out of line."

He raised the issues about the economic textbook and Mr. Lowry listened carefully. He got up and went around his desk and into the secretary's office and said something to her, he couldn't hear what. He heard file drawers opening and closing. Mr. Lowry came back to his desk carrying some files and looked through them carefully. After a while, he looked up and then said,

"You are correct, it's a terrible book for us to offer for economics. I'll get rid of it next term. In the meantime, you don't need the course to graduate, so forget it. I'll remove it from your schedule. Just use the period for study hall, OK?." He said, "That's fine."

Then he said, "I see here your grades are good enough for college. When do you take the SATs?" He said, "In a few weeks." Mr. Lowry replied, "I see in your records of your IQ of 127 and schoolwork that your grades are very good in some subjects and others not so much. What's that about?" He told him that he didn't know why. Just that some subjects were interesting, and some were difficult. He said, "That was always the same with me too, but I found my way and finished my Master's degree after the war, and I have a strong feeling you'll get along just fine." He asked how varsity baseball was coming this year and he told him it was going well and related small talk.

He thanked him, got up, and walked through the reception area past the secretary who was smiling now, and she nodded when he glanced her way. He figured she must have been listening to the conversation. He was walking toward the school library when he encountered Joe coming out of the men's room. They greeted, and he offered to Joe when he asked where he had been, "I just spent 15 minutes with Mr. Lowry, and you know he isn't that bad."

That year his baseball team was also winning, as in the years past, but without players like Baughman (who later was a catcher for the Cincinnati Reds), Glaze, Hart, Spangler, Tipton, and Noll, plus other who were not only good baseball players, but were also becoming outstanding citizens. He remembered having discussions with Coach England before the season got underway. The coach had heard about his accidents a few months earlier. At the school gym, where they practiced indoor during the winter, one day he asked to see his arm. The coach held it, felt the muscles on both sides and looked carefully at the 3-inch scar where the shrapnel entered and on the back of his upper arm where it came out leaving a 3-inch circular scar, which carried splintered bone fragments as well, no doubt. He felt his shoulder and moved the arm around in all directions. He asked, "Does any of this movement bother you?" He said "No, not a bit." "How about your fingers, do they all work?" He laughed and held his left hand up and moved each finger. "How about your right hand?" the coach asked. He said, "Pretty good," but didn't raise his hand. Coach then said, "Let me see your hand," He presented it and then closed it in a fist with the palm up. "So, I hear you actually impaled your hand to keep the pressure on your torn up arm?" "Guess so," he responded, "I just reacted."

The coach then said, "I heard the doctors put your humerus bone back together using the new PVC glue to creature a structure for bone growth, is that true?"

"That's what the doctor told me," he said. The coach said that he wanted him to focus on hand barbells and hand-crunchers (spring-loaded) to further strengthen his arm and hands. He then said, "You're going to have trouble getting the ball from deep shortstop to 1st with that curve caused by the dragging third finger. So, we may switch you to 3rd Base, but we'll see."

He already knew that he couldn't throw a straight ball, unless he turned his wrist inward when throwing the ball to compensate for the tendency to curve, so he learned to do both, when needed. The coach also suggested that while running the bases, he should lead with his right shoulder, or just push forward with his hands. He then said, "I heard you are pretty good at personal combat against bullies. Just pretend the opponent is one of the bullies, and you'll do fine." He poked him lightly with his fist, smiling, and turned away.

The baseball season got underway, and after a few weeks of winning all the games, his team was to play the Lancaster St. Mary's team from across town, including Bob, his non-friend from his Catholic neighborhood, the one he had issues with a few years before. Every year, this game brought out the crowds and they were beginning to fill the dark gray, cement stands around the baseball field in the corner of Miller Park (built during the Depression he heard). It was built on the Hocking River floodplain below which the town's drinking water originated. The groundwater was pumped by high-capacity water wells and treated before distribution by the water treatment plant located south of the ball diamond beyond the city swimming pool. His folks, Maxine and Clarence, were there somewhere in the crowd, and many of his friends, and the LHS Cheerleaders were there too.

It looked like Bob was the starting pitcher this game because he was the one warming up. He had grown a few inches and gained a few pounds. He noticed that in warming up he had what appeared to be one hell of a fast ball preceded by an imposing (aka show-off) wind-up and delivery.

The game started slowly; the Green scored first with some solid hitting. One of the hits resulted because he tried to field a line drive between third and his position in shortstop but although he knocked it down, his throw to first base was too late. He figured that was an error on his part, but later found out it was scored a hit. Bob was striking out everyone, even Butch and Smokey, and he seemed to have the game going his way. Then in the 4th inning, he remembered, his team started to respond. Butch got on with a single, and Stan hit a double into right field scoring Butch. Score, 2-1. Next, he stepped into the batter's box. He had struck out the first time at bat getting all very fast balls on the inside. The next pitch came, and it was fast and aimed way inside that appeared to be intentional. The Referee called "Time-Out" and Coach Clark, Joe's brother he always assumed, walked out to the mound to have a discussion with Bob.

The next pitch was a curveball, which he had never seen him throw before. The next pitch was a fastball coming right down the center of the plate, so he took a swing at it and connected so well that the ball went sizzling right back at Bob, who had to drop to the ground to avoid being hit in the head. He left the batter's box slowly because he was surprised to see Bob go down, but then took off for first base. Bob had gotten up quickly and threw his glove down in disgust and ran toward him as he was running toward 1st base. The umpire hollered "Time-Out" and bolted out from his position behind the plate and intercepted Bob just as he grabbed him. The umpire separated the two as punches were about to fly. The St. Mary's coach arrived yelling and pointing at him for reasons he couldn't fathom at the time. He assumed he

thought he was aiming to hit Bob, but who can do that? Not even the pros can do that on purpose. It just happens sometimes.

The umpire called a meeting of both coaches and huddled for a few minutes, and standing on 1st base, he could see that the umpire was pointing his finger at the other coach. The game resumed, and for reasons he never knew why, Bob's fast ball no longer intimidated his team and they began to get hit after hit, and then a double, and then a triple by Smokey, their best pitcher and best hitter, he remembered. That inning they scored 5 runs, then after striking out the opposing team the next inning, they scored even more runs. Final score, 10-2 Gales win, again for about 10 years in a row.

After the game ended, Coach England called the guys together for a private team discussion. He remembered the coach saying, "Men, I want you to remember this game and how it developed. Their pitcher was very good, a potential professional candidate, but someone with that good of fast ball may also have a soft spot, and when that hit decked him, he lost confidence and focus, and he got angry instead. But it was not just that he had lost focus, but that display transferred the confidence over to his opposition, to you guys, who individually, and collectively immediately sensed that you could hit any pitch he could throw at you, and that's why you exploded with all the runs. This applies to baseball and other competition sports, and to business, so remember, this could be useful to you sometime in the future. Good game, guys, let's do it some more in the rest of the season." The meeting was over and they all went their separate ways, but he remembered the idea.

He didn't see Bob again for some 20 years until the early 1970s, when he was working on his first book for McGraw-Hill at his office in east Columbus. One day, while climbing the stairs to his office, he was passing a tall, well-dressed fellow who was carrying a rack of what appeared to be tiny dresses, maybe baby clothes. He made eye contact with the fellow. They both stopped. He said, "Bob?" Bob said nothing and continued down the stairs leaving him looking after him. When he arrived at his office upstairs, he went out onto his balcony and could see Bob loading his van containing more racks of children's clothing. Turns out, Bob was living next door. They never spoke. He wondered whether Bob had made it into professional baseball. He had never heard.

The season that year moved on and the team did quite well, only losing three out of 18 games. The losses to Portsmouth (in southern Ohio) by one run and to St. Charles (in the Columbus area) by 2 runs were particularly distressing, but it was especially irritating to lose the state sectional championship game to Marietta (east-central Ohio) by one run.

The loss to Marietta was his fault, without question. The game was low scoring and tied at 1-1 through the 5th inning. His team was on the field with one out. A man on first base. A scribbler from off the end of a bat came snaking out his way toward second base. He reached down to scoop it up and pitch it to Butch for a double play, but the ball took an odd bounce and spun up his arm and hit him under the chin, then it disappeared in the dust. He frantically was looking around for it, and then Butch yelled out, "Behind your left foot." He turned and reached down, picked it up, and flicked the ball to Butch, but it was too late, the runner had slid in safely under Butch standing over 2nd base waiting for his throw. The next batter made a solid hit over first base and the runner on 2nd base scored easily.





Score 2 to 1 Marietta led. The last inning, Butch hit a single and Chilton hit a fly ball to left field. Butch tagged and went to second. Smokey struck out, which didn't happen very often. Two outs, and it was his turn to bat. He had vowed to himself on the way to the batter's box that he would make solid contact. Two balls, then strike one. And then a fast ball down the center of the plate and he took a mighty swing and made contact, heavy contact. The ball took off for dead center field and he had some hope for a home run. As he ran toward 1st base, he could see the centerfielder running after the ball; the fellow put his glove up, still running, and you could see that he was running and splashing water that marked the boundary of the field of play, and the fellow then lunged catching the ball with the web of his glove. The white ball could be clearly seen. The fellow kept running all the time splashing water, and as he was heading toward 2nd base, the umpire in the field raised his right hand with the dreaded thumb up, yelling, "You're out."

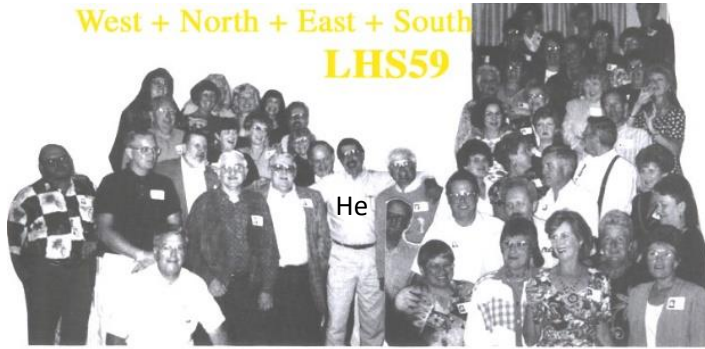
Coach England came running out to the umpire behind the plate, after the other umpire's declaration, saying, "What? The fielder was in the creek and therefore out of bounds, that's a home run." The two umpires and the two or three coaches were yelling and explaining. He had never seen Coach England that upset. The two umpires spoke privately, and there was another man who had come out that they were conferring with. In about a minute, the umpire was about to speak, and everyone got really quiet. Then, he said, "The runner is out. Game over," and both umpires left quickly for their cars. All you could hear then was the Marietta fans whooping it up.

They all sat down in the dugout quietly and looking down and digging into the dirt with their cleats. He had never felt that bad, ever, at a sporting event. The coach stepped down into the dugout still red in the face and said, "I don't know what to tell you, men. You guys played a great game and should have won it because the umpire's call was wrong, but they have the final call. That's the nature of baseball. Some of you are feeling especially bad. That business at second base opened the door to them. I'll admit that was a difficult ball to handle, but I've seen you guys handle more difficult double plays. But setting that aside (and the coach was looking at him), as far as I'm concerned you won the game because that was a home run, the longest I've seen you hit the ball yet, although it won't be recorded that way. Now, let's put the bad thoughts away and get ready for the COL playoffs next week."



He, Penny P., Jon N., Nancy B., & Phil H.

They did, beating Chillicothe and Coshocton, to win the COL Championship that year. He ended that season with a .333-batting average, 2nd in the team for on-base %, just after Butch, and 3rd in runs scored, while Butch scored the most, of course. Not too bad that year but could have been better. Coach England was the best coach he ever had. He knew how to instill confidence in confronting adversity.



He went out with guys the next night down to the fire tower and sang beer songs, smoked, and laughed at the Deacon's funny business, Phil's philosophies, Chuck's admirations of the Yankees, all being prompted by a few beers, that if consumed in excess, one or more of them threw-up along the way home out the window of Roger's car. He bought his first pack of cigarettes and



began a 25-year-period of self-punishment and addiction to nicotine before he wised up and walked away from that addiction. The fire-tower environment was reserved for when he and his friends would get "liquored up" mostly with a few beers (of "near-beer" at that), when "21-bottles of beer on the wall" and other songs seemed to be fitting and proper, mostly sitting around a small campfire under that Fire Tower south of Lancaster and north of Sugar Grove, Ohio. This isolated place was their favorite spot to get lit up in early and late high school, which included he and Joe C., Phil H., Tom H., Jon N., Chuck A., Steve B. (on occasion), Gary B., Dennis S., Dick E., David L., The Deacon, Roger G., and sometimes Nelson E., Mike P., and no others because this was their bunch of preferred friends. They privately thought of themselves as lifetime members of their first fraternity, but this one lasted the rest of their lives.

Soon, these accounts may be all that remains of that collective memory because he was in fact the unofficial historian for his group⁶ and for making a record of him actually singing *Swing Low-Sweet Chariot* at the 8th Sing in 8th Grade in a *cappella*, no less.

The LHS Senior article by Barbara F. on him published in the Lancaster newspaper in 1959 summed up that period, leaving only a few things out.⁷ His high school years were the best of times and the worst of times.



⁶ <https://lhs59.org/>

⁷ <https://www.i2mconsultants.com/downloads/corp/Purple-GoldArticle59.pdf>

Anecdotes of a Lifetime

These were his people in those days; most of whom (some 64% of the 340 graduates) have held up quite well over the years, he said in 2022⁸ as confirmed on the LHS59.org website. He noted that Tille B. and Hazel F. and, of course, Joe C., Helen A., and many others in the Class of 1959 have been of invaluable help with the LHS59.org⁶ website and the reunions over the years.



⁸ <https://lhs59.org/deceasedlist.htm>

Chapter Four

1959, The First Born Trials, Tribulations, and Successes and Heading for California



Aurora Borealis in Alaska by Todd Salat ⁹

The previous unemployment problems in the U.S. eased to 5.5%. Television programs included "The Twilight Zone," and the movies included "North by Northwest." Alaska was admitted to the Union and became the 49th State and Hawaii was admitted and became the 50th State. The Boeing 707 jet airliner came into regular service around the U.S. and the world. Fidel Castro came to power in Cuba. Pioneer 4 was the first American spacecraft to exit the orbit of Earth, but Soviet Union had already achieved the same feat earlier with their Luna 1 spacecraft. Pioneer 4 traveled within 37,000 miles of the Moon and had sensors on board that would allow it to transmit photos of the lunar surface but they were never switched on. The U.S. Navy launches the Vanguard 2 satellite, which was the first successful weather satellite and marked an important milestone in the space race between the Soviet Union and the U.S. Ohio State Football was almost unbearable in losing to University of Southern California, Illinois, Wisconsin, Iowa and Michigan. President Eisenhower warned Americans about the Military-Industrial Complex.

A change in society was about to explode onto the scene, both in terms of the Vietnam War and in the young people of America and their reaction to it. But that was not the only force festering in the American culture as the 1960s exposed these and many other issues.¹⁰

His parents were born and came into adulthood during the Depression. WW2 brought the economy back with the help from President Roosevelt and succeeding presidents. They were under the impression that

⁹ <https://fishcreekalaska.com/collections/todd-salat>

¹⁰ <https://www.theatlantic.com/magazine/archive/1967/09/the-flowering-of-the-hippies/306619/>

if they worked hard they would improve the family's financial and associated social position. Their children would have better lives than they coming out of the Depression. Maxine and Clarence were a good example. During the Depression, skin color meant little, but as the white folks prospered, non-white folks not so much. In fact, he was aware that White Nationalists (fascists) emerged just before the Depression, just as Hitler and other fascist cultures were expanding in the world. With an expanding economy, the disparities were becoming obvious to some. An almost unconscious sense of advantages swept through the country, which included mostly white people and his parents. As the economy grew, so too did the accumulated wealth within white folks, his folks included in a relative sense. Good business meant good incomes for all white people, but to a lesser extent for the non-white. Even women doing the same jobs as men were not receiving equal incomes in the still white, male-dominated society.

It was about this period in history that all the underlying conditions emerged as genuine issues, discussed by many, ignored by most. So too, as the economy grew, taxes of all kinds began to be looked upon as taking from the wealthy to give to the poor. This resulted in increasing anger toward the government, especially when taxes were to be spent on the lower classes in the form of social programs. In the decades ahead, these were to become serious problems, but as the 1960s began, it was business as usual.

He graduated in the upper 20% of 341 students in the Class of 1959. He scored around 550-590 on both SATs, not too good, but not that bad. After graduation from LHS, his family did not have the funds to underwrite his college aspirations. He had to make some money before he could begin college, so he went to work at the only place in town that paid well, Anchor Hocking, Plant #2 on the east side of Lancaster.



He and a few of his guys got jobs to help excavate the blast furnaces. They had to join the union, but the benefits became apparent on the first day.

During one of the early Class of 1959 Reunions, he won the best legs award. He is in the middle with the Deacon on his left and Dick E. on his right.

Anchor Hocking was founded in 1905 and produced glassware (drinkware, kitchenware, bakeware, etc.) that was sold all over the world. One of his parents' friends, Earl Y., was a salesman who traveled all over the world selling Anchor Hocking products. For years, when Earl and his wife Edith came to the house for a social visit (or when they would visit them) he would have an envelope for him full of foreign postage stamps that he picked up while traveling. Their sons were not interested in stamp collecting. He was working on his 4th volume of stamps, thanks to Earl and to Anchor Hocking. This also supported his Boy Scout merit badge. By the age of 8, he knew all the countries' names, capitals, geographical locations and something of their cultures. He spent hours sorting, examining, and looking up information in the family's Collier's Encyclopedia series of books in the bookcase of the den of their house. Years before, Earl had talked about his job and, one time, about how difficult it was to make Hobb-nailed glassware because mold-makers were getting hard to find in those days. It was certainly a company town for generations along with other heavy industries, such as Alton's Foundry, which had been operating in Lancaster since 1889, and other specialty glass mold makers and fabricators, all focusing on glass and ceramic products, as well as petroleum industry pump-jacks. A series of blast furnaces at each of Anchor Hockings' two plant locations in town were fired by natural gas and vented by a zig-zag cooling roof that towered over the west and east sides of Lancaster.

Every few years, the blast furnaces each had to be dismantled brick by brick because the bricks were getting coated by waste glass, increasing the heating costs. One of them in turn was turned off and allowed

to cool. At a certain inside ambient temperature the area was safe enough to enter. Every summer, plant management would hire about 25 college-bound students - "summer wonders," as the group was called by the old timers at the plants. They were issued asbestos gloves to protect their hands and upper arms over long-sleeved shirts and heavy, long pants and massive boots. The heavy helmet extended down to the shoulder and the face plate was made of thick glass. Outside the furnace, there was an area to practice using the air-hammers (aka hydraulic jackhammers), large and small sizes; when approved, two guys at a time entered the cooling furnace. Their job was to break-through the melted glass coatings covering the firebricks and break up the bricks of the four surrounding walls starting at the top working down. A union safety man would start timers on each of the guys, and after 20 minutes, they would be given the signal to stop, lay down the air-hammers, and climb out for a 30-minute break in the nearby recovery room.

They emerged from the pits covered in sweat and would typically drink a large bottle of water with ease after arriving at the recovery room. He was surprised at first how much he needed to recover. This was not an easy job, but the pay was very good. On a break once, he asked one of the old timers about how the glassware was made. Al was about 50 with white hair and had four children, all grown up. He had been working at Anchor all his adult life, which started when he was 16, he said. Al knew all about glass making and he spent a lot of time during rest periods listening to Al talk about the way it worked. High-quality sand was mixed with limestone and soda ash, plus some secret chemicals, he had said, cooked up in temperatures up to 3,000 degrees Fahrenheit for a specified amount of time made it all happen. He said he used to work in the lab until the Ph.D.'s started to show up and other college people, like yourself, began to take over the functions. Al had graduated grammar school but had to go to work to feed his growing family in the 1930s.

They were making good money over the following six weeks that summer and after receiving the first paycheck he, the Deacon, Tom, and Dennis decided to go to a bank and cash the checks, getting the money in cash. Someone came up with the idea of taking all the money they had received and piling in on the round table in the middle of the bank. They had never seen that much money.... And then the Deacon said, "Guys, do you remember how much each of you contributed to this pile?" There was silence. And everyone started looking for their pay stubs. Most of them couldn't find theirs, so they had to go back in line to the same teller who passed out the cash and ask her to find their checks and tell them the amounts on each. That was most embarrassing for the guys and some of the customers and tellers found it rather humorous. Later, the Deacon said, as he served as teller for their pile of money handing out the written amounts, "Whose dumb idea was this anyway?" Tom piped up and said, "I think it was yours." Deacon poked him and they all departed the bank never needing to do that again.

During Friday evenings he also played softball for Union Local #576 with Kenny, Glenn K, Terry F. and others who worked at Anchor Hocking. They were permanent employees. They had won the AA Loop Championship two years in a row. He played shortstop, of course, and was a pretty good hitter as well. They won that year too.

As the months rolled by, fall came and most everyone went off to college. The Deacon, Dennis, and Tom went to college at the University of Cincinnati. Joe went to Ohio Northern; Phil, Chuck, Dick, and Roger G. went to Ohio State; Jon went to Yale, David L. off to Indiana University. Each of them began their stories of their next fraternity, of major decisions and contributions made in their lives, and whether to pin or not to pin a fortunate young lady.

After a few weeks, he received a letter from his grandfather, his grandmother, Lucille's ex-husband, now living in Southern California, indicating that he could begin college there at zero tuition cost because his grandfather had resident status and so did he if he lived in California too. He wanted to get away from Lancaster as soon as possible in any event and had a feeling that he might just get trapped if he didn't, as had happened to many other guys he knew that worked at Anchor. He had earned a few thousand dollars that could pay the train fare and expenses for a while, so off he went in January and left the cold, snow and ice everywhere behind.

Maxine and Clarence, brother Steve, and sister Carolyn Sue, drove him to Columbus and the main train station, and hugs all around, wished him off. Mother emoted a bunch, as usual, but everyone made it a happy event. The train was pretty crowded and smokey. He had two brand-new *Samsonite* suitcases filled with his possessions. He was thinking about what he was leaving behind. His stamp collection and his baseball-card collection, safely stashed in a cigar box under some floorboards next to the window of the attic overlooking Elmwood Park, the tennis courts, and the old cemetery off in the distance. He remembered the hours he spent there watching the wind blow in the trees in front making the timber of his old house creak. Years later he had gone looking for his baseball-card collection in that cigar box and it was gone. It had a Bob Feller card and a Mickey Mantle card that turned out to be quite valuable to the collectors. Dad likely either pitched them or sold them off, thinking he had long forgotten about them. He never asked Dad because he forgot. After he had decided to go to California, he remembered being glad that he had read all of Steinbeck's novels. He figured that should prepare him for California.

The train headed for Chicago and along the way he was transfixed with the countryside as it began to change into the unfamiliar. He had only been to the towns around southcentral Ohio, but then he remembered he went to Cleveland once with his Dad when he was about 10 with Earl to see the Indians play the New York Yankees. Earl drove a Hudson that had two long horns on top of each fender. When he blew the horns, it made the sound of a large truck, which was hilarious. The Indians lost, again, and on the way home, he sat in the middle of the front seat between Earl and Dad and asked how fast the car would go. Earl said, "Well, let's see," and he pressed harder on the gas pedal. He watched the speedometer went slowly up and up and up, and it hit 100 mph. Earl said, "had enough?" He said, "Yes," and Dad said, "I'll say" nervously chuckling. As he arrived home that night, he ran up to Maxine and said, "Guess what we did?" She said, "What's that?" He proudly said, "We went 100 miles per hour." She turned to Dad with that look. She had words with Dad that night and he was in the doghouse.

He was also recalling the canoe trip down the Scioto River to the Ohio River with Dad and the guys, when the conductor, a tall colored man, broke his concentration by asking for his ticket. He fumbled around in his pocket and retrieved the papers and handed them all to the conductor. The conductor said, "Well, let's see what we have here. Here is your ticket. Oh, I see you are headed for California? What's there?" He said, "I'm going to college." The conductor nodded, saying, "Good for you," and moved on.

The outskirts of Chicago was approaching as the sun was setting. Pleasant homes and yards, and then it was dark with streetlights buzzing by. The train began slowing and eventually stopped in a big enclosure he presumed was the Chicago train station. His two suitcases were waiting for him, as was one of the porters. He noticed people in front of him were pressing money into the palm of the porter, so he pulled some folding money out of his pocket and did as the others by keeping the hand low and gave it to the fellow, which the fellow looked at and said, "Hey thanks." He noticed it was a 10-dollar bill. He had meant to give him a dollar.

He lugged the suitcases for miles it seemed into the main station with a huge ceiling. He saw a big sign in the middle that he figured was the train schedule and gate assignments. He looked at his ticket for the train # and found it on the sign with the gate number. At the other side of the big hall, he saw a line of black gates with white numbers on top, so off he went. He found the gate and went through and could see a long silver train waiting, the *Super Chief* of the *Santa Fe Railroad* with steam billowing out from below. His car # was right in front of him after a short walk. A colored porter was standing next to the entrance as he approached; the fellow reached toward him and said, "Here, Son, let me help you with that. I'll store them in the back." He climbed the stairs into the car, and it was very comfortable-looking. It was apparently open seating, so he picked a seat next to the window and sat down. Only a few people had boarded, but after a while, the car was almost full by the time they pulled out of the station heading westward to arrive at his destination, San Bernardino, some 38 hours later.

He settled in and prepared for the long ride and dozed off to the soft clickity-clack of the *Super Chief's* diesel-driven wheels over the segmented tracks. He awoke hours later with the chatter of people all around him talking, and as the Sun was dawning over the back of the train and he could see a large bridge off in distance. It was one of the bridges spanning the Missouri River near Kansas City. There were a few stops with the *Super Chief*, which was part of the reason he paid extra to take this train.

The second night was really entertaining. They were barreling down the track now, passing railroad crossings with red lights blinking in a matter of seconds and even passing through some small towns at what felt like near light speed. The next morning, he awoke to the plains of West Texas, and he didn't realize land could be so flat with only a few isolated bushes of green to black sage trees. He was hungry so he decided to explore the train. He came upon the porter and asked him which way to the dining car. He was going in the right direction and moved through to the next few cars. He remembered it was not easy to open the heavy doors between the cars, but he soon got the hang of it. When he arrived at the diner, he was surprised that it was almost empty. Of course, it was almost 10:00 AM train time, so the morning rush had already passed. Then the thought hit him that maybe the food was really expensive. Another colored fellow appeared and showed him to a seat and gave him a menu. The prices were just fine so he ordered up, eggs, bacon, toast, and coffee. The latter was the best he had ever had. The breakfast in general was very good as well. Bacon crispy, eggs basted; the white toast was not *Wonder bread*, but good, nonetheless.

He paid, left a 15% tip, and went exploring further up the train. After going through two more cars, he encountered what was described on a placard on the wall inside as a Dome car. As he entered a narrow hallway led to an even narrower stairway up. He took it and emerged to a nearly 360-degree view of the passing countryside. It was empty except for an older lady near the front. He decided to slide into the seat near the curving glass window. He took it all in and then realized he was getting motion sickness, a feeling he recognized instantly and knew well from the many trips he and his family had taken from Lancaster to Chillicothe along the single highway up, over, and down hills. Dad had to stop more than once over the years, but there is no stopping this train. He found a newspaper on the next seat and began to read, without looking outside. After a while, he felt better and decided to look far away at the mountain ranges that were approaching on the right side of the train and that didn't bother him for some reason. Eventually, he could see through the blur of cars sitting at railway crossings and cattle in the field near the tracks.

He decided to ask the porter if he could move to the Dome car and he said it was OK because the train was not "passenger heavy" this trip. So, he did, and that made the trip for him. He overcame the motion

effects and was able to see the West in all its beauty. That night, the porter dimmed the lights in the Dome, except for footlights; he had never observed such darkness before. It was almost foreboding for some reason. The occasional orange spark would fly over the top of the Dome. He could see stars and the Moon, but the glass distorted the view in places.

The next morning, he awoke with the Sun rising off the plains behind them. That was a remarkable sight as well. After a while, The Super Chief pulled into San Bernadino. He climbed down from his lookout perch and stepped down onto California. The fellow hauled his bags down the steps and set them down. He gave him \$10.00 and shook his hand. They both had big smiles as they parted waving farewell. What a great ride that was he said to himself as he walked into the main train station. It too had a big dome, but not as big as Chicago's. Then he saw a very short, white-hair man coming up to him, also with a big smile. "You have to be Maxine's boy, Michael," he said proudly.

He said, "I sure am, Grandpa!" and put his bags down. They hugged for quite a while. He could only feel bones in Grandpa.

They took a taxi to Grandpa's house, and he insisted on paying. He again retrieved the heavy suitcases and they walked up the driveway to what appeared to be a rather nice two-story house. He figured they were going in the back door of the house when Grandpa opened the door to the one-car garage and went in. To his surprise, this was where Grandpa lived, in a garage. It was well kept and had a big radio, but no television, and no telephone that he could see. There was a tiny kitchen, and all the dishes and sink were spotless. The bathroom was large. It had the regular equipment.

He said, "That's your bed there," and pointed at a cot in the corner.

He said, "Fine."

The place did not smell like a bar room but did smell smokey. He soon found out why. Grandpa was a heavy smoker, of the *Pall Malls* variety of cigarettes. They sat down at a very small table barely fit for two people, which was all he needed.

He said, "Now, I am so glad you are here. You probably have heard the stories about me in the old days from Lucille, and especially your Aunt Carolyn, about my drinking."

He said, "Yes, a little, but I figured you had your reasons," he told him.

Then grandpa said, "Well that was then, and now is now. I was on the skids during the Depression there was no doubt about it. Everyone seem to be upset and did all sorts of crazy things. Many men rode the rails for no good reason but to just keep moving, finding work, where they could. Have you read much about that period?"

He said, "Yes, I think everyone has read John Steinbeck and others, so we have some idea what that period was like."

"Well," Grandpa said, "It was all true and then some!" The he quickly said, "Shortly after, I damn near died on a train, and I got hurt, and a bunch of my so-called friends dropped me off at a church and left. Long story short ... I found Jesus Christ as my personal savior and joined the AA, you probably heard of the Alcoholics Anonymous?"

"Yes," he said.

"Well, I haven't had a drop of alcohol since 1939 and I have had good friends for more than 20 odd years now that they look after each other properly."

He said, "That was fortunate for you,"

"I'll say" Grandpa said. "Day after tomorrow is my next AA meeting and I'd like to take you with me, if you don't mind," Grandpa said.

He said, "Sure. Look forward to it."

It was getting late that afternoon; they took a walk as the Sun was going down that first night in California. They walked around the front of the big house and a grey-haired lady of about 70, he figured, came out of the gate and greeted Grandpa. He turned to him and said,

"Son, this is Virginia, my landlady." He smiled and she nodded. She was reasonably attractive for her age, a little plump around the middle.

She said, "I heard you were coming. So, I am in the process cooking tonight and would like to invite you and Robert (Grandpa) to dinner, OK?"

They both agreed and followed her into her house. The place looked like a Grandma's house, with photos of children, babies, men in military uniforms, and an American flag on the wall, and all manner of whatnots of memories on tables and mounted on the walls everywhere. The meal was fantastic, some sort of steak, with potatoes and green beans, and buns, homemade. As they finished, she got up to get the coffee, and Grandpa got up too and went into the kitchen behind her. He heard low talking that he couldn't quite hear. They came back into the large dining room with coffee cups and a pot of coffee, some milk and sugar. After taking a few sips of coffee, Virginia asked him if he could drive.

He said "Sure."

"Stick shift?" she asked.

"Sure," he said.

"Bet you didn't know that your Grandfather hasn't driven in more than 20 years."

"Really?" he asked.

"The reason I asked," she said, "I have pretty bad eyesight now and need to visit a friend about an hour's drive from here. I have a car; would you mind driving me there tomorrow?"

He said, "Sure, be glad to. When do you want to leave?"

She said, "How about 10:00 AM?"

"OK."

They spent the rest of the evening talking about his Grandpa's family back in Ohio and about his plans for school. Both Virginia and Grandpa were very sociable, talking about the news, the prices, and all sorts of subjects even more so than in his family at home. One thing he noticed was that no one was smoking.

They had been talking so much they hadn't noticed the time. Grandpa offered to help with the dishes, but

she said she could handle it. So, they all rose, he thanked her for the best meal he had had in some time, and said good-bye and that he would see her in the morning.

When they got back to the garage, he brushed his teeth, put on his long night shirt, and rolled over into his cot. He went out if by a light switch, to be awakened a few hours later with an ominous coughing coming from the Grandpa area. He looked into the darkness in that direction and he could see the glow of a cigarette. He said, "Are you OK?" Grandpa replied, "I'm OK. I just have this cough sometime." He went back to sleep.

The morning began with the smell of cigarette smoke, which he didn't mind because he smoked from time to time as well, but this smoke smelled more like it came from the sewer. He figured out that it was the cheap cigarettes (*Pall Malls*) that were known for their rancid odor.

Virginia came to the door and came in, saying, "Robert, I wish you would get an air freshener in here because those damn cigarettes stink." Turning to him, she said, "You ready, Sweetie?" and turned to walk out the door. He started to follow and turned to Grandpa. Grandpa just shrugged.

Virginia's car was practically in cherry condition although it was about ten years old. The speedometer mileage indicated 855 miles. As he shifted through the gears effortlessly, he asked her why she didn't go places. She told him her story in detail about how her husband died just after they bought the car and she never felt like going anywhere since, except to the grocery, but even then she had the grocery delivered so she didn't have to have to go out at all. She then said she had plenty of money in the bank that her husband had left her in his will but that didn't matter. She said that if it weren't for Fred, she said she probably would have jumped into a river somewhere. He then asked her about her relationship with Robert and she said that Robert was a nice, gentle man but he always stank of cigarette smoke and just made it so she did not want to be around him any length of time. "Too bad," he said. "Yea," she said.

"What about Fred?" he asked.

She said, "Well, somehow, we got to be pen pals. We write letters to each other every day and I love Fred."

He said, "Why doesn't he come stay with you in that big house?"

She then said, "Oh, we plan to get married as soon as he gets out of prison in about 5 years. I am helping him with his expenses in prison. That's where we are going now, to Chino." He damn nearly drove off the road when he heard that.

After quite a drive, they drove into the prison parking lot and got out. She said, "You can sit under this tree; it's nice and cool." She walked off and he only then noticed that she was wearing a very short skirt and looked very nice. She then disappeared through gate after gate. After about 10 minutes, he could see her off in some distance among other couples holding hands and she and Fred went up to a bench in the corner of the yard and he sat down, and she sat on his lap. Fred was a huge fellow with tattoos showing on his arms and back and even on his neck. He could not be more than 30 years old, he figured. They began to smooch, heavily. Guards were walking around with sticks keeping an eye on things, but paid no attention to them. He couldn't watch more than a few minutes. After about an hour, Virginia comes out the door and heads to the car. She was in a big hurry. On the drive back, she laid her head back and didn't move, she was sleeping, or dreaming, it appeared. When they arrived back at her house, he pulled up in

front and turned off the engine. He handed the keys to her, and she opened the door before he could get around the car and came up to him and patted him gently on the cheek, and said, "Thank you sweetie" again and hurried into her house. He couldn't imagine what was going on until many years later.

He didn't mention any of this to Grandpa, and oddly enough, Grandpa never asked. He often thought that he should have spoken to Virginia about the likelihood that she was being scammed and who knows what when Fred got out of prison. He feared the worst for her, but she was certainly happy. He decided to steer away. He also wondered whether Grandpa knew Fred ... He steered away from that too sensing that things were not as they seemed.

After a few days, he walked down to campus to check it out. It was certainly a beautiful campus, with well-manicured bushes, and palm trees. Beautiful buildings of Spanish architecture. He noticed the place had a plethora of attractive young ladies of all sizes, ages, skin colors, and hair color, although blond was the most popular. He gathered all this information in one visit. He registered with his grandfather's ID, dependent papers, and his high-school transcripts, and signed up for four courses, English II, Math II, Chemistry I, and Engineering Drawing I... 18 hrs. He walked into the Student Center, bought a couple of textbooks, and looked over the bulletin boards to see what was going on. The semester began the next week. He thought to himself that this ought to be interesting.

The next evening was time for the AA meeting. Grandpa got cleaned-up and was outright spiffy looking, with aftershave lotion, coat, and tie. He looked downright handsome, that new Grandpa of mine. He followed him out the door and down the street to the bus stop. They waited a few minutes and hopped on the next bus. How quaint, he thought. They were on the bus for quite a while, then Grandpa got up, pulled the cord, and they got off. It was almost dark when they arrived at the hall. It looked like they were going into a pool hall when, going through the front door, it opened into a large hall that was jammed with people, maybe 75 or even 100 people. Most of them were older and the worst for wear. A few looked like normal people. Grandpa waved at people and they began to circle around Robert patting him on the shoulder, saying, "Hi Robert, how you doing?" People began to pull chairs into the middle of the room and lining them up. Then Robert started to walk to the front of the room, and he followed. They both sat down in the front row. A thin lady appeared at the podium and, using a mallet, banged the session into order, announcing "Hear ye, this is the 987th meeting of the AA in this hall." Everyone clapped loudly and whistled.

"We now have the honor of hearing from our oldest member who has been sober since 1939 to do the AA prayer. Robert Davis."

Grandpa stood and went to the podium. He adjusted the microphone, tapped it, grasped the sides of the podium and said,

*"Lord, grant me the serenity to accept the things I cannot change;
and the courage to change the things I can;
and the wisdom to know the difference..."*

*Living one day at a time,
Enjoying one moment at a time,
Accepting hardship as a pathway to peace,
Taking, as Jesus did,
This sinful world as it is,*

*Not as I would have it,
Trusting that You will make all things right,
If I surrender to Your will,
So that I may be reasonably happy in this life,
And supremely happy with You forever in the next.*

Amen"

The audience said, "Amen"

Grandpa then said,

"Now, I want you all to know that my grandson has joined us tonight. [The crowd erupted in applause]. He came from the family I lost during the Depression because I was and remain an alcoholic. Through him I ask for forgiveness for all the dreadful things I did in those days, and hope whenever he returns to Ohio that he will relay this message in person to my wife Lucille, my oldest daughter Carolyn, my youngest daughter Maxine (his mother), and my son Robert, jr. (his Uncle Bob). Michael, stand up and say hi to my friends"

He stood up and waved and the hall was filled with applause that lasted for some time. Grandpa came over and hugged me while the crowd was still clapping wildly, and they both sat down together.

The rest of the meeting was filled with a business meeting about bake sales, and then a list of testimonies announced by the thin lady one at a time. Each spoke for about 5 minutes, each about their trials and tribulations of avoiding drink, of finding solace in the support of others in the crowd when they needed help. It was a sorrowful site to witness what torture these people endured because they were addicted to alcohol and it became the devil in them. When they arrived home that night Grandpa thanked him for going with him to the AA meeting. It meant a lot to him.



The next day, classes began, and he began his college career at San Bernardino Valley College. He walked the few blocks to campus that first morning and was the happiest he could ever remember being. A Freshman in college. The weather was perfect that January day, the Sun was warming, but not hostile, the palm trees were of all types, great tall ones, short stubby ones, broad-leaf ones, and thin ones. The plants, the vines, flowers of all colors spread everywhere, and he could smell them all. He was looking forward to seeing the Pacific Ocean for the first time and the San Bernardino mountains in person that he could see as he walked silhouetted behind the

campus. California was not Ohio and he was about to confront the rest of the world.

After the first few classes, he decided his professors were interesting and the latest information seemed to be hot off the press, as opposed to the old textbooks he remembered from high school. Linus Pauling had published a textbook on new theories in chemistry, likely to replace the standard Niels Bohr concept of the atom he was aware of. Because he wasn't much of an artist or illustrator with a pencil, he had taken

engineering drawing to improve on that, sensing that he would need it in his future in one of the sciences as a profession as he had always envisaged.

The Freshman English class was also important because he never before understood the value or purpose of learning how to design a sentence or avoid splitting infinitives, busting verb tenses, and even blocking run-on sentences. The math class was difficult at the outset, but he pressed into it to hopefully find the usefulness of the logic.



His first course in geology was, right off, the most interesting of all that first semester. Professor Allen was an especially good lecturer. He spoke clearly and distinctly, and even his markings on the “greenboard” were clear. One afternoon, he went to the Student Center to get a coke. He was sitting at a table by himself and started to get-up to get something from the buffet, when he ran into someone doing the same thing from the table behind him. He recovered and saw what he instantly thought was an angel, a tall young lady about his height (and of Julianne H., his girlfriend back home who had just set her sights on bigger game the last

time he saw her at Ohio State before he departed). Instead of long flowing brown hair, hers was long blonde hair and brown eyes. They exchanged excuses and both turned the same way and again collided. They laughed, he indicated for her to proceed, and they both went to the buffet table and he remarked to himself that this person was his first friend in California. The Deacon would approve and be pleased, he thought for some reason.

They spent the rest of the day together just walking around campus. Her name was Sarah S. and she was raised in the area and was Jewish but was non-committed, she said. She was telling him about the buildings she learned about a few weeks before. He figured she was three or four years older than him, but never asked. She was “a new” Assistant Professor in English there at SBVC, having just fished her Ph.D. at University of Southern California in English Literature. They were both enjoying each other because each had told their life stories non-stop until the Sun was getting low on the horizon that evening, and it was getting a little chilly, he remembered. She asked if he wanted a ride home, and he did of course. Her car was an older, non-descript blue Plymouth.



He pointed in the direction of his house and directed her into the driveway and had her drive back to just in front of the side-front door to his garage house. He knew his grandfather was not there because it was the evening of his AA meeting and would have already left for the meeting. He asked if she would like to come in for just a moment, she said, “Sure, I’ve got to see this, from how you have described it earlier.”

All the beds were made and the place appeared to be neat and clean, and cramped. She said, “How nice but what’s that smell?” He said, “That’s Grandpa’s Pall Malls.” “Ugh,” she said, and he agreed. They went back outside and talked for a little longer. He noticed Virginia peeking out of the curtain in the big house. He had described the trip to Sarah earlier and let her know that Virginia was watching us. They then began discussing in lower tones the ethics of making opinions known or just staying out of Virginia’s business.

“If it were my grandmother, I would have a talk with Virginia,” she said, “But that’s a difficult call for you since you have little standing in her family.”

He told Sarah at the time that she sounded like an attorney, and she replied, "My father is an attorney here in town," which explained it all.

Over the next week or so, they would meet at noon to have lunch together. Then, one day, while chewing away on a cheeseburger, she said, "By the way, I've been thinking that we need to get you into a better environment than that with your grandfather, although I'm sure he is a nice man."

He said curiously, "What have you got in mind?"

She said, "I have a house on the other side of campus, and a bunch of my friends live there with me and come and go. I want you to come and stay with us," he noting the "us" in her statement. She then said, "Think about it," and then she got up, patted him on his shoulder and rushed off to her class.

He sat there thinking about what she had just said, and how she presented the invitation. The next day he accepted her invitation. He had explained to Grandpa that he was moving into a fraternity house to be with his college friends, and he understood, saying, "Come and see me once in a while." He did two or three times over that first semester.

Moving day came and he found himself walking up the steps to a rather nice house and carrying his two brand new suitcases. He followed her into a bedroom, and she said over there is your closet and this one is mine. He noticed there was one bed in the room, and a telephone on Sarah's desk, the only one in the house. She owned (or her family owned) the house and it was hers to use.

She introduced him to three ladies who looked more like female Native Americans than normal ladies, and a couple of lanky guys wearing earrings and necklaces made of seashells and beads, who were not all that impressive, but all were cordial. Sarah told them they have a Buckeye among them now so New Year's football should be interesting. He soon learned the this was a USC Fanclub.

Over the weeks that followed, the music was always playing, the aroma of "Mary Jane," and the sparse clothing worn by everyone except Sarah led him to the conclusion that this must a hippie joint of sorts, that he had heard about back in Ohio. He had never tried MJ and always passed it on. Beer and wine were a different matter. The beer was actually 6%, not the 3.2% they had in Ohio. He, at first, listened to their heavy philosophical discussions and some arguments, and then began to participate as he got the sense of rules and the subjects at hand.

After a few beers and a glass of wine one night, he asked Sarah, "Why me?"

She said, "What do you mean? Because I like you, especially your spirit, even though you are very provincial, and have a funny accent, you haven't been spoiled yet and it is refreshing to be around you. I'm hoping to send you off in the right direction."

He said, "So, I'm some sort of project for you?"

She said, "You might say that, but you have been enjoying it, haven't you?"

She was right in many ways. When they were both in the bedroom at their desks, when he was drafting a paper for English class, he would get stuck on a spelling, and he would ask her over his shoulder, she would say two letters over her shoulder, like "ei," etc. and that's all he needed, only rarely needing to spell out a word. It was uncanny how she knew the issues. But of course, she was an English major he reminded himself.

Dinnertime was especially interesting. All sorts of food, in a variety of colors, filled the table almost every night. Other people would appear one day and be gone the next, just as Sarah had said. As the weeks went by, Sarah and he spent almost all the time in their bedroom, not only in bed sleeping, but he in studying and she preparing lectures for her classes.

Of the many things they had in common was that they both wore socks to bed. One morning they were awakened by the flash of a camera. Seems someone noticed that there were four white stocking feet pointed straight up poking out of the bottom of the covers. A few days later, the photo surfaced and was passed around the table of the four big feet and two little sleepy heads. If it hadn't been for him, he would have thought that it was cute overload. He later wished that he had gotten a copy of that photo and wondered whether she still has it.

One weekend, Sarah asked if he would like to go to a "gathering," she called it, to hear Vernon Bakker speak. Of course, he did not know who Vernon Bakker was, but he said yes in any event. That weekend, they got ready for the event. She got dolled up. He must have been staring at her dressing when she said,

"What? You have seen me dressing many times by now."

He said, "You do clean up well," he blurted out. She was absolutely beautiful in a skirt and blouse.

She said, "Thanks, You look great too, handsome."

They drove by campus and on the main freeway. After a while, they drove up a maze of crisscrossing freeways overhead. He was sitting on the edge of his seat straining to look up through the car's windshield at the overhead freeway. With traffic flying by her in the outside lane, she said,

"I take it this was first time you have been on a California freeway?"

He said "Yes." "How fast are they going over there?"

"Probably about 75 or 80 mph," she said, not looking down.

He said, "Holy Cow!" And then she said, "I see it's true that your people still say, "Holy Cow, how cute," He agreed and sank back into his seat feeling pretty much like a country kid, which he was.

They drove for about 45 minutes deep into the desert outside the city and eventually were driving on a single-lane highway when ahead he saw cars parked along the side of the road. She drove on and turned into a facility of some sort and stopped at a gate. A guard approached with a clipboard. The fellow said, "Name?" She said, "Sarah Shaw." He looked down the list, and said, "OK, over there," and pointed. She said thanks and they pulled up and parked within a few yards of the side of the building. He noticed people were in line at the front entrance, but they were going in the side of the one-story sprawling building.

Inside there were large open areas and the smell of new wood; the main stage was on the far side only about three feet off the floor. People were filing in and she grabbed his hand and led him in some haste toward the front. She found a suitable spot and sat down on the floor, there were no chairs. He asked her about the place and she was vague saying, "It is a place for meetings." What kind of meetings?" he asked. She said, "It's not a Communist meeting, if that is what you are worried about." He said, "How about for fascists? All I can see are hippies," he said. "That's close," she said, then she shushed him because something was about to happen. He could feel it and see it in the crowd.

Light classical music began playing softly for about 10 minutes. Then the doors on the one side opened loudly and in came four rather large fellows in long-sleeved white shirts open at the neck moving in unison holding a platform with a rug hanging down between them. They were sitting next to the aisle as the four fellows passed by heading for the stage. He nudged her and whispered, "What the hell is that?" She shushed him again, "That's Vernon."

After they arrived at the stage, someone turned off the music and announced the speaker for the evening. A middle aged, balding fellow in coat and tie said as the crowd hushed,

"We have with us tonight Dr. Vernon Bakker. He has received his Ph. D. in Philosophy from Cal Poly, and from Oxford University in the United Kingdom" and then went on to list a series of accomplishments about which he had no reference but sounded impressive. Then, he noticed that the announcer placed the microphone on a stand next to a big, dark-brown head with black hair and a little body. He at first thought it was a Dachshund dog or alien of some type, it didn't appear to be human, until he spoke.

"Good evening ladies and gentlemen, I am Vernon." The crowd broke into applause.

Vernon had an incredibly warm, articulate deep voice, which was instantly engaging. He began to listen carefully. Vernon recounted his trials to get born, to stay alive, to get access to schooling and to graduate from grammar school, from high school and then college in California and in England. He recounted that he was fortunate in one aspect. He had all the time in the world to study so he set out to study philosophy and human psychology.

Vernon spoke for about an hour and toward the end he began to understand Vernon's central message. Americans are losing the ability to think critically and this fact alone will cause trouble in the future. He pleaded with those present that if they were in the teaching profession or planning to become a teacher, or if they were scientists or physicists, that they hear what he has concluded in his 100% commitment to studying these issues. He went on in great detail about what he has learned about the American society. He ended by saying, "Thank you. I love you all" and the crowd broke into applause. The four bearers appeared, and lifted the platform and carried him off.

Sarah grabbed his hand and they moved through the crowd counter-currently toward the back of the stage and through a door where a few people were standing with wine glasses talking. They went around shaking hands with nearly everyone, and introducing him, as "My friend, Michael Campbell." He made a point to make eye contact with each person he met. After a while, they came up to a distinguished gentlemen and lady in a beautiful dark green dress.

Sarah said, "Mom, Dad, this is my friend, Michael Campbell."

Her mother said, "Ah, Michael, we have been looking forward to meeting you."

Then her father extended his hand and said, "Good to meet you." He was certainly an attorney, he thought. He had sharp, serious brown eyes, but when he turned to give Sarah a cheek kiss, his face lit up with a big warm smile.

There were other professors there from SBVC and other universities in the area. He joined the various conversations and answered questions about Ohio, some about how the Buckeyes were doing that year in football, and how did he like California. On the way back to the city, they hadn't had much of a chance to talk for the last few hours. It was pitch dark and no Moon.

She broke the silence and said, “You certainly made many friends. Obviously, you’ve been in big social crowds before.”

He said, “Well, some. I have sung solos before a large crowd, studied music, and played cornet for about nine years in a large marching band and school symphonic orchestra, and was the bugler for a summer camp. Played basketball and baseball winning a number of championships, is that enough?”

“Yes, that’s obvious, you ought to go into politics,” she said.

He quickly said, “Not in your life! But my mother should have. You would like her,” he said. They laughed.

They spent the rest of the semester in a functional relationship, having dinner with her parents a few times and studying together in their bedroom. There was never a discussion about where the relationship was heading because it was perfectly clear to each that he had to finish college, 3½ years away. Their relationship, however, was an intensely loving one, surrounded by the warm sounds of music by *Johnny Mathis*, *Everly Brothers*, etc. At the end of the semester, she proposed that they have dinner and go to a concert in LA to see the *Limelites*. She could get tickets. He told her that he couldn’t afford the dinner she had in mind, and she reached into her purse and pulled out an *American Express* credit card. He looked at it closely, never having seen one before. He said, “Great!”

They had a great dinner in a very fancy restaurant and the concert was incredible. He had never heard of the *Limelites*, but they had a fantastic sound and great lyrics. Years later he bought his favorite album but gave it, and hundreds of others, to an associate who loved the sound from vinyl records. Later on, he was trying to find a digital version of the album and found the e-mail address to Lou Gottlieb by searching the Internet. Lou played the bass in the trio. He asked in the e-mail if he could sell him a CD of his album, *The Slightly Fabulous Limelites*. He wrote back a pleasant response saying that he was sending him one of his last copies of a CD of the album at no cost and appreciated his enjoyment of his group’s earlier performances.¹¹ Lou is shown on the right in the photo of the album’s cover. At the time they corresponded, Lou was living below a night club he had purchased years ago in NYC. He was an interesting, articulate, crazy-fun sort of fellow with a Ph.D. in early historical music.¹² Lou died 1996, not long after he received the CD. Soon after, all of the old songs and classical music were available on the Internet for free!

Since the early 1960s, the importance of music to him had decreased substantially. Probably because he was busy with his family and career; no time to waste thinking of his younger days. Somewhere along the line, he recalled that, beginning with his first wife a few years later, they were in the business of raising a family, a serious matter after the excitement wore off, not like with his ladies before when they were in the “love” business, music and full of the 1960s. He figured that meant that he had grown up along the way, with minor lapses.

But on the drive home that evening, Sarah dropped a bomb on him. She had decided to apply to go to the Sorbonne University in Paris and had been accepted a few days earlier. They didn’t speak the rest of the way home. He looked over at her as she was concentrating on driving and noticed tears rolling down the side of her face. He couldn’t say a word. What was there to say, he thought, and he looked out the side window of the car for the rest of the ride home.

¹¹ https://www.youtube.com/watch?v=g3mIKIbEZgY&list=OLAK5uy_IBYK_GB9HCoxQh6Qsdd6rUhJVcgWiL_Zo

¹² https://en.wikipedia.org/wiki/Louis_Gottlieb

That night when they went to bed there was still silence. They always took the same positions in the bed. But she had turned the light out in their relationship.

He had finals the next week and he redirected his irritation and disappointment toward his studies, and they came out pretty well. Just after finals were over, he returned to his room to find all of Sarah's belongings were gone, with an envelope on the bed. He sat on the bed and read the letter, as he remembered it,

"Michael,

I love you very much, but this is something that I must do. You are in no position yet to have a family, and I feel that I have much more to learn.

I know this hurts you deeply, but you are a strong person and will have no trouble developing new relationships. By the time you find the one special relationship, I suspect there will be many such relationships.

I am sorry, but I know you understand and thank you for not trying to talk me out of this decision.

I will always think of you. Maybe sometime in the future.

Sarah"

And that was that !

Sarah had said earlier that everyone could stay at the house through next semester and through the end of the year and that the electricity and phone would be paid by her Dad's company, after which her Dad would be arranging for a rental company to rent out the house.

He told everyone at the house that he would return just before classes began in the fall. He also reminded everyone that Sarah made the house available to them and that they should not abuse it and keep it clean. Bonnie T. was one of the upstairs young ladies who said that she would see to that.

After a couple days, he was developing new interests from upstairs. Then, his mother called to say Grandma had cancer and wasn't going to last, and it would be nice if he could come home as soon as possible. He didn't have the money for the train, so he looked at the Bulletin Board at the Student Center to see if anyone had advertised a gas-sharing ride going east. Sure enough, there was someone going to Pennsylvania, via U.S. Route 40 to Columbus, no less. He called the number and the fellow said that he was leaving in a couple of days, earlier if he liked. He did, and they departed the next day. That was just as well because the ladies from upstairs were getting that look when they looked at him, especially Bonnie.

The car was a dark-green Chevy Coupe a few years old. They drove through the country he had earlier seen from the Dome Car on the Super Chief on the way out to California. When they got to the Texas Panhandle, they had to stop to empty bladders, and stood there alongside the single lane highway looking up into a truly dark sky that crisp night. No Moon. What an incredible sight, he remembered. All the stars, planets and the center of the Milky Way Galaxy were observable and breathtakingly beautiful. The sky was bigger in Texas, he had heard someone say. He could now confirm it.

They drove through the night and the next day, stopping only to eat and a few hours for the driver to rest. He was dropped off in Columbus and had prearranged to meet his parents at the central bus station. Dad was sitting in the bus station, like a passenger, with one of his funny hats. They hugged and then loaded his still new suitcases into the family's new Plymouth Barracuda, the one with the wrap-around rear glass. His Dad said that they better drive directly to Chillicothe, because Grandma was going down fast, if not already gone. Maxine and her sister, Carolyn, had been at the hospital with her the past few days. He filled Dad in on the part of California he thought Dad might find of interest, such as the weather, the Palm trees

and Vernon. He asked his Dad if he remembered what year it was when Grandma asked him to drive her in her car to Tennessee and back during one weekend? He couldn't remember why she wanted to do that. They didn't meet anyone. Dad said that he thought she just wanted to spend some time with her grandson.

When they arrived at the Chillicothe hospital, Maxine was sitting outside the hospital room in the hallway. Carolyn was with her mother, Lucille. They hugged and his mother emoted into him and he noticed that she was rather red-eyed, understandably. She said that they told Lucille that he was coming and on the way from California. Carolyn came out and he gave her a hug, and she said that he'd better go in now. He walked into his Grandma's room, she saw him and got a big smile extending her arms out toward him. They hugged and he sat down on the edge of the bed beside her. She was surprisingly lucid and asked how college was and he told her a little about California, the Palm trees, the flowers, and the freeways. He made a point to tell her about his time with Grandpa, and almost verbatim of his apology to her, Carolyn, Maxine, and Uncle Bob. She smiled, "About time that old geezer fessed-up," she said, then said, "When you see him after you get back to school, tell him I forgive him." He told her he would deliver her message. Then, politely, she asked, "Could you ask Carolyn and your mother to come in. I need to speak with them now." He said, "Just a minute," and hurried into the hallway to relay that Grandma wanted to see them. They rushed in, but he heard no talking; a minute or so later they both came out sobbing into their tissues. Grandma was gone. He put his arms around both of them and just let them sob away, so did he a little. He told them later that she seemed OK to him. She was cheerful and he told them about Grandpa's apology, and how she told him to tell Grandpa that she forgave him. Carolyn piped up and said, "You can tell that SOB that I do not forgive him" and walked down the hallway sobbing.

And that was that ...



That summer he got his job back at Anchor Hocking; seems that previous reports about him made him rehirable. He was assigned to Plant #2 on the far eastern side of town. He spent the summer stuffing clear baking bowls into shipping boxes. The trusty old 1947 Ford Coupe carried him to and back from the plant, but was getting harder and harder to start. He was also asked to help out in the Recharging Department, where the sand, limestone and chemicals were mixed and fed into the blast furnaces to make their glass products. Those few weeks were especially interesting. He was allowed to watch the weighing and batch preparation by the guys in white coats from the Anchor laboratory, where they developed all the distinct types of glassware they produced. One of the bottles the white coats carried that was to be poured into the batch contained a red fluid. He asked what that was, and the fellow said, "That is the company secret. I don't even know. It comes from the vault lab where only two older guys work, who have been here forever. No one else is allowed in. There is a guard at the door." This was probably what *Coca Cola* does in their lab too, he thought.

Over the summer, he got to know the lady in the park across the street from his house on Walnut Street. Samantha (Sam) was a few years older, and they had great fun. She supervised the activities of the younger children who came to play. He played golf at the clubs around Lancaster a few times, visited a couple of bars with Jim B., who was an old classmate and a fellow stuffer at Anchor Hocking Plant #2. None of the guys were around and he missed that, but he was beginning to look forward to going back to California.

One day, Dad, Steve and he were sitting on the porch watching a couple of young ladies play tennis across the street in the park, and Dad asked what a geologist did. He explained in considerable detail that first, he didn't want to be an oil and gas geologist, because there were too many of those, but second, he did want to be involved in the exploration for the needed industrial minerals in the world working for mining companies.

Dad took it all in and then said, "You know, being a barber is the best job in the world. They are highly respected and know all the secrets in small towns like Lancaster. A barber is always in demand. I was hoping that one of you might have been a barber."

With that, Steve and he looked at each other and broke out into laughter, but realized quickly that Dad was serious, so they cut the laughter short for fear of insulting their Dad.

A few days later, the family saw him off again at the Columbus train station. He had a few thousand dollars in traveler's checks in his pocket and was ready to go. Maxine and Clarence were in full parental-activity mode with Steve and his sister, Carolyn Sue. After hugs all around, he turned and off he went disappearing into the train station where he found his train that led to Chicago and to *The Super Chief*.

There was not much worth remembering during his ride back to California, except that it seemed to take longer to get there than his first trip, but he had no signs of his typical motion sickness as before. He spent all of his time in the Dome Car and the Dining Car, of course, watching the green grasses and trees turning into brown soil and flat plains without a tree in sight except along flowing rivers and creeks as they traveled westward. After a while it was mostly dry creeks, and then the mountains. He was wondering what Sarah was doing. He had heard nothing from her, nor could he because she didn't have his address.

When he arrived in San Bernadino, he retrieved his suitcases and found the taxi-stand. He directed the driver to Sarah's house. As he went into the house, no one was around, so he went into their bedroom. The bed was made, Sarah's desk was empty and cleared, and the place had not changed, except Sarah was not there. He unpacked his suitcases and put everything in their previously assigned places and took a shower. He came out of the bathroom with a towel wrapped around his waist and he decided to take a little nap and sprawled out on the bed, he was tired.

The next thing he knew, Bonnie woke him out of sound sleep by jumping on top of him, blubbering how great it was to have him back and how she was looking forward "so much." All this was a bit much for him for the first few seconds and then he thought to himself, 'what the hell, he might as well go with it.' When they awoke it was dark outside and he heard music, the *Everly Brothers*, he recalled. They got up, put their clothes on, and opened the door. The room was filled with people. When they saw the door open everyone went crazy loud. One of them said they were trying to be quiet so they wouldn't wake you guys up, after your long train ride. He recognized many of the ladies and guys, but there were some unknown faces as well. It dawned on him the place had become a full hippie joint, and for weeks the place had non-stop music from the record player, *The Fifth Dimension* and *Aquarius* at least 10 times a day. One thing he remembered was that the door to his room was very tight and the music didn't bother him at night. But he still likes to listen to *Aquarius* and all of its messages of hopes for the future.

He had too much to drink that night and went to bed early. A few hours or so later, he felt a warm body next to him and figured it was Bonnie. The next morning, he awoke early just as the Sun was coming up and was about to roll out of bed when a hand appeared over his back onto his shoulder. He turned to look

at Bonnie, but to his surprise, it wasn't Bonnie. He said, "Who the hell are you?," with a big smile. She said, "I'm Cindy and I'm new to the house" and she pulled him back into bed.

Cindy A. and Bonnie became my new friends.

The next day was the beginning of classes. He had decided to take more geology courses, but still had to slug away at English and math classes. He also signed up for Handball, an odd game he wanted to learn more about, and got pretty good at it that semester. He saw the baseball diamond on the other side of handball courts and wandered over to the stands one day to watch the practice. He was sitting alongside the dugout. The coach was leaning on the top of the dugout watching the guys going through drills, etc. He noticed right off that all of the players were dark brown and on the short side. The coach noticed him, and he walked over and sat down next to him. "You coming out for baseball this semester?" He instantly reminded him of Coach England.

He said, "Not really, I was just curious."

The coach said, "you look like a shortstop."

He smiled and said, "Good guess."

"Where did you play ball in high school?" he asked.

He told him, "In Central Ohio. And had a good team, winning the state semi-finals one year and the central Ohio League Championship my senior year, last year, and a great coach."

The coach said, "Figured as much!" and paused. "You know, I need a shortstop badly this year, you interested?"

He replied, "Don't think so, I have a dragging third finger that makes it difficult..."

The coach interrupted and said, "to throw a straight ball?" he said, "Yes." "Let me see your hand." He felt my fingers and the third one and bent it back and forth, "I see what you mean, the tendon has been cut."

"How did that happen?" he asked.

"That's a long story." They chatted a while and then parted with a handshake, the coach saying, "Let me know if you change your mind." As he was walking to his next class, he thought about it and almost changed his mind, but didn't. He didn't have the time he knew he needed to keep up on his courses.

His geology class this year involved going on a field trip up into the San Bernadino Mountains he could see from campus and was looking forward to that on the coming weekend. That afternoon he walked into the Student Center, got a burger, and fries, and a Coke. A fellow came up and sat down next him. He turned to him and said, "I'm Larry, we met a few months ago after the Vernon Bakker lecture." He didn't remember him. "You were with Sarah Shaw." He pretended to remember and then Larry asked how Sarah was and he told him she was at the Sorbonne in Paris. "Wow," he said. He then said that he was chairman of the rush committee this year for the Pi Alpha Omega fraternity and that he would like to invite him to a get together on Friday night, coat and tie. He said, "Sure, why not?" "Have you been invited by the Betas yet? He said, "No." "They are the big guys around campus, the jocks, you know the kind, the football and basketball guys. We are the cool dudes." They laughed together and went off in different directions. He wondered at the time how he knew Sarah.

On that Friday night, he went off to a house with Greek letters ΠΑΩ hanging above the wide porch. Guys and girls were standing around looking formal with drinks in their hands. He walked up the steps and into the house. Larry and friends made a line of greeters. He shook hands with everyone in the house that night including the ladies, so much so that his hand ached a little. Larry took him around for a tour of the place. It was a meeting house and only had one floor. The school had banned live-in fraternity houses a few years earlier because of issues around hazing he heard about later.

Many of the guys reminded him a lot of his guys at home. Quick-witted, pleasant dudes, not like the Ken-Dolls of the Betas he met a few weeks later. By the end of the evening everyone was happy, and some were smashed out of their minds. He noticed Larry taking one of them by the arm and leading him through a doorway of what looked like a basement and returning without the drunk. Larry saw him watching and came up to him and said, "Have you met everyone?" He said, Yes, and probably twice." They chuckled, and then he said, "This is certainly not DeMolay." Larry broke out into a big laugh holding his side, saying "It certainly is not." Larry had been invited to attend DeMolay in high school too.

He asked him about the drunk and basement business. Larry said,

"O, that was Carl T., he gets crazy at these things, so he gets a time out in the basement for the duration and gets handcuffed to a pipe so he can't do any damage to himself or others. Seems to work. I'll release him after the party and take him home."

Larry told him about the group and its long-time affiliation with Sigma Alpha Epsilon (ΣΑΕs) fraternity at the big colleges in California and around the country. Many of the fellows from Pi Alpha Omega go directly into ΣΑΕ as they transfer into the four-year college to finish their undergraduate education. He talked for a while to others, and their dates, who were mostly from the sororities around the campus. They were allowed to have live-in residents. Some of the ladies were "townees" and lived at home while attending classes.

He left the meeting after only a beer and a half and thanked Larry for the invitation telling him he had a geological field trip early the next morning. Larry waved good-bye and said he would see him at the Student Center next week. He said, "OK." and walked home, glad to breathe some fresh air after all the smoke in the house. Everyone could hear the music throbbing from his house four blocks away. People were standing out in front of the house with beer cans and plastic containers in their hands drinking, smoking, and laughing. He threaded his way through the mass of people and walked into the house to encounter the smell of Mary Jane but ignored it, went into his room, and shut the door. He had taken off his shirt and tie and was about to take off his pants when Bonnie blasted through his door. She rarely opened it calmly, always with an explosion to announce her presence. She jumped up on his back yelling giddy-up, and she wasn't even drunk or high. That's just the way she was. He enjoyed her that night and many nights all that semester.

The next morning, he met up in the parking lot of the Student Center with the geology class, Dr. Allen, and a medium-size white bus with the school name printed on the side. They all signed liability waivers at a little table set up near the bus. Dr. Allen made an announcement making sure that they all had the appropriate attire, long-sleeved shirts, hats. No skirts! The guys all snickered. The ladies punched the nearest male who was snickering.

They drove up into the mountains along a fairly narrow road. Looking out the bus window, it looked like the bus was damn close to the edge, but they made it to the first stop. Dr. Allen and the class climbed out

of the bus and to a scenic overlook. The ocean was visible far off near the horizon, Los Angeles downtown buildings were visible, and San Bernadino sprawled in front of them in the plains below. There was an odd dark-orange cloud that seemed to be hanging over the entire area in patches. He asked, "What's with the orange cloud?" He heard a quiet chuckle, when one of them said, "That's the LA smog." This was not only his first visit to a bonafide mountain, but his first introduction to bonafide air pollution.

For the rest of the day, the class was taken to various stops, where they would get off the bus and follow Dr. Allen up or down a path leading to either a large or small exposure of rocks. Some were igneous and some were metamorphic rocks, others were sedimentary rocks and down in the creeks were cobbles, pebbles and sands containing all sorts of minerals. A few of the sedimentary rocks in the outcrops had fossils of clams and snails that he soon learned were called pelecypods and gastropods.

They all survived the first field trip, but they were all bushed by the time they arrived home. Bonnie gave him a rubdown for his tired muscles. As the geology class continued that semester, he learned more about the field of geology and all of its associated fields, geophysics, geomorphology, stratigraphy, geochemistry, structural geology, hydrogeology, mineralogy, associated microscopy, etc. By the end of that fall semester, after hearing from Dr. Allan A. about what geologists do and about how they are responsible for exploring for and developing all of the natural resources needed to support human existence, he concluded that this was the field for him because it, he found, combined all the sciences from astrogeology to xenomorpholgy (alien life forms). He never wavered from that moment when he decided to become a professional geologist.

Larry was right, a few days later at the Student Center, one the "jocks" introduced himself and invited him to what he called "a smoker" that weekend at the Beta house. He accepted more out of curiosity than interest because he had already decided to join Larry's fraternity. He showed up at the designated house and went through the line of smiling greeters. After going through the line, he saw nothing but suits and ties of very large rather imposing fellows. He then saw the coach over in the corner talking to other guys. He walked over to him and said that it was good to see him again. The coach then explained that he was an assistant coach on the football team as well coaching the baseball team. "What do you think of our guys," he said. "Big, aren't they? We prepare a lot of our players for USC football," he said proudly. "You're like a farm club in baseball," he replied. The coach agreed. One odd thing he noticed about the "smoker" was that there were no ladies, but a lot of Ken Dolls.

He ran into Larry a few days later and Larry said that he and his group would like him to join their fraternity. He acted surprised and shook Larry's hand, saying, "I accept your invitation" Larry said, "We go through some ceremonies, but it should be fun and something to remember," He then asked, "Is it like DeMolay?" Larry laughed and said, "A little, but serious, not as stiff as DeMolay." He thought to himself that sounds interesting.

Time began to pick up speed, he thought, as the studying, mid-terms and his activities went flying by, he remembered. He called Maxine and Clarence a couple of times and went to see Grandpa once that semester. He showed up one afternoon at Grandpa's garage and met him at the door. They went inside. He sat on his old cot and Grandpa sat in his old comfy chair and lit up a cigarette. He asked how he was doing and he said fine and was very busy. He then told Grandpa that Grandma had died and about what she had told him to tell him. He sat up in his chair and listened carefully.

"She said that it was about time he apologized and that she accepted his apology." he said. Grandpa looked off into the distance of his room a while before saying anything, and then said, "Thank you, son."

Then he looked up and asked, "What about the others?" He said smiling, "Well, Carolyn said, 'Tell that SOB that she did not accept his apology.' "What about your mother?" he said, "She didn't say," he said.

He changed the subject and asked about Virginia. He said, "I haven't seen her since you left here. I looked in the window and even in the garbage can, but I don't think she is living there or is on a trip or something," he said. They talked for a while, and he left saying, "I'll see you the next time." That time never came. It was the last time he saw his Grandfather. He has wondered since what happened to both him and Virginia, and her boyfriend. She was oblivious to her potential danger.

As part of pledging, Actives would figure out ways to humiliate the pledges. Jason, one of the more snarky Actives said one day at the house that they had come up with something for him. He instantly thought to himself, "this ought to be good." As best as he could remember, Jason said something like, "We decided to do something about your irritating, mid-west accent, and we have made up a little ditty that you must repeat whenever an Active asks you to do so, as follows,

"I am from central Ohio and most people of the Protestant faith there say feesh and say buush, go feeshing, and hide behind booshes. But my brothers have taught me the right way to speak US English by saying fish, bush, and I promise to never again turn a short vowel into a long vowel while speaking the American English language without a damn good reason."

This was rather embarrassing at first, but he got into the spirit of the action. They were right, he did have an accent. He hadn't realized that until he went to California. Later, after he returned to central Ohio, the accent was even irritating to him when Maxine and Clarence and the rest of his family and many friends had the same irritating accent, but he never said anything. The next weeks went by quickly. He was having trouble with Linus Pauling's chemistry, but geology was incredible. There was so much to learn and so much to outright memorize, like rock names, mineral names, mineral identifications and characteristic hardness, crystal forms, and a host of textural names and qualities. He thought he might as well become a medical student with the memorizations that were required. Astronomy turned out to be mostly math and orbital calculations, mass calculations, and wavelength measurements, but it was doable, he thought.

One day at the Student Center, where his guys always occupied the corner table area, he approached with a tray of a burger and fries, plus a vanilla milkshake. Larry came over to introduce someone to him. As she came around Larry, he saw her, Carol C., an incredibly beautiful young woman. Time slowed down to micro-seconds while he looked at her face, another angel had just appeared, and he instantly wondered whether Sarah had sent her in his direction, but then blinking, he introduced himself. They chatted politely and Larry took off for a class. He skipped Handball, which was the last class of the day. She had no remaining classes and he walked her to her car. It was a Model 150 Jaguar, the one with huge front fenders.

The next day he found her sitting in their corner again. She waved and he sat down beside her. They talked some more. He determined that she was Jewish, reform version. A few minutes later they decided to go get a beer and walked to her car, and she said, "You want to drive?" He almost said "Holy Cow" but didn't. He was also watching his vowel management. While he was concentrating on shifting the Jaguar through four gears, she just dropped the question, "Are you Jewish?" Without thinking, he said, "Yes, I have a strange family but have a Scottish last name. It's complicated." She said, "You must tell me about it one



day.” She was a lot like a younger Sarah, bright and even smelled like an Angel should smell. They spent time together studying at his house. She used Sarah’s desk. She was a good speller too. The first night Carol stayed over, about 1:00 AM Bonnie comes busting through the door not realizing he had company and piled on the bed that all of sudden contained three people. Carol wrapped the covers around herself and so did he. Bonnie looked at both, slid out of bed, and said “Well, excuse me,” and ran through the doorway slamming the door behind. He had to explain to Carol. Bonnie didn’t bother them again. Carol understood.

There was talk at the fraternity house that a bunch of the Actives were planning an outing to go to a concert and dinner. He asked Carol and she said she would be happy to go. The plan was that they have drinks at the Student Center to form up and then go with 6 to 8 cars to the concert in downtown LA. The evening came and Larry had loaned him his car, the blue Ford Wagon. He drove to Carol’s house based on the address she had given him a few days earlier. He was looking for the house number. It was a very nice neighborhood. He found it, but couldn’t believe the size of it. It had huge brownstone columns in front where the driveway ends. The house was lit up like a Christmas tree, when all of a sudden, he remembered the big lie he had told Carol when they first met weeks ago... that he was a reform Jew with a complicated family. He thought that since he was quite dark complected being in all the Sun there, he might pull it off as partly Middle Eastern at least. He decided to press on and turned into her driveway and pulled up in front.

He went up to the biggest door he had ever seen and tapped lightly on it. It opened almost immediately, and he thought it was Carol. It was a maid. She stared at him, and he said that he was there to see Carol. She invited him in and pointed in the direction of the living room where big leather sofas and overstuffed chairs sat in from a huge fireplace that went halfway up the wall with ceilings at least 14 feet maybe 16 feet high. He then heard a deep voice, “So tell me about your complicated family name, sounds interesting.” It was Carol’s father. He rose to shake hands firmly and he thought there was a Masonic clasp but then dismissed it. He said, “Have a seat.” He said, “Thank you,” and he sank into the sofa.

He was a rather short man but distinguished looking. Maybe about 60 in age. He had a tie on with a white shirt covered by a vest. He was smoking a cigar and spoke with a slight foreign accent. He began to spin Carol’s father a whopper about his father leaving Poland and immigrating to Scotland in the 1930s,

“He decided then he wanted to go to America, but heard the Americans were not too pleased about immigrating too many Jews, so he had papers forged for a birth certificate made up by a friend and changed his name to a common name and immigrated to America and settled in central Ohio just before WW2 broke out and picked up the local accent and that’s about it,” he said.

Carol had been standing quietly listening to his yarn behind the sofa and then came around saying, “That was complicated.” And sat down close to him. He noticed that her father noticed how close she had sat next to him and then looked up at him. He thought he had a smile. They chatted about the approaching Hanukkah and other Jewish topics. He offered nothing. She then said, “Daddy, we have to go or we’re going to be late.” She kissed him on his slightly balding forehead, and they departed.

They drove to campus to meet up with the brothers and their dates; they arrived at the Student Center and all the brothers and lady friends were sitting around talking. Carol and he said down, but he then got drinks. On the way back, as he was about to sit down when Jason stands and announces,

“Mr. Campbell, Pledge, As a righteous and virtuous Protestant from central Ohio, what do you have to say for yourself?”

That was his cue to say his ditty, but all of sudden, he looked down at Carol and she had lightning in her eyes aimed right at his brain. She threw her drink on the table and it sloshed into the folks sitting on the other side, got up and turned to him and slapped him with some force and left. People were stunned. He sat down. Larry came over and said, “What happened?” He got up and said to the entire group loud enough for everyone to hear,

“You are all probably wondering what just happened. I lied to Carol about being Jewish; she just found out that you all knew I was not Jewish.”

For days, he tried to apologize and wrote a letter to her and to her father. But she would never speak to him again, and he didn’t blame her.

Toward the end of the semester, the Initiation rites of ΠΑΩ were afoot and were reportedly short in the beginning and straight forward, but the last part of it created some rumors of concern. There were five fellows who were selected as initiates for that fall semester. They all assembled at the house, Actives, and pledges alike. As he stood in line and repeated declarations of “fellowship and protection to the whole,” he noticed that there wasn’t a Ken Doll in the group. Many of his new friends looked like book worms and gear heads, Jewish and Spanish and then the rest of them somewhere in between.

When the formal ceremony was completed, Larry appeared and announced that “the trials of conviction lay ahead tonight.” He had no idea what that meant. Then a group of the Actives placed black hoods over the heads of the pledges and tied a rope around their necks. They then were led out of the house and helped into a van out front, and they drove for about 45 minutes. He could tell that they were moving in traffic and then turning sharply on a road that was quiet. The van stopped. He heard a commotion going on next to him and then heard the door close and the van continued on. About 20 minutes later, it stopped again, and again the commotion. The van drove on again, and then stopped after a while. Someone grabbed his arm and led him out of the van. He took a few steps and he heard the van drive off.

He noticed that he wasn’t standing on dirt but some kind of roadway. He figured they just dropped them off in the middle of the desert somewhere and were expected to find their way back to the house by any means available. Good thing he had some money in his wallet, he thought. He would call a taxi.

He decided he had to get the hood off and after about ten minutes he was able to untie the knot. He took it off and saw nothing, pitch black. He couldn’t see his hand in front of his face, and that was disturbing. He took his cigarette lighter out of his pocket and lit it. He looked down. It was cement. He walked about ten steps and came to a wall of cement. He held his lighter up over his head and realized where he was. He was in a flood-control or storm drain. But there were no unpleasant odors, and it was entirely dry. He remembered one the guys mentioning something about the subterranean storm drain system in Southern California with various connections that ran for almost 300 miles. They all emptied into creeks, rivers, or the ocean.

He decided to figure out if there was a draft in this tunnel and held up his lighter and lit it again. There was definitely a draft, so he decided to walk in the direction the draft was blowing. He walked along the drain in the dark while holding his right arm out to touch the side with his fingers once in a while for orientation and listened very carefully. Absolutely no sound or still no light. He knew the drain had to

come out somewhere, so he walked and walked some more, and was getting tired so he sat down and took a break. After a while he decided to get up and walk some more. After a while, he could feel a stronger draft of air on the back of his ears, and he could see a small rectangle of dim light off in the distance and so he began to trot.

He arrived at the opening, and all of a sudden, there were big flashlights and guys yelling, and that scared the hell out of him. He thought for a second that he was being attacked by a gang. But he then realized they were all hugging him and patting him on the back in congratulations. After the excitement, he heard some more excitement about 50 yards down the way. It was another entrance like the one from which he had just emerged, and another initiate had apparently just appeared. After about an hour, he overheard someone say, "You better go find Jack N." Someone appeared with motorbike and took off into the last tunnel where they were all standing and talking. In about 30 minutes, two guys arrived on the bike. The fifth pledge had gone the other direction; he overlooked the draft clue on what direction to go, but that didn't matter.



Larry is in the center. Jason in back right.

About 30 or so of the brothers walked up a dirt path and out the spillway and to the van and a number of other cars. They all drove back to the house and went in. Six or seven ladies had arrived earlier and were waiting for the guys to return. It was already about 1:00 AM. When everyone have arrived, Larry beats the bottom of a kitchen pot to assemble order. The initiates were lined up again, and one by one Larry approached and handed each pledge the $\Pi\alpha\Omega$ fraternity pin, and a handshake, saying, "Congratulations, you are now an Active member of Pi Alpha Omega." This was followed by other Actives shaking hands, one at a time.

No one got out of line, until the very last Active shook their hands, oddly the last two were older guys, who he heard later, have attended every initiation for many years. They looked familiar, but he never knew why.

Then the party started with music and the other dates that had arrived were dancing with anyone who would fast dance. He had three beers that night and got sick walking home by himself. By about 4:00 AM he arrived at the house and walked into his room. He turned on the light and heard someone stir in his bed. He undressed, brushed his teeth, and sat down on the edge of the bed and rolled the bundle over to see who it was. It was Bonnie, of course. She opened her eyes and smiled, and he turned out the lights.

The rest of that semester consisted of nothing but studying, especially his two geology courses, mineralogy, and stratigraphy of North America. He finished his finals that day and went to the Student Center to see if Larry or any of the guys were around. He saw Jason sitting alone and diverted to get a cup of coffee. When he turned to go sit down, he noticed that Jason had been watching him and continued as he approached. He hadn't seen Jason since the event a few weeks ago. He nodded and sat down. Jason got up from his chair and came over on sat on the couch next to him.

Anecdotes of a Lifetime

He said, "I was hoping to see you before I went home to San Diego for the Christmas break. I wanted to tell you how sorry I am for screwing up your relationship with your girlfriend. I don't know why I made a pronouncement of you at that time, it just came out. I feel so sorry for you and for all of you," he meant Carol and her family.



He interrupted Jason saying, "Look, I was the AH in this thing. I had no business lying to her and her father. I simply got what I deserved. So, just forget about it. It was bound to happen sometime, unless I had figured out a way to explain it away, but how was I going to do that?"

Jason got up, and so did he; Jason reached his hand out to shake hands and then gave him a big hug, saying, "Sorry, Buddy," and turned and walked off. He sat back down and then saw Larry coming down the walkway to the Student Center. He got up and went to the large window. He waved when he saw Jason in the parking lot, and Jason waved back

as he got into his Model 150 Jaguar Coupe. Carol's Jaguar was a few years newer than Jason's and was a slightly different color.

He sat down with Larry, who asked right off if he had heard from Carol, and he told Larry that that ship had sailed, or something like that, he couldn't remember. He did remember the discussion that followed. He mentioned to Larry that he would be moving out of his house soon because Sarah's father had called a few days before saying that he wanted to begin painting and fixing up the house to get it ready to rent next semester.

He told Larry that he had asked Mr. Shaw if he had heard from Sarah and he had said that she was having a wonderful time in Paris. Mr. Shaw then dropped a bomb,

"By the way, I heard what happened a few weeks ago?" He went on to say that he had been to a gathering of his clients for a Christmas party at their house.

He told Larry that he asked, "What happened?"

Mr. Shaw said, "We have known Carol since she was little, Carol and Sarah have been friends for years."

He continued telling Larry that he had instantly begun feeling ill, thinking that this was another one of those coincidences, he commented to Larry with some irritation.

He said, "Mr. Shaw went on by saying 'Yes, the Cull Water company has been my client for a long time. You knew that her father was the principal owner, didn't you?'

He said, "I had no idea. He was a very interesting man."

Mr. Shaw then said, "I'm glad you didn't pull that on Sarah."

He then replied, "It's just the same now. Did you tell Sarah about it?"

Mr. Shaw said, "Of course."

And that was really that.

Larry sat there shaking his head after hearing him tell him what Mr. Shaw had said. Larry said, "You got both barrels, didn't you?"

He said, "And, I deserved it." The subject was never discussed again, but never left his memory.

Larry said, "Where are you going to stay? Are you going home for Christmas break?"

He said that he would probably move back in with Grandpa and no, he couldn't afford to go home just for Christmas break. Larry had something on his mind and said, "I have an idea. Let me get back to you tomorrow."

He took Bonnie for the first time to the last house party of the semester with the guys and their dates before everyone took off for Christmas Break. He had told Bonnie earlier what had happened with Carol. She wasn't Jewish and had been raised in a small town in Iowa going to the Methodist Church. After a few beers and dancing with Bonnie and a few of the guy's dates, and Bonnie dancing with the guys, it was time to go home. Larry intercepted us at the door when they were leaving. The three of them then sat on the porch front steps.

He said, "Here is the idea I mentioned a few days ago. Instead of having to live in that garage with your Grandfather, how about staying with us, at my house? We have an extra guest room. I asked my folks last night and they said that would be fine and that it would be fun to have a full house again."

He said, "Are you sure?" "That would be great." And it was settled.

He and Bonnie left and went back to the house. When they arrived and went into his bedroom, Bonnie, who had not said a word since leaving the fraternity house, said, "What the hell am I supposed to do now? I have no place to go."

He always thought that Bonnie was such a free spirit and had that 'come what may' approach in her young life, but apparently there were some grown-up thoughts emerging in Bonnie, especially in the last few months as he and she had gotten even closer while she helped him work through the guilt of his lying to Carol and then causing the final insult to Sarah by long distance.

Bonnie said, "Quite frankly, I thought we were going to stay together," while tears ran down her cheeks. He went over to the bed and sat down and put his arms around her, and then began to explain the condition he was in. He said,

"Look, I don't have much money left. We couldn't stay in Grandpa's garage. I'm sure he wouldn't like you sleeping in the same cot with me. Plus, I'm going to have to find some work over Christmas and the school break to get some money for books and food and such to cover next semester. We both couldn't stay with Larry's family, I'm sure it wouldn't be proper. Plus, after next semester, I'm heading back to Ohio to get ready to transfer to Ohio State. So, you see, there is just no future for us. Do you understand? I have nothing to offer you at this stage of my life, because right now, we are in exactly the same place, neither of us have a thing to offer."

He hugged her for a long while, and a tear trickled down his cheek as they unembraced, and she looked at him for a long time, and said, "I guess that's life." She reached over and turned off the light, and he heard her say, "Come here, you big lummo," She was not the last free-spirited hippie girl he was to know.

A few days later, Larry showed up to help him move from Sarah's house to his house. Bonnie had left earlier that morning on her way back to her parent's home in Iowa "to reassess her life and maybe start college," she said. He never saw her again.

He had never been to Larry's house. It was in the suburbs toward the mountains overlooking the campus. They got out of Larry's blue wagon, and he instantly noticed how big the sky was... a view with a zenith of practically 180 degrees in all directions, except for the mountains to the east. He could see the cloud bank building just off the beach in the distance, and just a thin, low hanging orange cloud layer in the valley below.

Larry grabbed one of his suitcases, he had the other and a box of books and supplies. The house was located on an elevated corner lot with a manicured lawn. It was situated to meet the medium line of the corner befitting a ranch house. It was one story, with five bedrooms and three baths. There was a three-car garage around the side. As he was approaching the doorway, he stopped and said to Larry, "I'll have to take a photo of this beautiful location, framed against the mountains behind." A few weeks later he did, but he didn't remember to get the film developed until a few years later in Ohio.

Larry's mother was standing in the doorway as she heard them approaching. They greeted and shook hands. Mrs. M., Lonelle, was absolutely beautiful; it was difficult to tell her age. She also had blonde hair, but short. He instantly thought to himself, 'Are all the women in Southern California beautiful?' It had been his experience so far.

After he and Larry went into his guest room and emptied his suitcases, put away socks, etc., and set up his desk, plugged in the desk lamp, and filled the drawers with pencils, engineering pens, protractors, slide rules, and other paraphernalia of a student, they went back into the living room, where Mrs. M. had cocktails waiting, a glass pitcher of Martinis with a long glass rod sticking out the top. She handed him a glass and expertly poured the clear alcohol using the rod to guide the fluid into his empty glass. They sat around talking about everything that afternoon. He hadn't felt so calm and at ease for a very long time, he remembered thinking at the time. But, he had to be very careful not to bust a vowel while speaking. He thought about asking Larry and his mother whether he could sign up as a new member of the family but decided not to.

She asked about his family in Ohio and he told her what he could explain regarding his housing shortage, and about Grandpa's offer to start college in Southern California. After a while and a short lull in his conversation, Mrs. M. began to tell him about her family. Larry had a younger brother who would be arriving soon from Cal Poly, where he was a freshman after being allowed to graduate high school early because of sky-high grades and an early SAT score of nearly 1600. Mrs. M. was very proud of him. She also spoke glowingly of their younger daughter, Jackie, who was in a special high school for advanced students in Seattle. She too would be coming home for Christmas break soon. She didn't offer up or explain the reasons for her daughter spending high school way out of town rather than in the neighborhood. For some reason, he assumed something unpleasant happened to her in her freshman year that precipitated such a move. Larry never mentioned it. She never mentioned it.

By now he was feeling the heavy alcohol, the last time he had tasted a Martini was at Tom H.'s house on High Street in Lancaster, just up the street from Joe's house. They had the same glassware. Mrs. M. must have been feeling it too because she began to tell them about her early days. She had been a high school cheerleader in Boston and went on to Radcliffe College in nearby Cambridge and graduated early. She said that she wanted to see the world and had whittled the options down to: a) going into a career in the

U.S. State Department, or b) become an airline stewardess. She chose the latter and flew all over the world as a Pan Am flight attendant for 5 years, during which she got to know one of the Pan Am pilots; they were married in Honolulu, with Larry on the way. He looked over at his mother, and rolled his eyes, saying “do we really need to hear that much detail.” He had been quiet for a while and blurted out, “I understand that’s pretty common these days” They all laughed looking at each other knowing this period is going to get interesting with him in the house.

Then she said, “Larry told me about your predicaments,” looking at him. He looked at Larry, wishing he hadn’t. Then he said, “We’ll, what can I say, find something of value, make a big lie, and lose it all.” They all laughed again, but he wasn’t trying to be funny. About that time a car drove in the driveway, it was Larry’s father, Paul. He came into the living room after hanging up his coat and putting his briefcase in the corner.

Right off he said, “So, is this the notorious pledge of Pi Alpha Omega?” He got up shook hands firmly and they both sat down. Mrs. M. appeared with a poured Martini for Mr. M. ready to go. Mrs. M. brought Mr. M. up-to-date on the conversation, and he said, “Did he tell us about what happened yet?” Mrs. M replied, “Enough to know he doesn’t want to talk about it much.” She was certainly correct about that, he thought.

Turns out that Mr. M. was the Chief U.S. Postal Inspector for California appointed five years ago and traveled around California to investigate a range of issues. He was certainly a very nice man and looked like a lot of Texans he knew. Tall, thin, and handsome. He had graying hair. He later learned that Mr. M. was a pilot in Korea and flew for Pan Am until his hearing went bad. In his job, he was ushered around



California in a piloted state plane so he could be in Sacramento in the morning, conduct business, and be back on the ground in SB before dark.

Reggie and Larry M. with the San Bernadino Mountains on the Horizon

Mr. M was leaning on the bar when he asked the gathering, “Has she told the story of when we got together and got married?” Everyone in unison said “Yes” Then he said, “Was the story with or without Larry?” Everyone laughed again harder. Larry rolled his eyes again.

Later that evening Reggie arrived. He hadn’t heard that the family had expanded. He came into the gathering all smiles, with hugs all around. Reggie was introduced to the new temporary

family member. He and Reggie had a conversation in the kitchen later that involved geology and he found that Reggie had an interest in it as well. During that Christmas, he likely spent as much time talking with Reggie as he did with Larry. Reggie was very bright, a gear-head, and great fun.

The next morning was a Saturday. As all five of them sat around the table having a breakfast of eggs and bacon, and outstanding bagels, served up by Mrs. M. Larry's sister, Jackie, arrived in a taxi. They all got up to greet her. She was dressed almost formally with a big hat, shirt and heels, and a big purse. For some reason, he was expecting her to arrive in tennis shoes and a sweatshirt. 'That must be one classy high school in Seattle,' he thought. She was no girl; she was a nearly fully developed young lady already, make-up and all. He soon found out while listening to the conversations between her and her mother, Mrs. M., that it had to be one of those exclusive boarding school for girls.



Christmas at Larry's House

She finally got around to recognizing him, by saying, "You're new, who are you?" with a big smile. He said, "I'm the new temporary member of the family," She smiled and said, "The more the merrier." And Mrs. M. picked up the conversation on the otherwise boring details after hearing some gossip from Jackie about two of her teachers at her school who left abruptly and together went to New York City. He wanted to ask whether they were man and woman, or two women, or what, but decided to remain silent about the issue. After everyone had been talked out that evening, everyone went to bed at the same time. Showers were running, drawers were opening and closing, and then silence in the house. As he settled into his new, comfy bed, he was thinking, 'What a great family!'

Over the following weeks, he found studying in his unfamiliar environment distracting, but he got accustomed to it after a few days. He handed in his report for his geology class consisting of drawings of the parts of a trilobite and a pelecypod, and an essay for English class and finished finals. He had a long chat with Dr. Allen about geology when he handed in his report. Dr. Allen told him that he never regretted going into geology and loved to teach it at the introductory level to students like him, but he warned, "If you major in geology, it won't be easy and you'll need to work hard to make the grades, especially if you transfer to one of the big universities." "Why do you say that?" he asked. "Because the big university professors are more preoccupied with their research than they are with teaching and mentoring students." He stored away that opinion for later.

When Larry and he arrived home, Reggie was dragging a large Christmas tree into the house. They helped set it up in the living room next to the fireplace. Mrs. M. and Jackie were ready with the light strings and trimmings. He sat on a bar stool and watched the family function like a well-oiled machine. Everyone seemed to know what to do and when to prepare the Christmas tree and everything else in their lives, and they seemed to love doing it, he remembered thinking at the time.

When Christmas Eve arrived, Mr. and Mrs. M. and Jackie went to services at the Methodist Church a few blocks away. Mrs. M. and Jackie looked like movie stars. Larry, Reggie, and he watched television and had a few beers. He only nursed one. He noticed there were many presents under the tree and began to feel bad that he still had nothing to give. When they all arrived back from church, Mrs. M. made up a pitcher of Martinis and took a sip quickly. Mr. M. followed. They both collapsed on the couch still in their church clothes, but Jackie soon appeared in a USC sweatshirt and tennis shoes, finally. After turning down the volume of the TV none of them were watching, Mrs. M. then offered, "Well, that was a nice service, don't you think Paul?" He nodded sipping his drink. "Did you see Patrick and his new wife?" turning to Jackie, who got an odd look on her face and rolled her eyes. 'There was another indication,' he thought, 'that there was more to that,' but he never asked.

"OK," Mrs. M. then said, "It's time to open presents." She and Jackie began to distribute the presents when the doorbell rang. Mr. M. went to the door. It was neighbors carrying flowers and a plate full of cookies. They came in and one of the women said, "We just wanted to say Merry Christmas. We heard you had a full house this year," She looked around the group smiling and waved, and the entourage turned and were out the door. Pretty soon there were a couple of presents on his lap. He felt bad, but put on a good face and said, "What do we have here?" Mrs. M., came over sat down next to him and said, "Don't feel bad, we all understand." And patted him on his knee. He must not have hidden his feelings very well, he thought at the time. She must have sensed that.

He opened his presents. One box contained a bonafide *Estwing* geological hammer, his first. The other was a smaller box containing a leather belt and a leather sleeve to hold the hammer, a leather knife holder, and an empty compass holder. He was glad that it was empty because a Brunton compass cost a lot of money. After a while everyone had gathered up the wrapping paper, placed it in bags in the kitchen. He got up and Mrs. M. came around the corner and said, "So what do you think?" He said, "Perfect presents," he said. She reached out and gave him a big hug. He kissed her on the neck and noticed she smelled wonderful. She then stepped back and said, "Larry bought that stuff for you." He looked at Larry watching them and said, "Perfect." He returned with a big smile and a thumbs up.

A few days went by and he, Larry, Reggie, and Jackie went swimming in the pool in the back yard of Larry's house, laying out, sunning on flip-back lawn chairs. He was really getting dark complected now. So was Jackie. Larry and Reggie had gotten sunburned the first day they laid out and were covered with white cream of some sort. Jackie looked great in her two-piece pink swimsuit. She was very well developed. He was wishing that Mrs. M. could come in for a swim, but she never did. Neither did Mr. M.

On New Year's, Mr. and Mrs. M had decided to have a party that year long before his arrival. Apparently, the neighborhood took turns hosting such. At about 7:00 PM, the guests began to arrive. At first, it was mostly parents, and then their older children, then friends of Larry from high school, and some ladies about Jackie's age, now seniors in high school. They moved in unison around the house as if they were connected somehow, he couldn't help but notice. Even Larry elbowed him once as they passed the bar where they were sitting. He knew what that meant. About 9:00 PM, a couple of their fraternity brothers, who lived in town, came stumbling into the foyer of the house. Larry and he got up to greet them. And they were very happy to see them, in fact they were happy to see everyone. They even grabbed the young ladies for big hugs, when Mrs. M. eased herself between the happy fellows and the not so happy, but tolerant, young ladies. This reminded him of his guys at home who got that way once in a while. Larry strong-armed one, while he soft-armed another and steered them into the kitchen and asked them to quiet down, and, as drunks often do, both of them put their first fingers to their lips and began the "Shhhhhhhhhing" long enough to prompt people to pop their heads around the corner to see what's what; someone said it sounded like someone was cooking out there.

The guys calmed down and they talked about where they were heading. There was a bar they wanted Larry and he to see. While standing in back of both, Larry was almost frantically signaling No, No, No with his hand, head and mouthing the word, No! He told him he didn't want to because he already had enough to drink. And then they turned to Larry, who made up some story about having to get up on New Years' Day. They both said "OK," and swiveled around and said, "Bye, See you next year" and started for the door where Mr. M. was standing. They both kissed Mrs. M. lightly on the lips, and off they went into the night. The boys got into some kind of sports car he didn't recognize and drove off.

Larry then told him that they wanted to go to a scuzzy girlie-bar. He was right, it was not the night for that sort of thing, he thought at the time. The noise level in the house was increasing as the evening went on and he decided to retreat to his room. He was reorganizing papers and things on his desk when Jackie knocked on the door and came in. "Are you hiding too?" she said. He said, "I was just cleaning up now that the semester's over." She said, "Larry got cornered by Mrs. Moore who was pointing her finger at him for some reason. She's probably pretty high by now."

She sat down on the bed and was looking around. He returned to his business. When finished, he turned around and asked her how her junior year was going. She said, "Just fine, but it is an all-girls school." He changed the subject to her future. "Any idea what you want to do with your life yet?"

"Not really," she said. "I was thinking about going into modeling or maybe acting. I have been taking a lot of theater at school, but memorizing lines and positions are not easy."

He replied, "That sounds like fun."

She said, "I'm still trying to get my head on straight though."

He said, "What do you mean?"

She said matter-of-factly, "Well, I had this fling when I was freshman at high school here with a new teacher, got knocked-up of course, and had an abortion. The people at the high school won't forget that episode soon. We were caught many times hugging it up around school."

He said, "You seem fine now," hoping that was the end of the story, but she went on.

"I still talk to Patrick on the phone regularly, but he got married to his old girlfriend recently and she's expecting, so I just don't know how this is going to work out. I saw Patrick just a while ago and he was surprised to see me. I could tell his wife didn't think much of me."

He said, "Maybe you should just move on and focus on what you want to do with your life."

She replied, "Well, that's easy for you to say, but it's not easy for me to do."

Larry knocked on the door and came in, just as Jackie finished. Larry said, "There you all are. I see you all are hiding too." They all laughed, and Larry walked around the bed and laid down flat next to where Jackie was sitting.

Larry said, "What are you two talking about?" She started to speak, but he interrupted her saying that he was just telling her about how awful the weather gets in Ohio during the winter.

She started to speak, then turned to Larry and said, "Mrs. Moore was getting on your case about something last I saw. What was that about?"

He said, "I still have no idea what she was talking about. My chest still hurts where she was poking me with that finger." They all laughed. Mrs. M. poked her head in and said, "It's about time" meaning it was about midnight. So, they all got up and joined the rest of the family.

They counted down to the new year and 1962 began.

The next day the family watched the Rose parade on their rather large color TV. They had a huge dinner of steaks, mashed potatoes, and the rest. Later that day, they watched the Rose Bowl. He remembered

hearing about a growing uprising by the Ohio State faculty against football dominating the school for too long and the Faculty Council had voted against accepting the invitation to the Rose Bowl that year. So, no Buckeyes. Minnesota played instead and trounced UCLA.

Larry was thinking about transferring in the fall to Michigan State, he but had not committed yet. His second option was San Diego State. The next morning, Jackie departed for the airport and Seattle. She hugged everyone, and when she hugged him, she said, "Welcome to the family." He never saw her again.

The new year brought a new problem that was discussed the next morning at the breakfast table. He mentioned off-hand that he needed to get a job over the few weeks remaining before the new semester started at SBVC. Out of the blue, Mr. M. mentioned that the grocery store on the main street might be looking for help, so that afternoon he borrowed Larry's blue wagon and drove the few miles and went into the grocery looking for the manager. In less than 10 minutes, he had a job sacking and carrying out groceries at \$5.00 /hr. after paying \$100.00 union dues. The tips were quite good. This not only was the easiest job he ever got, but it also lasted throughout the semester on weekends, and provided spending money, books, gas, and most importantly, the ticket home on the Super Chief.

Every weekday, Larry and he would drive to campus for classes, and to the fraternity house to hang out with the brothers, play bridge, and occasional poker, and to BS on national/international politics. He had finished the chemistry course and was glad he hadn't decided to be a chemistry major. Linus Pauling was too much for him. Astronomy was out too, because it was almost all math, but was of the interesting kind at least, like solid geometry and trigonometry, but not that interesting. He had a great feeling about his decision last semester to major in geology when he transferred to Ohio State in the fall. He hoped Dr. Allen would be pleased in the years ahead and planned to stay in touch.

He was taking an American history class, an advanced engineering drawing class, and a mineralogy class from one of Dr. Allen's associates, a Chinese fellow, Dr. Chow. The courses were time consuming, and he was spending most of his time on reading and memorizing mineral names and characteristics that semester and a decreasing amount of time at the Student Center and fraternity house with the brothers. Larry was working hard too.

In his history class, he had noticed a rather attractive black-haired young lady who usually sat in the front of the class. He decided that morning he would see how close he could get and sat down about where she was as she was walking down the aisle behind him. He had estimated well because she sat down next to him. She turned to him and said, "Hi, I'm Brenda." He responded accordingly. The professor arrived and brought the class to order. After a few minutes into the history lecture, his thoughts drifted away from Alexander Hamilton to the sweet aroma of Brenda's perfume. Her hair flowed down her back, black as night. He began to ponder how effective perfume-supported pheromones were in bringing two people together. After the lecture was over, he started to get up when she asked him a question about the page assignment, and he told her and they walked together up toward the back of the rather large sunken lecture room into the bright sun.

They both put their sunglasses on and were still walking together, when he asked, "You want to get come coffee at the Student Center?" She said, "Sure, I need something to wake me up after that lecture."

They got in line, added the cream and sugar to the coffee, and then she stopped, turned and said, "Where do you want to sit?" He pointed toward "his" corner and headed off and she followed. Larry and a couple of others and a girl he didn't know were there and they sat down. Larry came up and he introduced him to Brenda. Larry was noticeably taken by this young lady. They talked a while and then he had to leave for a class. He left Larry and Brenda talking.

The semester melted into time. Easter came and went. Larry, as President of the ΠΑΩ, had declared a road trip a few days previously during a meeting at the house. And that meant a road trip to the beach for beer with dates. To avoid the potential issues with driving and drinking, the group always rented a bus with driver for such trips to carry the 30-odd Active members and dates from campus to Laguna Beach, and home safely. This was the group's favorite beach for many years.



Getting ready to play a game.

When they arrived at the beach that Friday afternoon, the beach was jammed with people. They carved out an area on the southern edge of the beach, backed by a big brown rock. That provided a bit of a wind break because it was rather windy that day. They built a small fire with some sticks and a couple logs and some charcoal someone brought stacked up against the rock against the rock. Pretty soon everyone was sitting down getting as close as possible to the fire because it was getting chilly.



Larry's date, Kathy, was a pleasant-looking, red-headed, with very long flowing hair bunched into a rope down her back. He had been dating her for a few weeks. She had brought a small bottle of Jim Beam and had already finished that off. She was leaning on Larry while he and Brenda were talking. The singing broke out, but he just looked into the fire. Brenda had one hand in his jacket pocket and the other in Larry's. He and Brenda spent a fair amount of time together, but he never pressed the relationship because there was no reason for it. It wasn't going anywhere, although he wasn't sure Brenda knew that. He decided that he would try to steer Brenda in Larry's direction. He knew Larry was interested.

Finals came and went. Larry called a party at his house as a sendoff for him. That was an effective plan, if Larry had planned it, to expose Brenda to his parents. About 20 or so of his brothers and a few dates attended. It was great fun, but it was beginning to feel sad. He began to drink up, especially something he found on the drink table called "Peach Sloe Gin." The train was to depart about 8:00 PM. He remembered giving Mrs. M. a big hug and buried his face in her neck and hair and said, "Thank you." She said, "Be happy, Sweetie," and he nodded and left with Larry and Brenda heading for the train station. The train was waiting. Larry put the suitcases down and they hugged, he said, "See you around, buddy." He responded that he couldn't thank him enough for his support and "adoption."

He then asked him to look after Brenda. Larry said, "I intend to," he said with a big smile, and then backed away so Brenda had access. They embraced and kissed deeply, and she said, "One day?" He said, "I hope so." The bags had been put on and he climbed onto the train, turned, waved, and disappeared up the stairs to the Dome. The train jolted a bit and then released a lot of steam between cars releasing the breaks and the train began to move. He saw them looking but didn't know to look up to the Dome. As he

moved, he could see Larry and Brenda walking away together. It looked like she was sniffing into a Kleenex. Just before he lost sight of them, he saw Larry put his arm around her.

And that was that for his new California family. Another beginning awaits.



Chapter Five

1962, The Training, A Bump, and the Beginning



Orton Hall Geology Library and Laboratories, Ohio State University

He had just experienced a fantastic year or so in California, but the world around him was changing fast. Telstar broadcast the first live trans-Atlantic television signal. The oral Polio vaccine was developed to combat Polio. John H. Glenn, Jr., becomes the first American to orbit the earth. The first Wal-Mart discount store was opened in Rogers, Arkansas. Cars continued to evolve as more compacts appeared and sold well in the U.S. The Cuban Missile Crisis developed as the Cold War continued to worsen when the Russians placed ballistic missiles on Cuban land just 90 miles from the coast of Florida and President Kennedy called their bluff by threatening war unless they were removed (which they were). For a short time, however, the world was on the brink of nuclear war. President Kennedy then set a goal of landing a man on the Moon before the end of the decade and then became more involved in politics in Southeast Asia by training South Vietnamese pilots. Folk music was evolving into protest music thanks to young artists like Bob Dylan, the Limelites, and the Beach Boys. The first of the James Bond movies, "Dr No," was an instant success. However, Ohio State football was pathetic that year losing to UCLA, Northwestern, and Iowa, but at least beating Michigan again.

The Super Chief with he and his recent memories, headed north to Barstow before making the turn to the east as the Sun was setting below the clouds and within seconds it was almost dark. Far-off lights were switching on. After nearly consuming the last of the bottle of Peach Sloe Gin, he realized that he was not feeling all that well and in fact was about to vomit. He hurried for the bathroom down the stairs and made it just in time. He spent the next few hours over an otherwise crystal-clean toilet. The porter came in a couple of times and kindly asked if he needed any help. He eventually cleaned himself up and, looking into the mirror, was shocked that he couldn't see clearly and realized that his glasses were gone. He checked all of his pockets, to no avail, and then remembered that he had broken them months before and only wore them in private after he glued and taped the pieces back together. He then moved closer to the

mirror to see what only could be called a drunk. His hair was a mess. His eyes were blood-shot. He opened his mouth and checked for his one-tooth front partial. It was still intact. He concluded that he had never been this drunk before.

He came out of the bathroom. The porter was leaning up against the edge of the doorway and said, "You feeling better?" He said, "I think so," and started back up the stairs to the Dome. The porter followed him up the stairs. He made it to his seat and slid over to the window. The porter then produced a bucket and placed it on the seat across the aisle. "I thought you might need this. If you do, please try to make it to the bucket," he said. He said, "OK, I'll be good." "That's fine, sir. I would appreciate it," he said.

The porter sat down on the arm of the aisle seat and asked where he was headed. He said, "Back to Columbus," The porter said, "I grew up in Columbus. When we left SB I loaded your bags. Was that your family?" He said, "No, that was just a girlfriend and a good friend that I'll probably never see again."

In changing the subject, the porter asked, "What were you drinking?" He said "Peach Slo Gin." "Ouch," the porter said with a big smile, "I got hammered with that stuff once, but never again. I'll keep an eye on you to Chicago." The drunk fell asleep, awoke, and grabbed the bucket. Then fell asleep again and woke up with terrible dry heaves over the bucket for a while. Good thing there was no one else riding in the Dome that trip he thought. Looking at the bottom of the bucket, he noted that the porter made a point of keeping it empty and clean. The next morning, he awoke with a terrible headache. He went downstairs and brushed his teeth, then washed his face and brushed his hair. He noticed his glasses in his shirt pocket, took them out and wondered where they had been. He cleaned them, put them on and peered into the mirror and saw that his glued and taped glasses made him look like a beggar. He put them away for use when he was by himself. Off he went for coffee.

He went to the dining car and noticed there were a number of people there. One of the waiters beckoned him over for a seat. The table was for two, a little cramped but no one was too close, so it was fine. Then he looked out of the big glass window and saw the world flying by and started to get that dizzy feeling, but it passed. Three eggs fried, sunny side-up and crispy bacon, orange juice and coffee. Just before breakfast arrived, my new porter friend walked by and sat a fruit-size glass down of what looked like coffee, dark brown. He said, "That's for the headache," and disappeared down the aisle. Although he usually did not have much trust in strangers, he did this one for some reason, and drank it down, entirely. He never knew whether it was breakfast or that "potion" that cured his headache that morning. When finished, he went back up to the Dome and enjoyed the mountains as they receded in the rear.

By the time he arrived in Columbus, it was almost dark. He climbed down from the train, passed a five-dollar bill to the porter, and thanked him. When he had arrived in Chicago a few hours earlier he had given his new friend a Jackson (a twenty-dollar bill) tip and thanked him for his considerations.

His folks, Maxine and Clarence, Steve and Carolyn Sue were all there to meet him. Hugs all around. Even the squirt, my little brother, who had grown taller since he last saw him. My sister had also grown. When he hugged his mother, she backed away and said, "Good Lord, Son, you smell like a brewery." Clarence chuckled until she gave him a look. He felt compelled to tell them on the ride home why he smelled so.

When they arrived home, he lugged his not-so-new Samsonite suitcases up the stairway to his room and laid them flat on the bed. Nothing had changed, but he knew he had. He could feel it, but then thought

that feeling could have been caused by the hangover cure provided by his porter friend, then discounted that idea.

He took a shower, put on a night shirt, and took his dirty clothes and stuffed them into a new Westinghouse washer (and dryer). "Wow," he said to his mother, "New." "The old ones wore out, I got a good deal," she said. Dad came into the kitchen where they were talking and went to the Frigidaire and opened the door. He reached in and paused, turning to him, and said, "You probably want a 'hair of the dog' don't you, and smiled. He said," No, I'm good. I'm done drinking for a while, Dad."

Things went back to their normal rhythms in his house. Everyone went off to work and Steve and my sister went off to school. He sat out on the front porch. No one was in the park across the street. He decided to make a visit to Mrs. Fey a couple of houses down the street.

He rang the doorbell, and she opened the screen door only a little. He heard her say, "What?" He said, "Mrs. Fey?" She opened the door a little more so she could see better, when she said excitedly, "Holy Mary and Joseph, it's Michael Campbell back from California. Maxine had said you would be home this week. Come on in." She gave him a big hug. They chatted about California and how she always wanted to go. He then said, "I don't remember, but I want to make sure that I thank you for being here when I needed you a few years ago. You saved my life, you know?" She said, "The Lord works in mysterious ways." He let that remark go and asked about the news around town. "Same ol, Same ol." She said. "Ellen, the Ehrler girl further down the street is getting married, and did your mother tell you that Katherine next door died last year sometime. Your folks and the rest of us around here went to the funeral." After a while of small talk, he got up and said that it was time to get back to work and gave her another hug and began walking toward the door, when he stopped and looked down. "Wasn't this rug a light color?" She laughed and said, "That's right, it was white until you bled all over it. Your folks insisted on paying for a new one so I got a darker color one just in case." They both laughed as he went through the doorway and pushed open the screen door, saying, "See you." He never saw Mrs. Fey again.

Steve had kept his '47 Ford Coupe in working order by starting it up once in a while. He was just learning to drive but wouldn't have his license until the next year. He called around to see if any of his old guys were around. None were around. He called Jim B., his friend from Anchor #2 plant days. He answered and they chatted and decided to meet up at Old Bill Balley's later that night. He said that Anchor was cutting their product lines and he got laid off. Jim brought me up to date while we were having Rolling Rocks. He had heard that Diamond Power was expanding and hiring.

The next day, he decided to go to Diamond Power. He took a right on Main Street and drove out east to the Diamond Power plant and walked into the front office. He said to the receptionist that he would like to apply for a job. The receptionist disappeared and came back with papers. He sat down at a nearby table to fill them out and then dropped them off. She said, "Someone will look over your application and get back to you." He said, "Thanks" and drove back into town.

Two days later, he got a call from Diamond Power asking that he come in for a visit. He arrived in a sport coat and buttoned down light blue shirt and khaki pants. An older, gray-haired fellow who looked familiar greeted him and they walked back to his office, and sat down. He said, "Do you know what we do here?" He said "No."

He said, "We are part of the Babcock and Wilcox Corporation, and we manufacture long, retractable soot blowers to accommodate increased boiler sizes for cleaning high slagging coal-fired boilers and industrial

monitoring elevated temperature camera housings. We have an opening for the right person to assist in our parts department. I see here you have a year of college.”

“That’s right,” he said, and then for some reason added, “I have three or so more years of college to go and will need to work each summer to pay for college.”

He said, “OK, Just a minute I want you to meet someone.” He disappeared and came back. He had someone with him. He was younger, about 35 he figured, a nice looking fellow. They shook hands. The other fellow said, “John is our VP of Purchasing; he is responsible for purchasing and maintaining everything that this company needs to build our products.” The other fellow left and John pointed and said let’s take a walk. They went down a hall with many offices with names on the frosted glass doors, like Design, Testing, Development, and others. They went through a door and all of a sudden the ceiling was literally sky high. He didn’t think he could hit the roof with a rock.

He saw all sorts of spinning machines and welding flashes down the way. This was a factory. A factory of the interesting kind. There was a furnace of some type glowing orange inside and long pipes. Walking to the far back, they came to the Parts Department identified by a sign hanging down from an entrance to an area surrounded by mesh fencing. He figured the fence must be for security purposes.

Another fellow emerged from rows and rows of what must have been parts, he figured. He introduced him to the new guy, saying, “William, Michael here is your new assistant.” They shook hands and he liked this guy right off. He apparently had the job before he knew he had the job, but that was just fine with him. Over the next 12 to 13 weeks, he learned the parts department, and heard a lot of stories from William G.. He had no college, but he read philosophy books and spoke often in those terms.

The summer flew by and soon it was time to get back to the business of college, only this time it was a big college, so big they called it a university with a number of colleges within, the Ohio State University.

On his last day at DP that year, William took him aside and said, “I’ll do everything I can next summer to have a job waiting for you. It may even be something better than chasing parts.” He thanked him and told him that he enjoyed working for him, which he actually did.

When he arrived home, he remembered that weeks earlier he had sent in all the transfer applications and transcripts from SBVC to the OSU registrar. He looked in the mailbox and a large envelope was there from OSU. To his great surprise and relief all of his courses had been accepted, including the physical education requirement that had been satisfied by the handball course. His math and English grades placed him in the advanced courses, and his history, chemistry, and geology courses also all transferred. He was a bonafide sophomore.

The next Monday was the meeting at OSU for first-time students, Freshman, and Transferees. That weekend before, Maxine and Clarence drove him and his two Samsonite suitcases to a boarding house on 14th Avenue only two blocks from campus that he had selected a few weeks before. He thought about the Dorms on campus, but the price was outrageous. This place was on the third floor in what once was the attic. The only window was at the far end of the room. It reminded him of his attic at home, but walled-in and re-floored into a rather nice room. There was a landlady who instructed all tenants that there would be no smoking, no cooking, or no lady visitors. He wasn’t aware of these rules when he signed the rent agreement, but he planned to ignore all three in any event.

When he complained to his folks about the new rules he had just learned, Maxine thought they were probably good ideas by saying, "You have to focus on your studies anyway," but Dad frowned and made a thumbs-down sign with his left hand. He was hoping that he wouldn't have to stay there more than a quarter because he was going to visit the Sigma Alpha Epsilon (ΣAE) fraternity house soon to explore the possibilities there.

Maxine and Clarence left with a hug from his mother and a pat and squeeze on his shoulder from his Dad. He settled in and went back downstairs and sat on the front steps to have a smoke. This was the first time he had relaxed since he had been home. He leaned back on his elbows musing that this is certainly not California, but the trees were green, and the air was fresh smelling. About then two young ladies walked by on the sidewalk in front of him. They had dark, short hair and wore some kind of tight pants. They smiled at him, and he smiled back.

His first night was not particularly comfortable in his new bed and he thought about what's ahead tomorrow and drifted off to sleep. He was awakened about 3:00 AM with a fire truck going by with siren blasting away. The firemen must have gotten a kick out of knowing they were waking up thousands of students living in the many boarding houses in the neighborhood.

On the way to campus that morning, he turned a corner and saw three firetrucks with firehoses laying everywhere. A bunch of students were standing around watching. There was nothing more than a charred black frame of what used to be one of the old boarding room houses, he overheard someone say in front of him. As he turned toward campus, he was thinking that maybe he should be really careful about flicking his cigarette butts out the window of his room.

When he showed up at the Student Center, he followed the signs mounted on chrome stanchions and the crowd into a large amphitheater and found a seat. The place was like a very big movie theater. The seats were connected to each other in what looked like a hundred rows with two large isles. Someone appeared at the podium and began to speak.

He was the President of the University he said, and he congratulated all of the students for being accepted into the university community. He then warned the students by saying, "Look to the person on your left and then on your right." Everyone did just that. Then he went on to say, "Both of them will be gone by this time next year." That stimulated grumbling in the study body, which meant that 67% of the students present in that room will have flunked out or left by this time next year. This was immediately of concern to him, as he wondered why the flunk out rate was so high. Over the next few months, he soon would see why.

His memories were vivid of the President going through a litany of do's and don'ts, Do participate in the sorority and fraternities that have been approved around campus. Do use the main library and its many floors of books and its new catalogue system. Do participate in and attend the sporting events of your choice. Do participate in the many arts programs, and do support the Student Center activities.

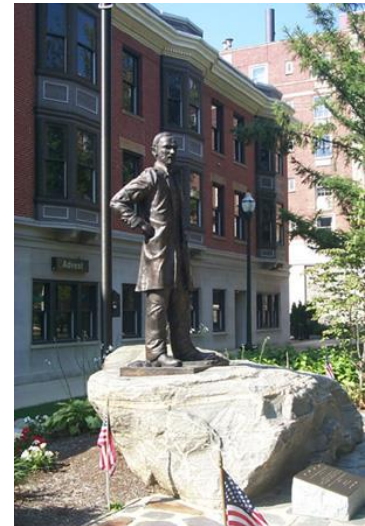
He then went on to list those activities that were either frowned upon or prohibited. "First," he said, "Be careful not to walk alone late at night in the streets around the campus, even you football players," which created a group chuckle in the crowd. "Second, drugs of any hallucinogenic types are strictly prohibited on and off campus, especially in the fraternities," which also created a group chuckle. "And third, any disturbances on campus or off that involve political or sports-related matters will be dealt with harshly, and in some cases, may result in expulsion from the university community."

He closed by saying that the best advice he could give was that the student should develop good study habits “because you will need to get the grades if you want to remain and hopefully graduate from the Ohio State University.” This is no longer a party school. Good luck and study hard.” And with that he left the podium with only a muted applause and the students with an unspoken warning that they should be prepared for serious competition in the classroom.

As he was walking toward the geology building across campus for the first time, he remembered that he began to reflect on what he had just heard, not just from the President, but in the responses from the audience. Obviously, the streets are dangerous at night, but also, drug use is getting to be commonplace, especially in fraternities. This environment here is all serious and the competition is going to be tough in the coming years. This was nothing like what he had experienced, more or less, in California. He had the thought that maybe he should go back and transfer to San Diego State or UCLA. He could still get in-state fees, but then decided that this is where he would begin his professional life. One way or another.

He walked up the steps to Mendenhall Lab, the center of the Geology Department, and went in to meet the current Chairman. No one was at the reception desk, but he heard some rustling papers in the adjoining office. A noticeably short man, with short gray hair, who must have heard his footsteps and said, “Who’s there?” He walked into his office and said that he was a transfer major from California and wanted to introduce himself to the Chairman. Dr. White said, “I’m it for now,” and chuckled. They sat down across his desk of neatly stacked piles of papers and books and rolled-up maps off to the side, and an ashtray with a big-bowl pipe, next to a black telephone. Dr. White asked where he had come from and he told him it was SBVC and he said, “Is Dr. Allen still there?” He said that he was one of the reasons he decided to declare geology as a major when he transferred to Ohio State. Dr. White said that Dr. Allen was a fine geologist and teacher.

Then he asked where he was from and he said that he was born and raised in Lancaster, Ohio. He perked up and said, “Ah, the home of Mount Pleasant. The best exposure of the Black Hand Sandstone in the state and the home of General William Tecumseh Sherman.”¹³ He wasn’t aware of the former, he recalled at the time, and had only considered the mountain to once being an outstanding Indian stronghold and lookout, and place to take a date in high school, which he had many times.



Dr. White leaned back in his chair and began to tell him about the many projects going on in the department that he might be interested in, like the polar research activities that were just beginning to get funded and the isotope age-dating program, which was also getting a lot of interest in the world, he said. Then, the telephone on his desk interrupted their conversation, and he took that as an opportunity to leave. He got up and motioned to Dr. White he was off and White nodded while talking and he left.

He had signed up for Geology 101 although he had taken the equivalent at SBVC. He thought it would give him a chance to score well right off. The grade-point-average (GPA) was the reason everyone was there, he kept reminding himself of that on regular occasions as a reminder to keep pressing. He also enrolled in

¹³ <https://lhs59.org/Today.htm#Shermans>

the typical required courses such as more English, math, world history, and German, the latter only because he was aware that he had German in his family history and he thought that might be interesting.

The beauty of the trees as they turned colors in early fall faded into bare trees and gray skies and the tempo of his life began to quicken. The four-quarter system as Fall, Winter, Spring, and an abbreviated Summer term, meant the school was a continuous machine of learning and he soon learned that each course was compressed, but wider topical areas were covered by extra reading assignments. Students would be responsible for knowing the content of lectures plus that covered in reading assignments.

After the 2nd or 3rd weeks, he decided to go visit the SAE house to see what's what there after his last class of the day. He walked over to a huge brown house and walked up at least 20 steps to a large wood door that looked like a gate, with metals chains and crossed wood inlays, which must have cost a bundle, he thought at the time. The door was partly open, so he pushed on it and walked in. Guys were lounging everywhere, all with either a book in hand, or a beer, sometimes both. Some looked up and then went back to their reading.

One of the guys came up and said, "Haven't seen you around."

He said, "No, I'm new this year."

The fellow said, "You a freshman?"

He said, "No, I'm a transfer from California. The San Bernardino Valley College. The fraternity ΠΑΩ. I understood it had ties to Sigma Alpha Epsilon (ΣΑΕ)."

He said, "Let me go get Chuck R. He is our Membership Chairman this term," and disappeared around the corner.

He walked around the living room and looked at rows of shields hanging on the walls. It reminded him of being inside an old castle and he expected to see a suit of armor next. Two guys arrived and they shook hands with him. They exchanged hand signals while in the grasp he had learned during initiation, involving the first finger, to be answered in secret response.

"Great," one of them said, "Now that we have that out of the way, it's great to see you and I'm glad you have come in." He had introduced himself as Chuck R. and the other one was Bill W.; they both were from the Cleveland area. They were both familiar and reminded him of his high school guys. Bill said something about how much of a shock it must have been coming from California to Ohio. He agreed, but he was born and raised in Lancaster, Ohio. Bill turned to Bill W. and asked, "Have we ever had someone from Lancaster before?" John said, "I don't remember anyone, but I'll check the records one day."

They then showed him around the house, downstairs, a pool table, a punching bag, a few overstuffed chairs, and a fireplace with a large shield with an elaborate version of the ΣΑΕ seal in raised letters, which was rather impressive. That was where they held their social activities, one of them said. They took him upstairs to have a look at the live-in rooms. There must have been 20 rooms with accommodations for two guys in each room, all rather cramped. They went back downstairs and walked through the big dining room and kitchens. They went out onto a deck that was lined all along the back of the building with lawn chairs. He leaned up against the railing and they pointed to the big house next door. There must have been 50 windows that took up most of the wall. It was the back of the Jewish Sorority House. They also pointed out other fraternities and sororities in all directions. He was very impressed.

After a pause to look around they headed back inside and went into what appeared to be an office, with a little desk, a filing cabinet, telephone, and more shields on the walls. All three of them sat down. John said, "I'm supposed to manage the pledges and transfers this quarter. You probably would like to know about the details. Are you thinking about staying with us?" He replied, "Maybe." Chuck said, "Well, here is what's going on. The house is mostly full of Sophomore and Junior Actives. The new pledges this year will be in the basement. We'll show that to you some other time, after it's cleaned up some. Most of the older Actives live in apartments in the general neighborhood, and come here to hang around, and for parties on the weekends and for other social events."

He said, "OK, that's about how it was in California, but no one was permitted to live at the house, because of some problems that had developed a number of years ago."

Chuck said, "That's too bad," after reaching into the desk drawer. "Here is a pamphlet on the dues and other explanations for activating your status with Σ AE" and handed it to him. He folded it up and put it in his pocket. They got up and went back into the living room. Most of the guys got up and formed a group. Chuck announced him and his origins and said something about maybe moving in with them. He spent the next 15 minutes standing around shaking hands and talking to them. All seemed to be great guys. After a while, he headed for the door, and waved to Chuck, Bill and the others saying, "See you later," and went out the big heavy door down the long steps to the sidewalk and headed to his rooming house a few blocks away.

When he got back to his room, he pulled the Σ AE pamphlet out of his pocket and read through the fine print. He came to the costs Wow, he thought, living there was going to cost way more than he could afford. He was immediately disappointed. He looked at the cost to activate and that too was very expensive and the yearly dues even more expensive, but he decided to squeeze it into his budget. He had made quite a bit of money over the summer at Diamond Power. A few days later, he went back to the Σ AE house and activated his association with the group. There was a party that Friday night and Chuck said, "It's perfect timing; it's Rush Night so bring a date if you wish." He told him he would think about it and departed for classes.

That afternoon he was sitting in the Student Center cafeteria having a sandwich and a Coke, when he noticed a noisy young lady talking about something, like a teacher instructing a small class. He couldn't make out what she was saying, but he also noticed that she was in a rush going to the counter, and in a rush doing everything it appeared from his vantage point. She walked by him and for some reason he spoke up and said to her, "Would you please slow down, you are wearing me out just watching you."

She stopped and turned to him and said, "Really? I wasn't aware that I wore people out" and in a hurry came around his table and sat down next to him. She reached out her hand and said, "Hi, I'm Mary. Who are you?" She became my first "girlfriend" on campus.

They spent the rest of the afternoon together getting to know one another. He felt some sort of electric attraction from this bundle of energy called Mary F. She was a townie and lived in Upper Arlington, not far from campus. She had black hair just to the top of her shoulders and was very good looking and was very well built. The kind of look that caused most guys heads to turn as she passed by, which he had already noticed in the Student Union. She was an avid tennis player, and her high-school tennis team had won the state or sectional tournament, he didn't remember which, but she said she didn't have time to play on the Ohio State tennis team. It would have just required too much of her time and might have impacted grades, she said. She was a junior and was planning to be a teacher of the arts in high school.

She was Catholic and politically active in a number of clubs on campus, but no sororities. She made it clear what she thought about those, which was in her mind, silly pods of insecure females looking for prospective, suitable husbands. Although she wasn't bragging, she let it be known that she was a straight "A" student and almost had a 4.0 GPA, except a philosophy professor had given her a B, which made her angry, about which she explained what the issue was in great detail. One miscue so far at Ohio State and she fumed about it for he never knew how long.

He interspersed his stories about California among hers in rapid fire, but it was difficult for him and easy for her. As it was getting dark, she said it was time for her to go home for dinner and asked if he lived on campus. He said that he did not but lived in a boarding house on 14th Avenue. She instructed him that she was going to drive him home and she did. They walked down the stairs into the underground parking lots. She drove a fairly new dark green MGA sports car with the top down. They got in and off they went, like a rocket. It was cold in the open car, but the sun was out. He had never been with someone who drove like her. In no time they were in front of his house. Without thinking, he said, "Would you like to go to a party at the ΣAE house on Friday?" She paused and looked out the windshield for a few seconds. He oddly knew instantly what she was probably thinking...1) She didn't think much of Frat boys, and 2) Did she want to commit to a first date with this guy that she had just met? She turned to him and said, "OK. What time do you want me to pick you up on Friday." He said "About 8:00 PM." He got out of the car, and she was off, not squealing the tires, but almost.

When he got to his room and sat down in his reading chair, he realized that she had worn him out and he leaned back and took a nap.

Classes began to be a blur, arriving in class after trudging through rain, then sleet, then snow. Taking notes, and then walking back through the mess, being careful not to slip on the icy sidewalks and streets. He would on occasion drop by the Student Center to get a coffee to warm up. He thought he could get accustomed to the weather, like he had before he had gone to California, but it was grinding on him.

That Friday night arrived, and it had snowed heavily over the past few hours. He and his new lady friend walked up the steps to the SAE house. Music was coming from within. They entered a living room filled with people dancing and some were walking around with their drinks over their heads to keep from bumping into people and spilling. Chuck and Fred spotted him and waved and began to weave themselves over to where they were standing. They took their coats and opened a door next to the front door and pitched the coats into a pile. Mary elbowed him to see if he had noticed that and he said, "Last here, first to leave." She said, "Are you sure?" They chatted briefly with the guys and moved over to where the drinks were sitting; there was a punch bowl and people were dipping their glasses in and out as refills. He reached for a glass, and she grabbed my arm, and said in a whisper, "I wouldn't do that if I were you," Then he looked at the bowl and got her meaning. It was probably loaded with germs. He diverted to where the beers in bottles were sitting and grabbed two Rolling Rocks.

They found a corner and began to converse but the music was too loud and so they spent about an hour far behind the punchbowl next to the back windows watching the guys and their ladies have fun, and they certainly were. One of his new friends, whose name he couldn't remember yet, swung by in passing while dancing, saying, "Michael, me boy" and moved on. Chuck, a few minutes later, came up to him and bent over to speak privately to let him know that that he had been selected to be on the Pledge Selection Committee and asked him to come to the room next to the living room in the next few minutes. He said he would and Chuck left.

She asked what that was about, and he told her that it was fraternity business, something about new pledge selections. After a few minutes, he excused himself and found his way into the designated room. When he opened the door, there were a bunch fellows lined up against the far wall. He inserted himself in the back of the room next to Fred. Each one on the line was introducing himself and telling a little about himself, where he was born, and what he planned to major in. One of the Actives was taking a picture of each one after their little speech. After the last one spoke, Chuck instructed them that they would learn of the results in due course, which he presumed meant who would be invited to become a pledge of Σ AE and who would be passed. After the prospective pledges filed out the door, one the Actives shut the door and stood in front of it.

Chuck brought the group of Actives to order, and said, "Gentlemen, you here are the governing members of the OSU Sigma Alpha Epsilon Fraternity. There are three new members transferring from out-of-state that we want to recognize and to induct." He did not know this was coming.

Chuck called out three names and, of course, he was one of them. They moved in front of Chuck, with the other 10 or 15 guys surrounding elbow to elbow, all very serious.

Chuck then, one by one, introduced each of them, the details of which he didn't remember but in essence it was a pledge to support and come to the aid and provide assistance to any member of the Sigma Alpha Epsilon Fraternity at any time for whatever stated purpose the person provided assuming the appropriate recognition handshake occurred.

He was the last one. Chuck affixed an SAE lapel pin. When he finished with me, he stepped back and said, "Congratulations Gentlemen." Then all of sudden all the guys pushed the three of them into a rally circle yelling "Rom, Rom, Rom," moving the floor below them, lasting about 15 "Roms." And it was over. They made a line for the three of them and shook hands quickly going out the door back into the even louder living room.

He made his way through the crowd, and noticed Mary F. was next to the front door. He arrived, and she said, "Are we ready to go?" He could tell she was ready to go. Their coats were in fact still on top and they retrieved them easily. He helped her with hers, and opened the door and they went out. It was really snowing then and the streetlights were barely visible surrounded by a white haze.

Her car was near the corner; they got in and she started the engine and turned on the wipers. That cleared the snow and off they went very slowly making crunching sounds as they rolled over frozen snow. They slowly rolled down the hill, barely needing the engine, and pulled up in front of his boarding house. She put the car in neutral gear, pulled on the emergency brake, and turned off the car lights, leaving the heater on that was just beginning to warm up. He began the conversation since there had been none since they had left the house.

"I'm thinking you shouldn't even try to drive in this weather. Why don't you just stay with me," he said. She looked at him closely, he noted, and then she said, "I agree, but no funny business." He replied, "Agreed, it's too early," he said. They had to creep up the stairs and then into his room before they could talk in subdued, but normal voices. It was very warm in his room because most attics get the benefit during the winters. They took off their coats and kicked off their wet shoes. He sat down in the only big chair other than the desk chair and beckoned for her to come sit on his lap. She looked at the desk chair for a second then fell into his lap. She was not light, but he hadn't noticed that before.

She said, after a while, "Did you enjoy your first fraternity party?"

"I thought it was interesting, not like the others who were having fun," he said.

"I'm sorry if it was a bore," he said.

She said, "Well, I thought it was interesting too. There was the future generation burning up brain cells in the hope of getting kisses later. Most Frat boys learn to be social, so they can sell financial programs and products, many ending up in marketing or business, and even in the ministry, which have similarities. They will all be selling something. They are training for a vocation. Someone in the sciences, like you, are training for a profession. As far as I look at it, there is an enormous difference in difficulties between science-related curricula, and non-science curricula and between the colleges and universities that teach them both. They are creating two very different perspectives in Americans today."

He almost applauded after her "lecture" but defended Capitalism as an unavoidable evil that could be controlled. She agreed that it's the best system available, but it was the greed factor that bothered her. "Nothing was enough," she said, and "they don't share, and they accumulate power in the process."

Although they hadn't talked much about politics with her before, her thoughts about the Frat boys and Capitalism made her a mandatory Democrat, he figured, although he agreed with her opinions. He didn't know how much of Democrat she was until months later.

They talked about an hour and then they both yawned, and they agreed that it was time to go to bed. He got up took off his shirt and pants down to his boxers and went into the bathroom to brush his teeth and gargle. She asked from the other room where one of his sweatshirts was and he told her "in the third drawer." When he was finished, he came out and she was standing there in a sweatshirt and holding one of his boxer shorts. He pretended not to look as she passed by on the way to the bathroom closing the door after her. He turned out the light and hopped into bed, and when she came out, he held the covers up and she slid into bed. Once they cuddled in, she said, "Wow, you are like having a furnace in bed. I love it." After a few minutes they settled in some more and then she said, "I said, no funny business until we're married." They both laughed and went to sleep. He had his head buried in her hair on the back of her head and the last thing he remembered was how nice she smelled.

He could hear the shower running as he awoke the next morning, moments later she was ready. He took a quick shower and got ready. They tried to get past the landlady, but she stood in the hallway when they passed but said nothing. They had breakfast at the Student Center and then went off to their respective classes in different directions; he was on the way toward the geoscience buildings, and she was off to her psychology class, he remembered her talking about earlier.

Toward the end of the quarter, he was working very hard on his course work, but his grades were mediocre, except for German and Geology. His finals did not go all that well in two of his courses, but acceptable in the two others. Grades came in the mail at home a few weeks later showing a GPA that was average at best, nothing to brag about, except for German, which represented his first A in college.

Christmas came and went, and the New Year, 1963, came as well, but without the Buckeyes going to the Rose Bowl. Wisconsin lost to USC, again. He noticed on the network news that the war in Vietnam was heating up and he was hearing from his friends in town that many working at Anchor and at Diamond Power were getting their draft notices via a lottery of some sort.

Anecdotes of a Lifetime

Over the holiday, he had growing concerns about his finances. Eating at the Student Center and not being able to cook in his attic room in the boarding house was driving up his expenses. Finding a cheaper place to stay where he could also cook in, and where he might look for a job, became a priority. Maxine and Clarence were doing what they could, like picking up his laundry once a week and delivering it all pressed helped, but it was not enough. He decided to get back to Columbus and try to solve some of his problems at least, and before tuition was due and before classes started in the next week. Steve had his 47 Ford working and he left for Columbus, which was only 30 miles away.

It was a cold wintry day on his way back to campus. Below freezing, but the roads had been cleared of the ice and snow. He pulled up in front of his boarding room as a place to start his search. He noticed a fellow sitting on the front porch of a three-story brick house across the street that was probably built in the 1940s. He was bundled up with his feet on the railing smoking a cigarette. For some reason, he crossed the street, took a few steps up the walkway, and said, "You look comfy in the freezing weather."

He laughed, "This is nothing compared to Korea in the winter." and then he said, "How do you like the boardinghouse room?"

He said, "Not so much."

He said, "I've seen you come and go. Come on up and have a sit."

He did and found himself talking to this new guy about all sorts of things, from the war in Vietnam to classes to girls. His name was Geoffrey T. Grant. He had light colored hair halfway down to his shoulders, and was about his height and weight. He was from Westchester County just north of New York City. His mother was an artist of some distinction, and his father was a senior editor for Reader's Digest. He was about his age. He had traveled and referred to serving in the Korean war, and was very knowledgeable on many subjects, including the ladies. He was a junior and was majoring in history and geography.



A Few Years Later, Geoff taking Photographs on an Oregon Beach



He told him that he was looking for a new place where he could cook in and not spend a lot of money at the Student Center and at the nearby greasy spoons along High Street adjacent to campus. Geoff allowed that the middle rooms were available there, on the first floor across from his room that he also had a full kitchen with stove and refrigerator, and a small back porch that he could use.

Geoff took him inside to have a look and it was quite nice, clean, and even had a large bed and some old couches, and a small desk. There was even a pay telephone in the hallway between Geoff's room and his new place. He was directed to the proctor, who lived on the other side of the building, who looked after the place. He signed a lease for the quarter, paid the deposit and first month's rent. He went over to his old room across the street and was packing up, when his landlady appeared. "I thought you were staying for this quarter too. You should have given me notice." He turned to her and said, "Look, I'm running low on funds and need to cut expenses and the thing I couldn't do here was to cook-in, so I had to find some other place." She said, "I'm sorry to hear. Well, OK," and she left. He dragged his suitcases down three flights of stairs, and across the street to his new apartment. Geoff announced to him that there was only one rule, when his door was shut, that meant stay out. Geoff was busy, which meant a lot of different

things he soon found out, such as, 1) presence of overnight guest, 2) smoking Mary Jane, and/or 3) sleeping off a hangover.

He shook hands with Geoff and thanked him for his assistance and went out to the street and got into his car and decided to cruise the shops along High Street looking for "Help Wanted" signs. There were a number of them, but some had issues, no shoe stores, no bookstores, and then there was a parking spot in front of an old, but rather inviting restaurant. The window had a sign: "Help Wanted." He parked and went in. It was mid-morning and there were only a few people in the restaurant. He went up to the counter and asked about the "Help Wanted" sign. An older lady, looking something his Dad's mother, Retta, pointed to an office down a hallway. He entered and there was a reasonable-looking portly man sitting behind a desk littered with flat and many crumpled up papers. He said, "I'm here about a job."

He looked up and came around the desk, shook his hand, and said, "I'm Jack O., I own this dump, or, I mean, my wife owns this place." He then asked if he had any experience in restaurant work, clearing tables, washing dishes, and/or behind the steam table. He said, "I worked at a grocery store in California, and did some stocking. The other things can't be that difficult." Jack laughed and said, "You right, it's not difficult. When can you start? My wife's mother is getting tired clearing the tables."

He said, "I can start tomorrow morning, say 8:00 AM if you like."

Jack said, "Great," and they shook hands.

He said, "Wait a minute, how much are you paying me?"

Jack said, "How about \$2.00/hr.?"

He immediately thought to himself, 'He's asking me?' he responded to Jack, "How about \$3.00/hr."

Jack said, "Well, OK." and they shook hands again. Jack took him out front and introduced him to his wife and mother-in law. They both gave relieved smiles, and both were obviously glad that help had arrived.

He drove those 30 miles to Lancaster on a bright, clear, but still frigid day. The fact that he had fallen into both a new place to stay and a new job cheered him up. Early that evening, the family went out to eat at that nice restaurant on Cherry and Main Street and had a great meal with mashed potatoes, a small steak, and lima beans. While talking, Maxine would still reach over and cut up Dad's meat. She even did that to him a few years back, by mistake.

He gathered up what other possessions he had in his room at home. His folks drove him back to campus that night, only because he decided he couldn't afford the gas, and any upkeep needed for his '47 Ford. He figured Steve would be getting his driver's license soon in any event and Steve could have it as far as he was concerned. Steve was already learning about the car while he had been in California.

They arrived in front of his new house. His parents then knew where his new place was for any future visits. He gave his mother a hug and fist-pumped his Dad and they turned walked back to their Barracuda and left for Lancaster.

He arrived at the side entry door, and it was ajar. As he entered, he heard classical music playing coming out of Geoff's room. He walked up the couple of stairs and stuck his head in an open door and saw Geoff with his feet resting on his desk, smoking. A pretty, dark-complected girl was sitting on the couch. He remembered thinking that she must be Geoff's object of affection for that night. He waved.

Anecdotes of a Lifetime

He turned and went into his new room and began to get things organized. He arranged his desk and hung-up his clothes in the small closet and laid out his toothbrushes and razors in an even smaller bathroom that was perfectly clean and newly painted. The shower was very small, built for only one, fairly thin person, but that was fine, he thought, for now. He finally went to shut his door into the hallway and noticed Geoff had shut his door already.

He went to bed and found that the bed was quite comfortable, much nicer than the one across the street. He drifted off thinking about the coming quarter and hoping that he could manage a job, 15 hrs. of courses, and everything else. Hoping for the best as he drifted off and in time, the alarm clock was buzzing 7:00 AM. He decided then and there that he absolutely hated alarm clocks.

The days went by under a rather rigid schedule and very quickly. Awake at 7:00 AM; show up at work before 8:00 AM; classes at 9:00 AM and 10:00 AM; then to work at 11:00 AM; then to classes at 1:00 PM and at 2:00 PM and at 3:00 PM; then a break from 4:00 to 5:00 PM; and then to work from 5:00 PM to 7:00 PM. Then, he had to decide whether to head for the geology library, the main library, and/or go home to study. Five days a week, but just work on Saturdays and Sundays.

After a few weeks, the Grant rule was rescinded. He decided he didn't care as long as he was quiet about going into the kitchen, etc. This was always interesting because there was often an assortment of different girls, some asleep, some smiling, and even some waving as he passed through his bedroom while Geoff lay there out cold in the mornings.

He was building up a good cash flow but there was a problem. As he sat down to read some assignments while taking notes, he would often find himself nodding off, waking up often past midnight with very little homework completed. He resolved and then re-resolved that he would press on.

One day while walking to campus to psychology class, he had on white, long shorts and a white golf shirt and tennis shoes. Really styling that day. He was with a group of students on the side of the street waiting for the cars to go by on High Street near the big bookstore. They began to cross all together and he caught up with them, when he heard motorcycle cop pull up behind. Everyone scattered across the street, three or four people ran back across the street. He ran with them and glanced sideways at the cop who was off his cycle holding his ticket book getting ready to cite someone, anyone. As they ran, he heard the cop say, "Hey you, in the white, stop" then he heard him running toward his three-wheel police motorcycle with a cherry on the front fender. He ran up the alley way and took a left. He could hear the motorcycle finally starting up so he went a little farther and took a sharp left and ducked in the back of a restaurant and through the swinging door to the kitchen, which looked vaguely familiar.

He was dripping in sweat. He figured the cop would cruise the back alley for about an hour and then park where he could see the back alley. He went into the restaurant and had a cup of coffee and after a while he got up and went to the front window and looked out the window. He saw him cruising slowly down High Street looking everywhere for that fellow in white, which shouldn't be that difficult to find, the cop must have figured. He went out the door and looked around the corner down the street. There he was off in the distance going the other way.

He noticed that there was a clothing store just two stores down, so he slipped down into that store and went in. He bought a new cheap shirt, dark color, and some brown shorts, and then bought beach slippers, and a sports bag and a cheap baseball hat. Total cost, \$52.00 that he couldn't afford, but it was better than paying the \$200.00 fine for jay-walking, plus resisting arrest. That probably meant Sing Sing Prison

for maybe five years, he mused. He changed into his new clothes and became a different guy. He had taken off his sunglasses to complete the anonymous look.

He had missed his Psychology class that day, so he began to walk back to his house on 14th Street. He made the turn on 14th to the east, and sure enough, there was the cop sitting there with a bead on the alley. Then the thought struck him, what if the cop asked him to have a look in the sports bag. Evidence! He had already planned to takeoff. The cop, however, paid no attention to him and kicked started his motorcycle and the cop went off down the street. The policeman gave up, but he vowed never to be that conspicuous again and never wear a white outfit, color-coordinated, again.

When he returned home, he told Geoff and he got a large laugh out of it, but he didn't think it was that funny. He told Geoff that it was a good thing he hadn't been arrested because it would have been up to Geoff to bail him out, at which time Geoff re-thought the situation, and said, "Good thing you escaped" and then Geoff started to think about it and they began to laugh even harder. Geoff had tears in his eyes it was so funny. He had the thought maybe this guy Geoff has a screw loose, because it just wasn't that funny, or he had missed the joke.

Another problem also developed and that involved he and Geoff becoming good friends. They would BS for hours and tell stories and debate on many new subjects well past his time to start studying. It was affecting both of them, but Geoff didn't have to work too.

A third problem came up as well. He had committed to ΣAE to participate in the Rush program last quarter, he also had responsibilities in the initiation of the pledges he helped to select. That required late evenings on too many occasions.

And finally, Mary would call once or twice a week and wanted to do things together, but he told her as nicely as he could that he was flat out and didn't have time. One phone call he remembered in particular involved telling her, "OK, as soon as this quarter is over, we'll go to Niagara Falls and get married." She was stunned, after a long silence, then saying, "Are you nuts?" He said, "Of course," then she said, "You are going have to become a Catholic, you know." They both burst out laughing simultaneously and of course she knew the pressure he was under. She made him promise to at least meet her at the Student Center to cool off with her during his break between 4:00 and 5:00 PM. He did that for the rest of the quarter, but it did not help much. She made him tired just trying to stay up with her refreshing thought-energized personality.

One night Geoff and he were discussing the war and the growing race problems, when Bob, one of the guys who lived upstairs, came into Geoff's room and said, "Gentlemen, we have a problem. They were listening carefully, Geoff saying, "In what way?" Bob said that he had walked by Sam's room and noticed the door was ajar after he saw Sam leave a few minutes before. Then he saw that the tall door of his armoire standing closet door was wide open. Then another of the guys who lived upstairs came in, asking if there was a house meeting or something. Geoff explained to him, and they all sat down and began to discuss the issues, almost in clinical terms, of how Sam was terribly shy, no one could remember when they ever had a conversation with him. Geoff said, "Guys, it is clear that Sam is afraid of girls, so we need to give him support." One the guys said, "How in the hell could we do that?" Someone said they should just leave well enough alone, while others said that Sam is missing the enjoyment of a relationship with girls and how fun that is.

Geoff stood up and said, "I have it, what do you think? I have a lady who visits me from time to time whom I think would do dear Sam a favor. I think I can convince her to present herself to Sam for the purpose of showing him how fun it could be." Someone said, "O, no, you have to be kidding." Geoff said, "I wish someone would have arranged something like that for me when I was a teenager." Then the plan was accepted, with only one dissention.

That weekend, Geoff had made arrangements with Shirley. On Friday, Shirley had spent the night before with Geoff and she had agreed to this righteous plan to liberate Sam. Everyone gathered in Geoff's room talking to Shirley and among themselves. Most of them would likely have Shirley visit them as well some time.

The time came. Sam was in his room. Shirley was off to educate Sam on the benefits of female company. They were listening as Shirley knocked on the door, heard some muffled conversations and the door shutting. Someone whispered, "She's in." They listened. About 10 minutes went by and then all of sudden they heard yelling and screaming and furniture breaking sounds. They all ran up the stairs to Sam's room and tried to get in but the door was locked, so someone kicked in the old wooden door and off its hinges. They went in and found Shirley on the floor crying. Someone sat her upright; her face was covered in blood.

Someone said, "Where is that SOB?" and they noticed the window was open and they saw someone running down the street toward campus. Geoff was holding Shirley and said, "We need to get her to the hospital." Three of them and Shirley got into one of the guy's cars and went to the University emergency center. She was in the hospital for three days with a broken jaw, wired together, and a cracked rib and likely a concussion. She told the story of being mugged by a white guy on the street to the police and school newspaper. The guys visited her the third day when she was feeling better. Geoff had been with her throughout the first night and following days.

Shirley told Geoff what happened. She was making progress with Sam showing him a few things and then began to work on him very softly when all of a sudden, he exploded in rage. She said she wasn't forcing herself on him, just warmly prodding him. She said he got up with this terrible look on his face and hit her with his fist in the face as hard as he could and then again and when she had fallen to floor, he kicked a couple of times and then went out the window onto the porch roof and gone. Then you guys broke through the door. She said she thought he was going to kill her.

A few days later, on Saturday, he was with Mary F. and told her about what had happened. For the first time in their relationship, she became furious at him for not opposing "such nonsense," she called it. He told her about how the guys had a meeting to discuss the issues and how they had decided that the plan involving Shirley would help the fellow to learn to like girls in that special way that for some reason he had never learned.

They were going to his place to listen to some music and got to the place and went inside. Geoff's door was open and they went in. Geoff was there and so was Shirley. Her face was black and blue, one eye was still almost swollen shut. They soon saw that she was drinking through a straw because her jaw was still wired, and it was painful to open her mouth. Mary instantly hugged Shirley with tears in her eyes. Then she turned to Geoff, and he said, "What the hell is wrong with you people," meaning all of them. Geoff was looking down. He was watching Geoff's reaction. He said nothing, for a while and then Geoff said, "We screwed up and I have been apologizing to Shirley for days now." Mary turned to the rest of the guys who had just entered the room and said, "You guys should have not let this happen. Shame on all of you."

She continued by saying that they all should apologize to Sam as well for putting him in that position of psychological hell. He was probably born that way and couldn't help what he preferred. She turned to him and said, "Let's go." She hugged Shirley again and they departed. On the way to dropping him off at Jack's, she said that she was very disappointed in him for not stopping the nonsense. He agreed that he screwed up as well.

Working at Jack's was at least not boring. After a few weeks of clearing the tables, and doing the dishes, Jack decided to hire an ex-con Jack knew, Willie, to handle the dish washing and clearing the tables. He kept saying business was improving and his cash flow was rising. After Willie could go it alone, Jack asked him to join him behind the steam table. He taught him the fine art of frying eggs on a griddle, flipping pan cakes and waffles, and how to rapidly load dinner plates with mashed potatoes and green peas and/asparagus. After a while, Jack would leave him by himself to oversee the morning's breakfast orders. He also bumped up his pay to \$5.00/hr., all in cash, paid on Saturday evenings.

One Monday, he was having breakfast with Jack when Jack was beckoned away from the steam table by his mother-in-law who was pointing toward the rear door. He was walking toward the door when it opened. He had followed Jack enough to see a large black four-door Lincoln in the alley behind the store. As Jack went through the doorway, a distinguished well-dressed older man smoking a short cigar got out of the car and handed Jack a large bag. They shook hands and he got back into the car. As Jack turned to come back into the restaurant, he quickly returned to the steam table. By the time Jack came back, he was flipping a potato pancake he had made earlier just for fun.

The business was slow that day. After Jack surveyed the restaurant to judge activities, he turned to go to his office, and beckoned him to follow. Jack reached under his desk and presented him with a white puffy cook's hat like to one he wore when behind the steam table, but he never wore it straight up, always slightly tilted, as if he had been instructed by a senior chef in the past.

While he sat in front of Jack's desk, Jack had his back to him while he was busy doing something. He turned around and sat a briefcase on his desk in front of him.

He said, "I have a new task for you, if you don't mind." He said, "Sure, what?"

"Last week's cash receipts are in this briefcase. I need for you to take the bus out front up to the Third National Bank and give it personally to the Vice President." He handed him a note with the VP fellow's name on it. He then walked around the desk with the briefcase in hand and sat it down next to his chair and produced chrome-plated handcuffs. He said showing them to him, "These are so no one can grab the brief case from you." He then put the cuffs on his wrist and through the eyelets below the handle of the briefcase. He said, "Wow, this feels odd. I've never had handcuffs before."

"And let's hope you never do, Son." Jack had never called him Son before. The first time went well, like a well-oiled machine. During one of the trips on the bus a few weeks later, he noticed that someone was paying him a lot of attention. An African-American lady barely took her eyes off him all the way. He never noticed her before, but then again, he rarely looked around because Jack said that made the person look nervous about something which might attract the attention of the bad guys out there. He got off the bus, and so did she. He went across the street to the bank. She didn't. He went into the VP's office. The VP had the key to the cuffs. He left with what he presumed was an empty briefcase. As he came to the bus stop, he sat down, and she appeared from somewhere and sat down beside him. He didn't say anything until

she said, "I work for Jack to watch your back." He smiled, she smiled and said, "You are doing fine, but don't look for me in the future, just mind your own business, like Jack no doubt told you." He said, "OK."

They boarded the bus together; she sat in front; he went to the back of the bus. They got off at the same stop in front of Jack's Restaurant. He never looked for or saw her again. As the weather was warming, one morning Jack produced a new thin-wheeled bicycle. He said he thought he might like to have one so he didn't have to walk to and from his house to Jack's place, and to the bank and back, he added.

He said, "Great!" During one of those trips on the bicycle, the clasp that joined the two sides of the briefcase came undone somehow. Although the briefcase was still firmly attached to his wrist, as it hung down below the handlebar, he could see rather clearly inside of it. There were many, maybe 10 to 20 bundles of crispy clean, even new one-hundred-dollar bills, with each bundle half an inch thick and individually wrapped with the tape with dollar amount in fancy writing, but he could not read the actual number. He guessed at \$10,000 / bundle. He quickly reached down and closed the case with a snap so that he knew that it was closed tightly.

He made the delivery and returned that day without incident, but he has some serious things to think about. After he returned home from Jack's that night on the bicycle, he did some calculations, \$10,000 times 10 = \$100,000; then times 20 = \$200,000. The hundred-dollar bills were not the kind of currency Jack traded in feeding students. Further, the bills appeared to be new. They never went through Jack's cash register. Based on the black limousine in the alley a few weeks before and the bag Jack was carrying, combined with the physical nature of the currency, he concluded that it could only be one thing, Jack was running a money-laundering operation using the restaurant as the face, and he was the mule.

Jack had made a habit of putting #11-size cans of peas and applesauce, and a couple of raw steaks wrapped up in tin-foil in the carrier bag of his bike on an almost regular occasions for him to take home, but never said a word about it. Geoffry was beginning to look forward to what he was bringing home from the restaurant. Geoff cooked up the steaks quite well. But all that had to come to an end, and he was happy to see the end of the quarter.

Most of his classes were not going well. The geology course was very difficult requiring a huge amount of rote memory of time periods, age periods, terminology, place locations, and paleontology, with even more terms and fossil forms to memorize and draw. He was often nodding off in the lectures even though the lectures in geology were fascinating to him. The psychology course was crazy with an expensive 500-page textbook assignments to read. The third course in Calculus was making little sense to him. Finals were the next week and he told Jack that he would need to take off to study for finals and that after finals he was going home to work at Diamond Power for the summer.

He put his big arms around him, and "Sorry to see you go, Son, I do like your style. Be sure to come see me when you get back in the fall." He said he would and left Jack's bicycle behind and walked to campus and then up his 14th Avenue to his house that night. One thing was sure about that was he could not tell anyone what he had concluded about Jack's operation, especially not Geoff because he would have gotten a huge kick out of it and maybe even would have hatched a plot to grab the money and frame him, who knew. He even forgot to tell Geoff years later when he saw him again once in California.

Finals came and went. The next day or so, he went into the Registrar's office to get his grade packet. He opened it. He had flunked Psychology 101. He had even participated in a lab experiment where one was seated in an enclosure and presented with large colored photos of women's faces, one at a time, and was

asked to indicate which ones were lesbians and which weren't, and which ones you couldn't decide. The midterms and final were in multiple choice. He received a D in Paleontology, which he otherwise enjoyed, but it required a huge amount of drawing and memorization, and a C in Calculus, where the lectures were presented via CCTV in large classrooms by an Asian lecturer with a heavy accent. Attached to the grade packet was a notice with an asterisk to advise that his GPA had fallen below 2.0 and that he was suspended for two quarters, but because of his outstanding grades in other subjects, this was not a permanent dismissal, and that he could reapply in early 1964. He was one of the 67% that would not be back that year, but he would return, he remembered thinking at the time. He didn't tell anyone about that action for two or three years. He told the cover story for not returning was because he needed to make enough money so he did not have to work while going to classes, which was all true.

He had met Mary at the Student Center for a few beers after their finals. She was fuming again about another professor throwing her class a curve ball in the test that sent many students' grades downward. She said, "I'll bet half of the philosophy class flunked or D'ed the course. I was just lucky to get a B." He remembered her asking how it went for him and he replied by saying, "I know one thing from this quarter, I'm never again going to work while going to classes. I'll stay out extra quarters if I have to in order to make enough money." She said "I'm sorry this has been so hard on you." She hugged him with an extra squeeze. She sensed the truth, he figured. Then she handed him a piece of paper with her telephone number and said, "Call me, maybe we could get together over the summer?" He said, "OK."

He walked home and gathered his things and packed his suitcases at the apartment. Maxine and Clarence were supposed to be there around 2:00 PM. Geoff came in and they talked for a while. He too apparently had a bad final in one of his important geography courses and was thinking about changing majors. He was staying on for the summer quarter, only because he didn't want to go back to Westchester County in New York for the summer. He always claimed that all he got at home was "heat," but he never explained what that meant, although one could guess. He heard Maxine and Clarence coming through the door. He then introduced them. He said goodbye to Geoffry T. Grant and shook hands, saying, "See you around," and they headed off for Lancaster.

And that was that for that quarter.



Chapter Six

1963, Retooling and Realizations



A Sketch Inherited from R. I. Rackley, 2018

The world around him continued to heat up in national rhetoric as the news media began to change Americans' views. Martin Luther King, Jr., delivered his "I have a dream" speech. Members of the Ku Klux Klan dynamited the Baptist Church in Birmingham, Alabama. The Sabin oral Polio vaccine, which was taken with a lump of sugar, was distributed nationwide in U.S. and UK. Then, in November of 1963, President John F. Kennedy was assassinated allegedly by Lee Harvey Oswald, who was then oddly killed by Jack Ruby, who then died in prison due to an illness. This chain of events remained controversial for decades.

The continuing campaign for civil rights by the African-American community caused violent reactions from some whites in Mississippi, Virginia, and Alabama, where the black civil-rights leaders were arrested for allegedly causing problems. One of the more interesting movies of the year was "The Birds," by Alfred Hitchcock, a not-so subtle nod to growing environmental concerns.

NASA lost contact with the Mariner 2 spacecraft, bringing an end to the successful mission. The Mariner 2 spacecraft had been launched on August 27, 1962, and became the first mission to successfully observe another planet when it flew past Venus. Before contact was lost, it had transmitted data back to Earth about the temperature, atmosphere, magnetic fields, and radiation on Venus. The Soviet Union launched the Vostok 6 spacecraft, carrying Valentina Tereshkova, the first woman in space. Ohio State football program remained mediocre in losing to USC, Penn State, and even Northwestern, but beating Michigan once again.

By the end of the year, the last Studebaker car was produced. The United States and the Soviet Union had agreed to establish a "hot line," a direct communication system between the two nations to prevent a possible nuclear war, but there were mounting troubles in Vietnam when the Viet Cong guerrillas killed

Anecdotes of a Lifetime

80 American Advisers. It was clear that the war was expanding in scope and even more in the loss of American lives.

As they drove toward Lancaster that spring of 1963, he had a sudden realization that with those grades he might be vulnerable to the Army draft. The Vietnam War was becoming even more of a problem along with the brewing racial unrest that was developing in the South. He just knew that it would all be resolved and it didn't bother him much.

When they arrived home, he noticed his '47 Ford was nowhere to be seen. He asked where it was and Maxine replied, "Oh, I had a little accident a few weeks ago. The brakes failed and I plowed into a telephone pole."

He said, "Are you all right?"

She said, "I was prepared for it, no problem. But the insurance company totaled it. We got \$500 for it." He thought that there was more to the story, but he let it go. The important matter was that he now had to buy a car somehow. Both of his parents used their two cars for work every weekday. They talked at the dinner table about the problem that evening and decided that he would find a suitable car, and Maxine and he would go to their bank and arrange for a car loan. Then he would go out to Diamond Power to see if a job was still available, and if not, start the search for a new job.

Brother Steve and he went off to find a new car. They went to various used car lots along Memorial Drive and out east along Main Street. He was about to give up when they saw a car parked along the street with a "For Sale" placard on the windshield. They took the telephone number down and kicked the tires, looked for fender damage, and peered inside.

Someone approached them and said, "You interested?"

He said, "Maybe, how much? How many miles?"

The fellow told him \$1,500 and 40,000 miles.

"It's a 1957 MGA Roadster convertible, with wire wheels, and the color is robin-egg blue."

He said, "I'll have to have a mechanic have a look."

The fellow said, "Sure," and pitched the keys to him. He printed his name and address and telephone number down on a piece of paper and handed the information to the fellow.

The fellow said, "No rush, but you should put some gasoline in it. It's probably low." He thanked him.



They went back to the house and told Maxine and Clarence about it. She drove him back to where the car was sitting and got out and they walked around it again. She said, "It's a pretty car, but a little cramped don't you think?" He thought about it, but said, "It's just snug, no need to double date anymore" and turned to get into the car. He saw the fellow standing on his porch and waved. He waved back and they were off down the street in his new car.

Steve was beside himself in excitement when they drove up. "Do I get to keep it when you go back to school? He said, "We'll see." The next day Maxine and he went downtown to the bank. She signed for a

personal loan without collateral. The bank officer had known her for years from the time she managed the accounting at the hardware store next door to the bank.

Later that day, he and Steve took the car to the mechanic shop his parents had used out Main Street. He drove it in and got out. A short, burly fellow came up and said, "What do we have here? An MGA. Been a while since I've seen one of these."

He asked him if he could look it over and tell him if he should buy it. He agreed and got into it and took off down the street to put it through its gears. After a few minutes he arrived from the other direction, pulled up and drove the car over the hydraulic lift inside the garage. He got out and went to the handle that controlled the lift and up it went. He took a while to look under the car at the oil pan, the transmission, the brakes, from one end to the other. Steve was walking around with him very interested. He made some notes and came over to where he was sitting. He sat down and said,

"Well, it's in pretty good shape. There has been a lot of work done on it recently and that's a good thing. There are no oil leaks, there are no metal fragments in the bottom of the oil pan, the brake linings and pads look new. The gear box is a little loose, but that doesn't mean much in British cars. There are some cracks in the plastic segments of the convertible top that you may want to replace before winter, but overall, it's a beauty."

He thanked him for his service, and paid him \$50.00, ten more than he asked. Off they went back into town. They dropped off the check at the fellow's house and got the title signed over and all seemed in order. They went back home. When he pulled up, Dad was sitting on the porch steps and met them at the curb. He walked around it and said, "Did it check out OK?" He said, "The mechanic said it was in decent shape." Steve, who had his driver's license by now, then asked if he could take it for a spin and he agreed. Off he went and disappeared around the corner.

While Steve was gone, he began to think about how to handle Steve's use of his car, which could become a problem. By the time he returned, he had developed the rules. He motioned for Steve to come sit with him on the porch. "Now, I have come up with a plan for your use of the car. In return for your keeping the car clean, waxed, oiled, tire pressure checked, and radiator water checked, you can use my car on Sundays, 3:00 PM to dark, unless there was snow and ice on the road." Steve was happy as a clam and nothing more was said on the topic. He did an excellent job over the following months. This was the beginning of Steve's interest in such cars. Only a few years later he bought an Austin Healy, and then began to refurbish the interiors of Maserati's, Lamborghinis, and Jaguars that he purchased overseas for a while until EPA developed rules that prohibited importing such vehicles.

He always admired Steve for his mechanical abilities and his artisanship even beyond his radio and TV successes, when he became the anchorman following Walter Cronkite on the main CBS television station in Greensboro with 'Steve Campbell and the Evening News.' He thought all that was quite cool and was very proud of his younger brother. He had inherited his father's good looks.

The next Monday he called John, the VP, who had spearheaded getting his job at Diamond Power the previous year. He indicated to John that he was home from school and ready to go back to work. John said, "Tell you what, come out tomorrow afternoon say 2:00 PM and we'll talk about it."

He thought that sounded a little ominous, but the next day he put on a sport coat and tie (blue shirt with button-down collar) and drove off in his "new" car. On the way out, he passed the Old Children's Home

that Dad and his brothers lived in those many years ago and noticed there were more businesses appearing along the way, but the old drive-in movie was looking a little ratty and may even be closed. There were many memories there he remembered. He took a right into the DP parking lot. It had a fair number of cars, and that was a good sign that business was booming, he figured.

He was accompanied to John's office on the second floor. The two walls were all window glass. John greeted him with both hands and a big smile. "Good to see you again," he said. "How was school?" He said, "up and down, but I learned a lot."

John said, "Anything useful?"

He responded in serious face saying, "One thing I learned is that I cannot go to school and work at the same time in the mornings, evenings and weekends."

John said, "You sound like you had a difficult year." He agreed. "Does that mean that you will be with us as more than just one of our 'Summer Wonders'?"

He said, "Yes, maybe for at least a year or two."

"Well, that's good to hear," John said, "because we may have a different position for you." He went on by saying:

"Diamond Electronics is located in that building to the east of us here. That group has an opening that you might find interesting. After I spoke to you yesterday on the phone, I spoke to Jack M., who is the Vice President of that Division, and told him about your record with us and suggested to him that he might want to discuss the position he has open with you, before we take you back inside DP. He agreed, so here is the plan. Go have a talk with Jack now and then come back and we'll discuss things in greater detail. How is that?" he said.

He said, "I really appreciate your thinking of me. And yes, I would be glad to talk with Jack." With that they got up, shook hands, and John pointed him in the direction of Diamond Electronics, just next door.

He arrived at the receptionist's office at DE after a short walk and was taken to Jack's office on the 2nd floor. A fairly tall, thin fellow greeted him, and they sat down to talk. Jack was looking at some papers and said, "Well, the record of your work last summer in the parts department over at DP certainly makes you a viable candidate for what I have been looking for," he said looking up at him. "Says here that that you helped William reorganize the part's acquisition and distribution system into a very useful service for their operations."

He said, "It was William's basic idea. I just helped him implement it."

Jack said, "William says here that you did a lot more than that."

Then Jack began to tell him about himself. He had graduated from Vanderbilt University in civil engineering about 10 years ago, was married and had a daughter. He was raised as a Catholic, but his father was Jewish. He said that both of his parents grew away from practicing religion of any kind, and Jack was left to decide on religious matters for himself.

He instantly liked Jack, who was very quick-witted, pleasant, and reminded him of a fraternity brother.

Jack then began to tell him what he had in mind, but first he provided a brief introduction as to what they did at Diamond Electronics. They engineered closed circuit television systems for industrial applications all over the U.S., with special emphasis on high-temperature environments, for which Diamond Power produced their soot-guns for use in boilers and in blast furnaces, and which required monitoring of the high-temperature processes by CCTV systems engineered and installed by Diamond Electronics.

Then Jack said, "You probably noticed last summer over at the DP plant that many of the parts were electronic in nature. We use DP Purchasing to acquire the parts and then to assemble the systems we design to be compatible with DP equipment also used in boilers and furnaces. Our business is growing rapidly, and I need someone to function as a bridge between sales and engineering, in a position we just created called a Corresponding Sales Engineer, and quite frankly you might be the person to fill that position."

He said, "Sounds interesting."

Jack said, "The position will probably evolve into requiring a graduate engineer, but we decided to start with a mature college student and see how the function goes."

He immediately realized that the position was perfect for him to help build something like that without a concern for a long-term future with DP or DE. He then said, "What's the salary and benefits?" thinking it was time to get down to the financial part of the position description...money and benefits.

Jack said, "This is not an hourly union job. It is full-time salaried employment, since I hear that you plan to be with us for at least a year, maybe two, before you go back to school."

He nodded.

Jack then said, "The salary is \$4,500/year, plus health benefits."

For some reason, he then asked Jack if that included a formal six-month review of salary. Jack said, "You bet."

He said, "If this is an offer, I accept." Jack said, "Great, can you start tomorrow?" He said, "You bet."

Jack said, "I'll show you around tomorrow and introduce you to everyone." He said, "Look forward to it."

Jack said, "So do I."

He departed DE and walked back over to discuss his decision with John at DP. John was delighted and wished him the best. In his drive back into town, he was thinking that all the planning had been executed successfully: a) find and acquire car (Check), b) find an excellent job (Check), and c) cheer up (Check). It was time to re-tool and begin to stack away as much money as he could to prepare for re-entry at Ohio State sometime next year.

The next morning, he arrived about 9:00 AM at Diamond Electronics, took the stairs up to the second floor and walked along the hallway. As he passed an open door, he saw rows of ladies, some young and some not so young, sitting at their typewriters banging away. He reached the Marketing/Engineering office door and went into Jack's office. The door behind his office opened into a long office with two rows of desks separated by a wide aisle.

Jack appeared with five fellows, all in expensive suits and classy ties. He introduced everyone all around. These guys were sales engineers who were responsible for different sections of the U.S. Jack then took him into a side office with two desks. In one corner there was a desk and a fellow about 45 years old, or so he thought, who was the Applications Engineer, John Anderson. He was responsible for approving or adjusting the designs for each system, because almost every environment was unique and required custom CCTV systems.

He shook hands with John A. and was shown to his desk at the other corner of the office. He thought the layout was perfect: the guy who knew everything, 'the main supervisor,' the fellow who was to sign off on everything; and the sales team who were at hand around the corner and available with connections to the clients.

Each of the sales guys came by that first day and sat down beside his desk for a chat, just to get to know him, because they wanted to know who they would be talking to on the phone when designs and cost estimates were being assembled. Each left their business card with telephone numbers where they could be reached. One of them turned out to be a fraternity brother. He had graduated from Indiana ten years earlier. When the subject came up, he told him they were brothers. He said, "Let's see." They both stood up and shook hands. Having received the appropriate recognition, he patted him on the arm and said, "Welcome to the bunch, there are all manner of old fraternity fellows around here. We'll go get some beers one day soon, after I get back from a Florida trip."

After that meeting, and over the months to come, he accumulated many new friends in the sales guys and it was true, they were all fraternity fellows of one Greek group or another earlier in their careers. Some even played golf when they could find the time. Of course, when they were with clients, golf was a central activity so most of them were very good golfers and knew how to let the client win often without being obvious.

Some people brought their lunches and would eat at their desks, while others went to the lunchroom where there was a wall of snacks, bananas, apples, and soft drinks, coffee, and tea. He was surprised how social things became as lunch time came; the lunchroom filled to near capacity. Groups of ladies, groups of men, and groups of mixed folks all were talking at once, and it was soon rather difficult to hear someone across the long tables. He could see people with their heads almost touching and he soon realized that it wasn't necessarily affection causing that but only the desire to hear one another, albeit in private conversations.

On the first day, he was sitting with John A. and a young, attractive woman appeared and sat down next to him. He leaned over to get a better look at her and he recognized her. It was Elaine A., from West School and high school days. She was working at Diamond Power next door and said, "I saw that you had joined our happy bunch." He said, "How so?" She replied, "I had recently typed a couple of memos mentioning your name." He said, "What did they say?" She laughed a little and said, "I wouldn't be a very good confidential secretary if I blabbed confidential subjects, would I?" He agreed and dropped the subject. She was a striking looking young woman, he remembered, and he thought she must have some Native American blood because she was almost as dark as he (in the summer) and had the blackest straight hair he had ever seen in a woman. It hung straight down to her shoulders. He learned that she had married someone he didn't know and had had a son a few years before. He also remembered that she always sat fairly close to him in grade school. Then it struck him, 'Was she the one with the beautiful shoes in the

third 3rd grade?’ They were usually seated alphabetically. He also remembered that she was really smart. She apparently didn’t remember the incident and he wasn’t about to bring it up.

He asked her about college, and she said she was getting around to that. Years later, he had heard that she did go to good colleges for her bachelor’s degree and her master’s degree and even went on to receive her Ph.D., accomplished mostly as a single mother of three children and was subsequently appointed as president of some regional colleges in northern Ohio and Michigan. He tried to stay in touch over the years but that was difficult because he was in a different world.

Later that day, Jack brought in a stack of manuals on the different equipment used in the systems, like the new vidicon TV imagers, the older ortho tubes, venturi cooling (or heating) subsystems, and the cost sheets and graphical lay out of previous systems. He remembered that day, and others to come, that he felt like a kid in a candy store.

There was a large, heavy blackboard with chalk that was John A’s. He soon learned the procedure. John (and later he) would roll it out of their office around the corner into the sales engineer’s office to a particular desk. That sales engineer had a possible sale, and he needed a system designed and described in a proposal with estimated costs and diagrams (which he learned was prepared in the drafting room down the hallway). Everyone rolled around in the office. It was kind of funny at first to see three or four guys moving around that way at the same time.

The sales engineer was responsible for providing the data on the specific environment (max/min temperatures), nature of ambient air (clean or dirty), amount of anticipated light, etc. in which the CCTV system was to operate, the location of power, and location and distance from the cameras to the TV monitors and panel below (or above) that controlled the cameras’ focus, horizontal and vertical video stability, etc., and other items. After hearing the sales engineer’s presentation about the needed system and after drawing a map of the system on the chalk board, John A. would then determine what would be required for the system, and mark with the chalk the model numbers and symbols meaning certain connectors, housings, switches, distances, lengths of cable, etc. at various locations on the blackboard.

When John finished, they would roll the board back and forth to add new information based on their research. His job was to make a record of what was on the blackboard after they finished the mock-up and write up in draft form the written account of the design decisions. And then he would give the draft to John for final review. When it returned from the typing pool down the hall, the proposal was assembled, with a cover letter he prepared summarizing the system elements and estimated cost and estimated delivery date. The letter was signed by,

Jack T. Meyers, P.E.
Vice President, Marketing Division

and below by,

Michael D. Campbell,
Corresponding Sales Engineer, Marketing Division

The next morning Jack came into his office and said, “Let’s go, I want you to meet Ralph Matthews, Executive Vice-President of our group.” On the way down the hallway, he told him that Ralph had been instrumental in the development of early radio, especially as co-founder of Zenith Corp. and later with

Magnavox and Westinghouse.¹⁴ When they arrived at the receptionist's office, she asked them to have a seat, and that, "Mr. Matthews was on the phone to New York," which had some significance they assumed so they both sat in silence. His deep voice could be heard through the door, but not in any detail. He could tell that it must be important because Jack was trying to listen to what was being said.

After Ralph hung-up, he opened the door and said, "Come on in, guys." They went in and sat down on very comfortable visitors' chairs. Jack immediately indicated why he wanted some time with Ralph. He introduced him and summarized almost in verbatim what he told him the day before about his newly created position.

Ralph was a very interesting looking man with a thin, pleasant face. He must have been at least 75, if not 80 years old, but had a few wrinkles in his face and a full head of white hair. His hands were very wrinkled, he remembered as he shook hands with him when they came in. When Jack finished, he turned to him and said, "Looks like you have a very challenging job."

He quickly replied, "Looks interesting, I'll admit."

Ralph said, "Tell me about yourself."

Normally a request like that would have put him edge, but he felt very calm and very confident. He spoke for maybe five full minutes about his interest in science, in rocketry, and in his going off to California to begin college, and after a year transferring to Ohio State and declaring his major as geology, and his decision not to ever again work and try to go to college at the same, because it was too hard on him.

Ralph sort of chuckled after he had finished and said, "I had the same problem trying to get through Lane Technical in Chicago in the old days. It took me about 6 years, but I got what I needed," he said proudly, pointing over his shoulder to the wall behind with the big, framed certificates and a bunch of other plaques commemorating accomplishments, one of which enclosed a certificate with notation, 9ZN, his radio call ID known around the world, he said. He then said, "I'm sure you're going to do well."

That was apparently a signal to Jack that it was time to leave, so they rose, and Jack said thanks to Ralph, and as they were walking by the receptionist's desk, the telephone rang and they heard her answer and then say, "Mr. Matthews, it's Los Angeles," as he closed the door into hallway.

As they walked back to their office, Jack said, "That man is a legend in his own time. He knows everyone in the world involved in electronics. We can't keep up with all the leads he is generating for us."

He said, "He seems like a very interesting man."

Jack said, "My wife and I were invited for dinner at the Matthews a few months ago and it was so refreshing to hear his stories. He has been working on his memoirs to capture that period of time."

After that first day and the weeks of learning that followed, he was having great fun, although Jack would have to remind him that 9:00 AM was when the office opened to business, not 10:00 AM as was often the case, even though he almost always stayed to 7:00 PM and even later when a proposal required his attention. When reminded by Jack occasionally, especially when one of the salesmen would make a crack at a staff meeting about "the boy" having banker's hours. That criticism soon melted away one night when one of the salesmen came into the office late for something and found "the boy" working. When he left,

¹⁴ Google Search Results ([here](#))

the salesman found out from the night guard at the gate that he worked late almost every weeknight. He told Jack and there were no more criticisms about his “banker’s hours.”

During lunch time, he was getting to know a number of the ladies besides Elaine. He noticed that most of them were about his age, but they had gone to the Catholic High School in Lancaster, so he didn’t know any of them. One day, one of the ladies he had met earlier that week slid into the table next to him and said, “I’m having a party and you are invited.” He hadn’t gone socializing (to a bar, bowling alley, or movie) for months so he accepted the invitation and said, “Where, and When?”

That Friday night became a fixture in his permanent memory. When he arrived, almost the entire Catholic baseball team of his era was there, some with wives, some still single. Almost everyone would come around that first hour and want to talk about the LHS shortstop (i.e., himself) that almost took the ear off the SMHS’s pitcher Bob Miller in 1959 with a line drive and how LHS would always beat their team. He asked whatever happened to Miller. Someone said that after high school, Bob just dropped out of sight. No one had seen him or his brother Bill since. Word was that their father had gone off the deep end and left the boys. A year later the house stood empty.

He said, “I live 3 or 4 houses down from the Miller house, and I’ll ask around, especially Mrs. Fey.” One of the guys said, “Do you know Mrs. Fey? He said, “The Feys live 2 or 3 houses down the other side of my folks’ house across the street from Elmwood Park. I bled all over her rug and she literally saved my life in 1957.” The fellow asked, “What’s happened?” He replied, “Ask Mrs. Fey.” The fellow said, “I will.”

Being among the opposition made him a little apprehensive at first and was on guard for a sucker punch from somewhere but none came. They all became great friends in a matter of hours and he felt oddly comfortable in their midst, with no one giving him the evil eye. Some of them had gone away to Notre Dame, or other Catholic colleges but ended up back in Lancaster for one of a number of possible reasons, e.g., pregnant girlfriends, trouble with coursework, trouble in paying for tuition, trouble in the form of the Vietnam War. Two of the single guys were heading to bootcamp in a few weeks. When he heard about that he almost simultaneously noticed that almost all the wives were pregnant. He asked himself, ‘If my wife were pregnant, would I not be drafted?’ He realized that he had never thought about that and didn’t actually know for sure what the answer was. He soon would.

He had noticed a young lady who had just arrived while his conversation about Mrs. Fey was going on. He watched her for a while and the fellows were talking to her one after another. He noticed she would leave a three-way conversation to go to where the drinks were being poured and then go stand by herself or talk to other ladies. He decided to intercept her and see what happened. While getting the next drink, sure enough there she came. He said, “Hi” and she said, “Hi.” Then she said, “I haven’t seen you around.” “I didn’t go to St. Mary’s,” he said. She said, “Just as well. I wish I hadn’t.” He said, “What makes you say that?” She looked around to make sure no one could hear her, he figured, and said, “That’s all a bunch of BS, just couldn’t stand it, but I had no choice. My folks wouldn’t have it any other way.”

Her remarks cleared the table for discussions about anything. They began to talk about all sorts of things, about her brother, who was problematic, about her father, who sold bubble gum all over the eastern U.S., although she thought there was more to that story. Her mother was petrified of her father although she never once heard them argue or fight or disagree about anything. She had been in a Catholic girls school in New Jersey, but the family had to move for reasons she was never told.

She stopped and said, “I don’t know why I’m telling you all of this. You are the classic perfect stranger.”

The noise was really getting loud as the house filled up with people, and they went into the kitchen. People overflowed into the kitchen behind them. He saw a door and opened it. It was a fairly large coat closet. He turned his back to it extended his arms and grasped her hand he gently pulled her into the closet and closed the door. They sat down on the floor still holding hands in darkness and almost total silence. They bumped heads as they settled in, and he remembered thinking it was good thing he had been chewing mints for the past hour or so.

The more they talked the closer they became, both physically and in spirit. Time passed and there were no quiet periods. She told him her entire life's story and he returned the favor but mentioned only a few of his relationships to balance hers in terms of number and intensity. Her father came from Lebanon when he was young. That explained her somewhat dark complexion, dark green eyes, and long black hair down her back. When he mentioned what he knew at the time about his genealogy, she said, "Your dark complexion, height and build doesn't look like Scottish/English heritage to me," they chuckled saying in unison, "But you never know," and they squeezed hands some more. Then, after about two hours, she leaned her forehead in the darkness until it touched his and they began to hug, which lasted the rest of the evening. Sometime around midnight someone opened the closet door and they heard someone say, "Here they are in the closet. We were looking everywhere for you guys."

Her folks had dropped her off earlier and told her to be home by midnight. He drove her straight home, which was on North Cherry Street up the hill on the left. As they hugged goodnight. He asked, "Breakfast at 10:00 tomorrow?" She said, "Yes, I would like that." Her name was Mary Ann (MA). She was a strikingly beautiful young lady of second generation Lebanese heritage, and was a warm, intelligent person in the process of casting off Catholicism.

They spent time together almost every day over the next 6 months and then a few nights on the weekends in Columbus. He taught her how to shift his four-gear MGA and then allowed her to occasionally have the car for the day by dropping him off around 9:00 AM and picking him at the office about 6:00 PM. She loved the MGA and so did he. Steve was also doing an excellent job maintaining the car, knowing that one day it might be his. She was wanting to get going with college, but her father was hesitating in providing funds for anything other than a Catholic college, which she had refused.

In July, he received a major jolt in the mail. He had been drafted and he was to report for his Army physical examination that next Saturday morning at 9:00 AM in Columbus. He didn't tell MA about that or about why he actually couldn't go back to school that fall, at least not until summer quarter next year, except for the cover story, which made sense in any event, even to his folks.

Saturday morning arrived and by 9:00 AM he was walking through the doorway of what appeared to be an old army facility. He registered and an Army Sergeant checked off his name as present. He was then directed into a locker room where he was told to disrobe in all but his underwear, in his case it was his boxers. He went through another door that to him looked like a gymnasium of the older variety. About 50 to 75 guys were milling about looking lost. A stiff-shirted Army guy called everyone to make a line, and they all did. They filed into adjoining rooms one by one as each was called. As the line shortened in front of him, it wasn't long before he was able to go into the room. There was a doctor in a white coat sitting on a swivel stool.

The doctor said, "Stand on the line."

He looked around for the line, and it was right in front of the doctor. "He could have pointed to it," he thought to himself as walked up to the line.

The doctor then said, "Drop your drawers" He rolled up closer. Then said, "Bend over."

He looked all over him. Then he said, "What's this?" touching the front scar on my left arm.

He told him, "Results of an explosion while testing a rocket engine."

The doctor then said, "You're kidding me?"

He said, "I am not kidding."

The doctor said, "Raise your arm so I can see the back side."

"OK" the doctor said. while he made notes on an official army form. He handed it to an assistant Army guy, who had been sitting in the corner and said something he couldn't hear. The doctor said to follow him.

The Army assistant walked through two doors and down a corridor and rounded a corner and he followed him. There was a bench with about five guys sitting in their underwear, all white briefs. The Army assistant told him to sit down and wait his turn, and then gave him half of the form given to the Army guy by the doctor, and he kept the other half, like a receipt of some kind.

The fellows sitting on the bench looked like they had been frozen in place. They were staring straight forward. He watched and he swore they never blinked or moved their heads. He scooted to the far end of the bench, even half off. He thought to himself, 'Maybe they are a new type of human robot, just caught in the wild living among us, or maybe they were a secret weapon created by injecting LSD.' He was trying to get his mind off of this very serious business. The line whittled down pretty quickly. They had gone in, but, oddly enough, none of them came out.

Another older doctor came through that doorway, as he had a few times before for the others and said, "Next."

He followed him in and he pointed to the chair to sit down in front of his desk. He did. He noticed there was another door in the room.

The doctor then said, "OK, what's this about your arm?"

He told the story of his rocket-engine testing activities and of the explosion in great detail, and even about the fuel preparation procedures, the safety program, and Mrs. Fey's rug.

The doctor said, "It's a wonder you didn't bleed out before you got to the lady's front door, especially since you had been running."

He said, "I think I know why I didn't bleed out. As the explosion occurred, I felt the pain and grabbed my arm very fast impaling my right hand with the splintered bone fragment. One big one was sticking out the back of my hand. I didn't think about that at the time until I began to run. I figured later that all that served as some kind of a tourniquet that held off the blood flow from severed arteries or veins."

The doctor had come around his desk to have a look at his arm and hand and said, "You are probably right. That was good thinking."

He said, "I just reacted without thinking much."

The doctor said, "The surgeon did an outstanding job of saving your arm. What's the surgeon's name?"

He said, "Dr. Monger in Lancaster, Ohio."

The doctor said, "Well, we can't risk damaging your arm. What did the surgeon use to join the bone?"

He said, "I don't know, but it was metal of some kind."

The doctor then said, "OK, we can't use you; so, there is no army for you. Give this form to Dr. Monger, and ask him to fill it out and send it in. That's all. Do something good with your life, son."

He said, "I will try" and with that, the assistant led him back to the locker room and he dressed and he drove back to Lancaster.

And that was that.

When he arrived in Lancaster he drove directly to MA's house, got out and knocked on her front door. She appeared, with her mother looking over her shoulder. She invited him in and finally met Mrs. F. She was a very pleasant lady and happy to see him. He explained that they had to go to the park for a function and MA played along with a quizzical look on her face. They drove over the hill and then around in front of Mt. Pleasant and past the fairgrounds on High Street on the left and then into Rising Park. He pulled up next to the baseball field and play area, he remembered at the time, where he had hit a home run and a triple in Single A baseball in 1954.

He turned to MA and said, "I didn't want to tell you, but I just came from taking my Army physical."

She got this look of horror on her face and was tearing up when he said, "Wait a minute, there is good news. I flunked the physical and I don't have to go."

She leaped into his arms, now with tears of joy from both of them. They sat there just feeling the joy of inadvertently dogging that awful draft and the war in Vietnam.

A few days later, he went to Dr. Monger's office and gave the form to the receptionist and a note with his name and office telephone number and asked her to be sure to give them to Dr. Monger. The next day, Dr. Monger called him at his office and said, "Just wanted you to know that I'm sending in the form, so you are officially off the hook, Vietnam-wise. It's odd isn't it how that otherwise bad accident of yours may have saved your life?" He agreed.

Dr. Monger then said, "By the way, I didn't use any metal support to re-connect the humerus bone of your upper arm. I used something new called PVC glue and it made a perfect superstructure to allow quick re-growth of your arm bone. That won't make a difference to them."

He thanked him for that and for his outstanding effort to save his arm. He told Dr. Monger that the doctor at the induction center was very impressed with his work. Dr. Monger said that was possible only because of the brief time between the accident and when he got to work on him. Nerves don't live long. He just happened to be on call at the hospital when he arrived. He said that he was a good patient as well and that helped.

After a few weeks, a letter arrived from the U.S. Government to advise that he had been reclassified to

I-Y – “a person unfit for military service except in a national emergency.” The Vietnam war was apparently not considered a national emergency.

And that was really that.

He and MA spent the rest of the summer together as he continued to enjoy his work at DE. Decades later he would think back to those days remembering the feelings and concluding that they were the happiest, most carefree days of his young life so far. MA spent time with Maxine and Clarence when she would have the MGA to get around town. She decided that it was time to begin college and was accepted at Ohio State and went to Columbus to register for classes that fall.

At his office one day, he received a call from Ralph Matthews, himself. Mr. Matthews said, “I thought I would check in on you to see how you were doing.”

He said, “I appreciate that. It’s getting more interesting all the time; the more I know, the easier it gets.”

Mr. Matthews said, “I know what you mean. Listen, the real reason I’m calling is to invite you and your lady friend to join us for dinner Saturday, say 8:00 PM; can you make it?”

He said, “Let me check with her, and I’ll get back to you.”

Mr. Matthews said, “That will be fine. Just let Jenean, my secretary, know, in case I’m out of the office, and she’ll give you our address.”

He said, “That will be fine.”

He immediately called MA to make sure she wanted to go. She was at her folks. He spoke to her, and she said it sounded interesting, which was code for ‘I’ll do it for you,’ just like Mary F. often said using the same code for the party they attended at the fraternity house.

That weekend arrived. He picked up MA at her house. Still no father in sight. She was wearing a very smart-looking, multi-pattern cocktail dress and she looked absolutely beautiful with her long black hair. She looked like a model in *Vogue* magazine.

Mr. Matthews lived on the hill in the eastern part of Lancaster where most of the very nice homes were located. They arrived about five minutes late, but MA said that was fashionable for the hosts to have just a little more time to prepare for guests. He replied to her that he thought being late was a signal to the host that the guest had few expectations. Arriving early meant expecting too much, he understood.

It was raining that night. They arrived at the front door with an umbrella and pushed the fancy doorbell. The door opened and a maid showed them in and took their coats and umbrella. Ralph and his wife, Joan, presented themselves with big smiles. Joan also wore a beautiful dress, not unlike MA’s. They sat down in the living room and had drinks, both Joan and MA’s were *Tom Collins* and Ralph and he had single-malt Scotch. Joan right off said that Ralph had seen his resume where it mentioned he had begun college in California and asked if he liked it there, which, of course, he did and they talked about the weather, the music, the beach, and the mountains and how he was introduced to geology in the mountains behind San Bernadino. Joan also asked MA what she was doing. She told her that she was beginning at Ohio State in the fall.

Joan didn’t offer much about her background, with the exception of mentioning something about Ralph’s first wife, Mildred, who was rather famous in the radio world of the 1930s. Joan said that Ralph gave her

to his partner, but they had been married for about 40 years. Ralph piped in to say that he was just preparing the way for her. Joan said that she never quite knew how Mildred got from Ralph to his partner, but she could only guess. "There were only rumors at the time," Ralph interrupted. Joan said that she didn't come along until later, so it really didn't matter.

Joan changed the subject and was particularly interested in how they met for some reason. MA said that they met at a party. He added that it was such a loud party they retreated to a closet so they could talk. Ralph & Joan got a big kick out of that, saying Joan and he had done something similar, but Joan interrupted him saying that there was no need to get into that.

The maid appeared and indicated dinner was served. As they walked into the large dining room, Ralph was talking to MA, and he and Joan were talking about Chicago, where Ralph got started in radio. The table was set elegantly. It reminded him of the Sunday dinners at Larry's house in California. Small, delicious steaks with all the trimmings were on the menu and the meal was outstanding, better than at Shaw's restaurant in downtown Lancaster.

As they finished the meal and were about to have coffee and after-dinner liqueurs, he asked Ralph about how he got started in radio. Ralph perked up and began to tell them a no doubt abbreviated story of his successes in radio and early television. Ralph built his first amateur radio station in Springfield, Ohio. Then while attending *Lane Technical High School* in Chicago, he built his first radio transmitter in 1912. Because of his successes, and even though he was a young man, in 1917 he was appointed to a number of corporate boards of directors during WW1. He enjoyed the work with distant radio stations. For many years, he said that he was known as 9ZN. The first station could only broadcast signals 4 miles in 1912 then that was quickly extended to distances in the range of 3 thousand miles by tweaking signal modulation of the carrier signal, Ralph said.

Ralph talked about his part in the unheard-of record of a transcontinental radio relay message of six minutes and 50 seconds duration across the United States in 1921. He was also a cofounder of the *Chicago Radio Laboratory* in 1918 with a fellow by the name of Karl Hassel, who had been a very smart military friend. Then together with Gene McDonald in 1923, they put together a fledgling radio industry with McDonald's financing and leadership skills.

Ralph enjoyed thinking and talking about the early days of the *Zenith Radio Corp* that was formed in 1923 and which would constantly vie for popularity with the likes of *RCA* and *Westinghouse*. He said that the day-to-day responsibilities at *Zenith* got to be less fun, so he passed it on in 1928 and *Mathews and Associates Sales Engineering Consultants*. Then in 1933 and officially free of Zenith encumbrances, he created *Ford, Browne and Mathews Advertising Agency* of Chicago. About that time, he rejoined the Navy during WW2 and assisted with recruiting and development of secret communications technology.

Ralph then said, "In 1954, I joined *Magnavox* and then worked for *Westinghouse* starting in about 1957. A few years ago, the *Diamond Electronics* people asked me to help kick-start their new industrial CCTV product lines and here we are today."

Joan then said that Ralph could talk about early radio forever and they all laughed, meaning that it was clear that Ralph had enjoyed his life in trying to talk to the entire world by bouncing radio signals off the ionosphere. He noticed that MA was captivated by Ralph and his narration of his life, even Joan watched Ralph with great admiration, even after 40 years of marriage.

Ralph then said, in purposely redirecting attention away from himself, “Michael, what is your main area of interest?”

He said that he is majoring in geology at Ohio State and then said that he had always been interested in all the sciences, from when he was a young child he would look up into night sky and wonder about it all, and about the chemistry and physics involved in astronomy. While he was active in the Boy Scouts, he first became interested in radio for his first merit badge. In fact, he said,

“I remember vividly sitting in front of one of large wooden console models of Zenith radios, that you made happen, it appears. I was able to get ahold of old radio chassis and would plug them in and watch the vacuum tubes light up, especially the big RCA 5U4-G Power tubes and then study the wiring underneath and try to understand what was going on. Static was especially interesting, because it seemed to be basically constant, aside from interruptions by thunderstorms near and far away, and that it meant something important was going on in the atmosphere. I made a radio on a board from scratch parts from Radio Shack to meet the requirements of the merit badge in radio.”

Ralph then said an odd thing, “Too bad you weren’t born last century. I have the feeling that we all would have been much further along than we are now.”

He stopped to think about Ralph’s comment and then resumed his train of thought,

“I don’t know about that, Ralph, but I felt compelled to do things, although that may sound strange. For example, when I was hearing in the news that the Navy was having difficulties with explosions in getting their low-temperature liquid-fueled rockets off the ground as the space race was beginning, I realized that I wanted to look into solid-fuel propulsions systems. I know that sounds a little odd, but that’s what I was thinking at the time. So, I made a laboratory in my parent’s very old house, connected a gas line for a Bunsen burner and other things, and began to work on combining potential fuel constituents and testing them in the backyard. As part of the Science Fair sponsored by my high school’s Science Club here in town, I demonstrated the power of solid fuel with an engine mounted on a kid’s railroad car bed, with heavy wire arranged to keep the car on the track when accelerating.”

He went on by saying that the rest of this account was a little gruesome. He described the incident that fateful Sunday in the 1957 in some detail involving the rocket engine testing that exploded and then the incident that followed that involved the splinter in his foot, both of which required weeks in the hospital for him to recover. But he indicated that he got through it and over it and by the next spring he was ready to play varsity baseball, with a plastic guard protecting his upper left arm. The injury turned out to be an unintended military draft classification of I-Y, which excluded Vietnam.

He had noticed that neither Ralph, Joan, nor MA looked bored throughout his dissertation. If they had, he would have cut it even shorter. Ralph was first to speak and said, “That has got to be the most engaging story I have ever heard. You are a great narrator. I will not soon forget your experiences; I’ll tell you that. You’ll have to include them in your memoirs when you turn 80.”

He said, “I won’t be doing any memoirs until I do more than just that.”

Ralph said, “I’m sure you will.”

They got up from the dinner table and Joan went across the living room and sat down at her very expensive-looking Steinway piano and began to play softly while talking to MA. Ralph beckoned for him

to come over to see what looked like a cream-colored box sitting on the edge of a wall-size bookcase filled with books and small statues and trophies. He said, "These are the things I received before I was 40. They are nice to have. It helps to remember your past a little better."

Ralph then demonstrated his wire recorder that he claimed provided the highest quality sound reproduction available. He turned up the volume a little bit to hear the classical music playing. It was very different than a record.

Ralph asked him some rather pointed questions about the fellows he worked with. He instantly realized that he had to be careful here on this subject. He didn't want to be totally in with the sales guys but had to be careful not to degrade them. But the more he thought about how he was going to answer, it became clear. Just respond honestly for he had no beef with any of them, even Bledzaker, who although he was a semi-FUBAR, he almost always brought in the most orders for DE.

After a while talking about the staff, Ralph then said, "I want you know that if I can be a reference or help in any way in the future, please feel free to call on me. After I die off, feel free to ask Joan, I know she would do whatever she could for you," he said. "She is still very connected all over this country. Promise me?" he said, "I will if I need to." Even if you don't," Ralph said, "let us know how you are doing anyway. I want to see how you do. Promise?" He said, "I will."

And with that they began heading for the door while still talking. The maid appeared with their coats, and they departed waving back as the Matthews watched them walk down their walkway to his car.

MA was quiet as they drove to her house. It was almost midnight. She then said, "I hope when I'm their age I'm as comfortable in my skin as those two are in theirs. They are wonderful people. But over the years, he forgot about Ralph and Joan until he began to write his memoirs and it all came back and he felt guilty he hadn't let them know how he was doing.

Then in early September, the day came when it was time for MA to move to campus. She had found a suitable boarding house for women on 13th Avenue less than two blocks from campus. He helped her to move in. Her father was against her selection of OSU and refused to help, except for his credit card that she had tucked away in her purse. After she was all moved in, they walked down to the main street and he introduced her to where the good restaurants were, and even past Jack O's greasy spoon, but he didn't look in for fear of being recognized. Then he decided to visit the ΣAE house and see if any of his brothers that he knew were around. They got to the car and drove up in front of the ΣAE house and climbed the many steps up to the big door and went in. The place was quiet until two guys came down the stairs in a mad rush out the big door. Then Chuck appeared coming out of the dining room; he was about to go into the office, when he saw them and turned and said loudly, "Michael, me boy" and a "How are you?" shaking hands and they patting one another on their shoulders. "And what beautiful person do you have here?" he said looking admiringly at MA and extending his hand to shake her hand. MA smiled and then politely shook his hand in return.

They sat down and Chuck discussed the coming quarter, the Rush, and then Chuck started to talk about what they were going to do, when he interrupted him to say that he wasn't in school that quarter or next because he was building up funds so he wouldn't have to work while in school like he did last year. Chuck looked disappointed, but then understood, because he then explained that a number of the Brothers had trouble with their grades last year and were either put on probation or flunked out entirely. "Over the

summer, Uncle Sam nabbed them and some of them are in boot camp now and on their way to Vietnam, no doubt," he said.

He felt compelled to relate to Chuck that when he didn't register for the next quarter, the draft board also noticed and came after him, but he then flunked the draft physical and held a 1-Y classification. Chuck responded with, "You lucky guy." He said that he was planning to be back for the summer quarter.

They got up to leave and they shook hands. "Hope to see you both, next year," and they were off.

As they were walking down the street he then got another idea to see if Geoffrey T. Grant was still around. They went to his old place and in through the side entrance and then up the few stairs. Geoff's door was open, and he was sitting about where he was the last time he saw him some 4 months earlier. He saw him and got up with a big smile, they shook hands with a polite hug. He walked into Geoff's room and MA followed. He introduced Geoff to her as: "This is Geoffrey T. Grant, my friend, that I have told you about." Geoff waved "Hi" to her and everyone sat down and talked about the war, and about him flunking the Army physical and his new draft classification of 1-Y.

They talked about when he was coming back in the summer quarter next year and said by then he would have accumulated enough money to last a few years at least. After a while they got up and said goodbyes and off they went. They went out the side door but he had forgotten to tell Geoff something and said to MA that he would be right back, and he went back inside. Geoff was standing next to his window apparently watching them as they walked down the sidewalk, when he came into the room and said, "By the way, I would like for you to look in on MA from time to time." He then explained to Geoff where she lived. Geoff said, "Sure" and over the ensuing quarters, he did.

After dropping MA off at her apartment, and as he drove back to Lancaster that evening, he realized he was once again alone, which hadn't been the case for months. He had been encouraging MA to get moving on her college education, that time was wasting, as he had said to her often.

He would go to campus every weekend and spend Saturday and Saturday evening with her, going drinking in one of the quieter bars, going to a concert in the Student Center, or going to a hotel just off campus. He figured he should not expose her to the Brothers in any of the fraternity parties they gave. She just might take a liking to one of them.

Then in October, they were visiting their folks in Lancaster one afternoon. He remembered that they were at his house standing in the den in front of the television talking to Dad, when Dad pointed to the TV and he turned up the volume and they heard Walter Cronkite say, "JFK was dead, assassinated." MA broke into instant tears, and he couldn't believe what had happened, and it wouldn't be the last time something like that would happen either.

He took her back to campus that evening, and she was dejected, as was everyone in the country that night, he figured. Over the weeks that followed, he bought her a black double-pearl ring and then a rather large pear-shaped diamond engagement ring. By then he had plenty of money in the bank and that was increasing with bank interest. He was going to formally propose during Christmas break.

She finished finals and got her grades, all As, 15 hours in English, History and Psychology 101, the course that he had flunked. He was pleased for her. But he was a little apprehensive about his capabilities in courses like that. 'What the hell is going on in your brain, boy?' he had said many times to himself. Maybe he had had chewed on too many lead pencils when he was a boy, he chuckled to himself.

Christmas came and he popped the question, and she instantly teared up looking at that beautiful diamond ring. She took his face in her hands and said, “Michael, I love you very much but it’s too early. I need to finish school first, and then we’ll see if we feel the same. Please understand, my Adonis.” He was disappointed, but understood and even agreed that she was right, it wasn’t the right time.

She pulled out a box and handed him a Christmas gift too. He opened it and it was an Omega wristwatch with a handsome leather wristband. On the underside of the watch were the inscriptions, Mary Ann – Michael – Love – 1963. He had never received such an expensive gift, until decades later. They did a lot of hugging that Christmas and New Year’s, albeit carefully, if at all, making sure not to complicate things.

He took her back to school after a visit with her parents, actually her mother because her father was on the road selling his Bazooka bubble gum, a product of the Topps Company in New York, MA said. She talked about her father on the way back to campus. She said that there were meetings with many Mafia-looking men when they lived in New Jersey in her younger years. She really didn’t see her father as a bubble gum salesman. He didn’t have the personality for it, she mused to him. He almost told her about Jack and the Greasy Spoon operations, but decided against it for some reason.

It had begun to snow that afternoon as they arrived at her boarding house. They hugged in the warm car for a while and then they said goodbye. He headed for Lancaster again as the roads began icing up and the snow was coming down in huge flakes. He took forever to get home, well after darkness that night.

It was especially cold, wintry and bleak that year, as he drove many days on snowy and icy roads to get to his office in DE. When he got stuck, it was easy to get his MGA moving again because it was so light. His good friends, the sales engineers, also had to deal with the weather because they had to travel by air all over the country in good or harsh weather to keep the sales orders coming for Diamond products.

In early January, Jack M. called him into his office.

He said, “We have reviewed your salary and have decided to give you a 20% pay raise. This is based on your outstanding contributions to DE. But I want you to do me a favor and not tell anyone of your raise. Will you do that?”

He said, “Of course,” and he never did.

Jack said, “The sales engineers would only bitch if they heard about your raise, like they bitched about you coming in late in the mornings until they heard how late you stayed at the office in the evenings.”

He enjoyed working for DE. He was making enough money to get married and start a family, but he sensed that it wasn’t the time yet and MA was clearly correct in her views on the subject. As things returned to normal in his work, he got into the habit of buying small cans of *Planters* Spanish peanuts, which he loved to eat on the way to and from work, but he had noticed after a while, that they were causing what he called ‘tail-pipe distress,’ which was medically otherwise known as irritated hemorrhoids. One day at the office, he got an odd feeling in his tail-pipe and went to the bathroom to see what was going on. What he found was alarming. Blood. He instantly knew the cause, though, bleeding hemorrhoids, so he stuffed the tailpipe inside his pants full of toilet paper. He figured that would take care of it in an emergency. As time passed that afternoon, he was trying to figure out a better solution, then it dawned on him. Women have this issue to deal with every month. Having established that as the solution, he then turned his attention to how to get the equipment that would solve his immediate problem.

Kathleen, another friend in the typing pool, would be the best candidate to provide the material needed, being a private secretary and all. He chuckled to himself but dismissed it as a bad joke under the current circumstances. He left his office and walked down the hallway to the secretaries' bull-pen and opened the door just a little and caught Kathleen's attention and beckoned for her to come out. She came to the doorway and said, "What's up?" He said bluntly, "I have a bleeding hemorrhoid in my tailpipe and I need Kotex pad and instructions how to use it." She said, "Your what?" and put her hand up to her mouth and began to snicker and then laugh. He instantly said very seriously, "This is important, you don't want me to bleed to death do you," which made her laugh out loud holding her stomach. He said indignantly, "Well, I'm glad you think it's funny. I don't appreciate your attitude. I thought we were friends."

She eventually composed herself, took his hand, and led him down the hallway to the Ladies foyer and she disappeared into the toilet room where they stored such supplies. She came back with a bunch of them in hand and explained how to open the individual packet.

He thanked her and they parted. The first thing that came into his mind as he was walking back to his office was that he hoped the Deacon never heard about this incident or he would never hear the end of it. Tom H., and maybe even Phil H. would have piled on too, no doubt. Joe C. wouldn't have because he was a gentleman.

Days later after the issue had cleared up, he had to go the bullpen to pick up some typing and he noticed many of the ladies were looking at him with odd smiles. He knew instantly that the news had gotten around, and as he passed Kathleen's desk, he said sternly, "I see you blabbed," and she began to reply but he didn't hear her as he went through the doorway back to the hall. In the days ahead, that matter brought his daily consumption of Spanish peanuts to a halt, as well as the need for feminine products after that, aside for buying many, many such devices over the years for girlfriends and wives.

As the winter turned into spring, he began to notice a change in MA, in her enthusiasm, and in the level of heat in their relationship. In fact, he began to replay in his mind, she changed right after JFK was killed and the tenor of her irritation with the government's treatment of the case in the Warren Commission investigations was apparent when she discussed it, which was often when they were together. He decided he should do some investigation of his own, but into her activities.

On the first Friday, he arrived early that evening at MA's boarding house. He noticed that there was a tree with climbable branches from where he could be high enough not to be noticed but still see the front porch. He climbed up as it was getting dark, and it wasn't more than 15 minutes when he saw Geoffry T. Grant himself walking nonchalantly up the sidewalk onto MA's porch. He rang the doorbell, and a few seconds later MA came out and she was in a hurry. They left together but were not touching, but they were walking quickly for no apparent reason he could think of. OK, he thought to himself, Geoff was looking in on MA. But he decided to stay perched in that tree to see what happened when or if she returned. It was downright comfortable in that tree, in any event, surrounded with new leaves that were beginning to grow to full size.

Based on her Omega watch on his wrist, it was about 11:30 PM. He was about to give up and climb down, when MA and Geoff came walking slowly down the walkway and on to the porch, They then embraced passionately and urgently for an unnerving amount of time. She was facing him, and she looked very happy. They parted with a peck, and she went in. Geoff had a cigarette out and was lighting it directly across from him when he decided at the last minute not to descend upon him to beat the crap out of him. If this situation had been one involving a fraternity brother or a stranger, he would have, he was thinking

at the time. He sat there pondering the situation. He concluded that they deserve each other, that Geoff was much more worldly and was much more experienced with women than he, although he was learning fast, and he knew Geoff was going to be difficult to live with should they in fact become a long-term couple, and not just a short-term fling.

He decided to confront his friend Geoff at his place that night. He arrived at Geoff's room; his door was open. Shirley had just arrived and was standing on the landing in front of his doorway. He saw her first and they smiled, and he gave her a big hug. She looked great. She said that she had had a little plastic surgery on her face, but Geoff had been looking after her. He asked her if they ever found Fred, and she said matter-of-factly she read in the campus newspaper that they found him a few weeks before Christmas hanging from a light fixture at a friend's house off campus, death by suicide or murder, no one knows for sure.

They went into Geoff's room and sat down on his couch. Geoff came around the corner from the kitchen and said, "Michael, is that you?" They greeted each other but he didn't get up to shake his hand. "What are you doing here on Friday night."

He said, "Well, I just observed that you just can't keep your hands off of any good-looking woman, can you? Even if it is your good friend's girlfriend that you were entrusted to protect." Shirley turned to Geoff and said, "Geoff, what is he talking about?" Geoff's face was turning grayish and she got up and began to tear into him slapping him in the face and punching and swearing and backing him into the kitchen where the dishware and pot and pans went flying and hitting the floor making one hell of a racket. She said, "You are one SOB" and she left, still fuming.

He was sitting there enjoying the whole incident. He heard Geoff running the water in kitchen and then appeared, shocked to see him still sitting there, and he sat down at his desk and put his feet up.

He then said, "Geoffry, my good friend, tell you what. I'm going to tell MA in no uncertain words that I have been warming her up for you all along, knowing that you would put the moves on her sooner or later. I'm also going to tell her about Shirley."

Geoff had a shocked look on his face, saying, "You wouldn't do that, would you?"

He said, "Watch me. It will be something like that. I'm sure you'll hear about it," and he turned and departed.

He didn't see him again for more than 10 years when he happened to be in Solvang, California, where Geoff was operating a photography shop after going through a very nasty divorce. Geoff told me all about it. According to the decree, there was such incompatibility between the two of them (even though their birthdays were on the same date, May 7th) that Geoff was not allowed to be within 100 yards of MA, or so said the divorce decree.

She always was a rather calm, confident woman, but Geoff told him that she was quoted in the decree by Geoff's attorney of having said, "she hoped that Geoff would burn in hell for the unspecified damage he has done to her over the years." It so happened some decades later, Geoff was trapped one night in his Airstream camper in the mountains behind Solvang after a kerosene night light tipped over and ignited the surroundings, quickly engulfing the camper's interior in flames. He escaped, barely alive, but with 3rd

degree burns over 80% of his body, languishing at a local burn center for two months before finally dying of septicemia from organ-wide infections.¹⁵ He didn't think Geoff deserved that, but he might have.



The anticipated summer quarter finally arrived. His last day at the office also arrived. He departed DE with mixed emotions. He enjoyed the work and was making an incredible salary for not being a college graduate yet. He also enjoyed the people, especially Jack M., John A., and of course Ralph Matthews. After making the rounds in his office saying goodbye to the guys, he went to the bullpen and thanked Kathleen with a hug and said goodbye to all. As he drove through the gate, he waved to the guard and was thinking at the time as he drove by DE and then DP that he knew he would not soon return. He remembered what William, the DP parts manager, counseled him two years before, "Never misplace your enthusiasm for what you choose to do. It will guide you well."

The next task was to get ready to go back to campus. He had called the proctor at his old house, and he had said that Geoff had moved out a few weeks ago and the place was available. He committed to it indefinitely. If that place in back was available, he could store the MGA and not worry about it getting vandalized parked on the street in front.

Steve was also beginning college with Doug as his roommate. He predicted that that would not go well, and it didn't. They were gone by fall quarter. During their stay, they occupied his old middle room and the front rooms. Doug had somehow acquired a couch that was once a white Porcelain bathtub. Shortly thereafter, they both found ways to avoid the Vietnam draft by getting married with families on the way.

He moved into Geoff's old place, with the kitchen in the back room with attached porch. This was probably where MA fell into Geoff's charms no doubt, he mused and then erased that memory with new such activities over the coming months. He rearranged everything and bought a used desk, and replaced the couch/bed, and added a new reading chair. The room looked entirely different with art on the wall. Classes began and he had a good feeling about what was ahead. He vowed not to get distracted by the surrounding BS but to focus on his coursework.

He spent the next few weeks studying. One Wednesday, he decided he needed a break, so he called Mary F. and she came over a few hours later. She was glad to see him, and he her. They exchanged hugs with a big hug and short kiss on his neck; they decided to have supper down on High Street at one of the newer restaurants. She insisted on paying for it. She wanted to play tennis on that Saturday, and he agreed.

On Saturday morning, she picked him up and off they went to the tennis courts but not the courts on campus but to the Upper Arlington Country Club. He was pleasantly surprised but did not comment. They walked through the rather grand entrance, and she said she had to change and would be right back. As she walked away, he noticed that she knew everyone and everyone knew her by first name. When she reappeared, she had on the classic white tennis outfit, a little dress that looked like a ballet skirt. Nearly all of her legs were exposed, and they were exquisite, beautifully shaped, not too muscular. He was wearing white, long shorts and a blue golf shirt.

¹⁵ <https://www.legacy.com/obituaries/name/geoffrey-grant-obituary?pid=155933716>

They played for about an hour and a half. Although he had not played tennis in years, he found that he could beat her on occasion, but it was really no match. Her serve was almost impossible to return. It was fast and well placed. They played two sets, 6-2, 6-2. He wondered whether she was laying off him, but she said after they had finished, "For not playing much, you are a natural tennis player." She was extremely competitive, but he also wondered whether she was just being nice after beating him. She was a real tennis player who had won many tournaments in high school and had an offer to play on the Ohio State Tennis Team, but she declined in favor of focusing on her schoolwork. Her father also wanted her to go to a Catholic college, but he at least did not resist.

During a break between sets, he had to sit down while she continued to execute workout moves. She was full of energy. He had never seen someone like her before. Then she approached him, moving in and sat down in the middle of his lap. She was sweating, but she smelled great. He put his arm around her. They just talked matter-of-factly, and she was a pure wiggle worm on his lap. He was becoming quite interested. Then she stopped and leaped off his lap turning and punched him on his arm. She was speechless and he quickly said, "What did you expect?" "I know," he said, "not until I take Catechisms and we get married." They laughed knowing that was pointless, but still funny to think about. He never did know whether she was flirting with him in particular or that she was just saucy with all the guys. She was clearly the best girlfriend he never ever had.

Mary F. graduated that spring quarter from Ohio State *summa cum laude* and a few months after they played tennis she married Greg, a Catholic boyfriend from high school and from her neighborhood and he wouldn't see Mary F. again for more than a year.

Aside from the racket and funky music that would emerge from Steve's and Doug's rooms, he would keep his door closed and spend all of his time studying. One day as he was sitting on the steps of the back porch, he was being bombarded by acorns he thought were falling out of the trees, perhaps by squirrels, but no trees were directly overhead. After about 10 minutes, he felt one bounce off his head and he looked to the 2nd floor porch of the boarding house next door. It was a young woman smiling.

Then she said, "Were you really thinking that acorns fell out of midair?" He said something back to her that called her ladyship into question. Over the next few weeks, she would show up at his room unannounced and knock sometimes, and sometimes would just barge in, so often that he began to lock his door and say to her when she showed up, "I'm busy!" She would then go outside next to his window and jump up and down, saying, "Hey." He could only see her head for a second, and repeatedly. After a while, he would give in and open his door and in she would come and collapse on the couch. On other nights, when he just didn't want to see her because he wanted to read something, he would turn off all the lights and arrange the booklight so it could not be seen from the window. And one night, as the lights were out and he was reading, deep in thought, she crept up the back steps and came in the back door that he had forgotten to lock, crept up to him within inches and said, "BOOOO!" He jumped out of his skin and when he landed, he went after her, grabbed her and threw her body out the back door and she went sprawling onto the sidewalk at the bottom of the stairs. She had scraped her knee when she came down and it was bleeding a little.

Brother Steve had been out on a date and was coming in the side door when he heard the commotion in back. He arrived just as Jerrie was laying spread out on the sidewalk. He helped her up and brought her into his room to fix her knee with a big band-aid. He came into Steve's room and said, "I see you found a new puppy." This young woman irritated everyone over the next few weeks, he as well as Steve. But she

became Steve's friend first and began to hang around regularly with Steve and Doug. Eventually, he allowed the three of them into his room. One night, as they were debating something she began to badger him. He picked up a Time magazine and threw it at her hitting her right in the mouth, where he was aiming. She got up and left, and he didn't see her again for weeks. After a few weeks of quiet and lots of studying, someone knocked on his door. He opened it and it was her. He was about to slam it in her face, but she stepped in and stuck out her hand wanting to shake hands, so he did.

They shook and she said, "Hi, I'm Jerrie Lee Hollifield, and I can be a complete asshole. I am sorry. Please forgive me, and can we be friends?" Just like that, she was a different person and didn't change back for about seven years, when it appeared again.

She and he began an intellectual relationship, which developed slowly until one day they decided that they actually liked each other finally and then the relationship grew into a close relationship and more. She told him about her childhood and trouble with her stepfather, but she never specified the issues, although he surmised the worst and made every attempt to support her in any way, and he admired her for surviving unharmed psychologically. As their relationship became really serious, he observed no signs of fear or hesitancy in the hugging and kissing department; she liked both.

Jerrie was very attractive with flowing hair and piercing brown eyes. She was very quick-witted and spoke well and clearly when among friends. She was not to be trifled with because she would fire back with great force of argument. The time spent studying was beginning to pay off. Midterms came and went, and he was carrying all B's so far and noticed that he was learning more easily than he had ever before. He presumed it was because he was well rested and had plenty of time to get his schoolwork done.



Jerrie and he became constant study companions. She was majoring in English literature and carried a high GPA. She always carried 4 courses per quarter. He had signed up for only three courses to make sure he could handle them. Never again 4 courses. They were German scientific, more calculus, and one geology course, micropaleontology by Frank H. T. Rhodes, a famous Welsh geologist who was a Visiting Professor that year. It was a graduate-level course, and he was the only undergraduate in the class. Dr. Rhodes was a very effective lecturer and he enjoyed all of them, so much so that he received the only A in the course. Dr. Rhodes noted in his department record that he was an outstanding student. He was told about the commendation a year later after Dr. Rhodes had moved on to the University Michigan for some reason unknown to many Ohio State fans.

Together, Jerrie and he were an explosive couple. They would have fights over trivial matters, but she would make sure the disagreements were resolved. As his grades improved, he also became more serious about everything, whether that was because he had to be on the defensive around her all the time or because he had learned to concentrate on his readings and studying overall, he never determined, but he had changed that first quarter back, he could feel it. He also thought that his experience at DE might have contributed to his new abilities to concentrate with self-confidence, or maybe it was because he was still irritated with MA for being susceptible to a fellow like Geoffrey T. Grant.

His summer quarter grades were great: 1 B and 2 As, in German, of course, and in micropaleontology, which he thought was the most interesting of all the geology courses so far. His latest German course involved translating scientific papers into English, which he found came to him almost by instinct. He noticed that during the first German course he took. When he handed in his last translated paper for the class that quarter, Dr. Wiseman asked him to stay after class; she wanted to talk to him. She was an older lady, and it was apparent right off that she was a warm, caring person. She had mentioned in class earlier that she and her family decided to leave Germany just before Hitler came to power. She was commenting on my contributions during class and then said, "Michael, have you considered majoring in German? My husband and I have noticed that you have an outstanding ability in interpreting German sentence structures and interpretations without knowing the meanings of all the verbs and nouns. You have the instinct for the German language. We have only seen this a few people in all our careers."

He replied, "Well, German meanings do come easy to me, I'll admit."

Dr. Wiseman said, "Tell me, do you have German-roots in your family?"

He said, "My mother's family were Studebakers, and my Dad's mother was a Work."

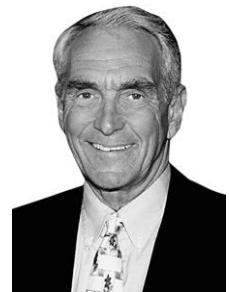
She said, "That's interesting."

He said, "With regard to majoring, I enjoy the geosciences the most, but I will take all the German courses I have time for," and with that he rose and they shook hands and departed her office. He saw her husband coming out of his office, the other Dr. Wiseman, and they waved, and he was off.

For the next few years, he received German-themed Christmas cards in care of the Geology Department.

The Fall quarter was underway, and his life began to increase in tempo even more than he had noted before. He took two more geology courses but did not have to take the dreaded Mineralogy 101, well known to be the course that if the student did not get a B or better, he would not be encouraged to major in geology. He had taken the equivalent course in California, the credit hours for such transferred as Mineralogy 101. He had received a B in that course. He took Paleontology again, this time from Dr. Sweet, another outstanding lecturer. Dr. LaRocque who taught him before had less of a favorable impact a few years earlier.

That quarter he took a hydrogeology course from Dr. Jay H. Lehr, a recent Ph.D. from the University of Arizona, who had received the first Ph.D. awarded specifically in hydrogeology in the U.S. He represented the new type of university professor, who was interested in building his students' careers, not only in his own research. He was an outstanding lecturer. He was also a perpetual sportsman throughout his life, from lacrosse to semi-pro football. He was to especially enjoy skydiving and held many records even running into his later years. He participated in many *Iron-Man* events. His popularity with the incoming students rose considerably over the next few years, but with the existing, older professors, not so much. Their concerns were focused mainly on their own research interests, while the graduate students did the work, which was often not recognized in their publications. The undergraduates were generally barely tolerated by the older professors, who treated them very differently than their graduate students, whom they regarded almost as colleagues, but not quite, because they needed them.



After class one day, Dr. Lehr asked him to follow him to his office. They went in and sat down. Dr. Lehr said, "I need an undergraduate Research Assistant to help me with modeling groundwater flow. I just received a couple of grants so I can pay you a little bit. Are you interested?"

He said, without hesitation, "Yes, I would be pleased to help," He instantly thought to himself, 'Another lab, hopefully this one won't involve explosions.' He didn't realize it at the time, but this was the beginning of his professional career in hydrogeology. He was getting paid for his services.

He began to be a presence in and around the Geology Department in his new function. Dr. Lehr would ask him to take notes for him during faculty staff meetings, even when Dr. Lehr couldn't attend the meeting. He was often off playing soccer, lacrosse or other sports, and coaching. He observed on many occasions the older professors rolling their eyes when hearing about Dr. Lehr's exploits and accomplishments, especially when they heard about him skydiving.

Dr. Lehr would invite him to visit his home and spend time in his pool. It didn't take long for him to get a real deep dark tan in those days. One day, Jay and his wife, Claire, had a bit of a social event, where a few of his favorite fellow professors, graduate and undergraduate students showed up. He noticed a very nice maid, Mrs. Wilson, serving drinks, and hors d'oeuvres, with a pretty, young daughter, Nancy, helping out. Mrs. Wilson's daughter blossomed into the singer, Nancy Wilson,¹⁶ whom he met a decade later one day when Jay and she came for a visit to his office when he was working on their first book in the early 1970s. She was a beautiful person all around.

He attended all the noon and evening geology student functions and technical discussions, but he noticed right off that everyone was very serious about their work, and that there were very few frivolities involved, except under unusual circumstances. One such circumstance was in the heckling of a certain geology student. He was treated like a "war monger" among the rest of them.

This particular fellow, sturdy and slightly wide, would on occasion wear his ROTC (Reserve Officer's Training Corps) Army uniform to class, studded with many recognition badges and ribbons. He remembered some of the older students would throw paper balls at him as he walked into class and booed him, all with smiles, but underneath they were showing their widespread anti-war viewpoints. His name was Bill H. and he just happened to be the highest ranking "officer" in ROTC at Ohio State during those years. He also played a big sousaphone for the OSU Marching Band. In his senior year, he was recognized for having the honor of dotting the "i" in Ohio in the famous Script Ohio formation the Band performed every Buckeye football game. Everyone in the Geology Department called him "The general." Bill was good natured and took all the heckling in stride, according to the Army manual, no doubt. After he graduated and entered the Army, he later did achieve the General rank in the U.S. Army Corps of Engineers. Afterwards, he went to work in the mining and environmental industries. He and Bill became friends over the decades. He helped Bill get a job in California and then years later as well.

The quarter melted into the winter quarter of 1964. His grades and Jerrie's grades were very good, he having mostly Bs, with German As, Jerrie with mostly As. By then, their relationship had heated up and they were making plans to start a family and get married when it was convenient. Sometime in the winter, they decided.

¹⁶ <https://www.imdb.com/name/nm0933897/bio>

It was during this quarter that all sorts of political demonstrations were going on around the country and in Ohio and even on campus. A bunch of the undergraduates in the Geology Department had made plans to attend a lecture in History Hall about Marxism. All of them had not heard much about it, only knowing simplistically that Marxism was an economic criticism of Capitalism but that it had little to do with Communism. Everyone knew that the Russians had absorbed Marxism and perverted its economic model for their own purposes that created oligarchs.

Off they went for the 8:00 PM lecture. Once there, they all saw a large sign on the lecture door saying the lecture had been canceled by the Administration. The students were insulted. For reasons that seemed at the time to be righteous and appropriate, the group of them, plus an even larger group of students from elsewhere on campus, decided that after meetings that they would descend upon the Administration/Registrars building at about 8:30 PM. They had an impromptu meeting and together decided to somehow get into that building and occupy it in protest of canceling the lecture on the grounds of free speech rights, etc., and by locking the doors so that no one could enter in the morning. Jerrie and he decided to support the idea, although he told her that she should steer-clear when the police show up, which they will, he told her. She was wearing a *muu-muu* dress that made her look pregnant.

Someone found a way into the building. There were about 45 students who were in the building with instructions that there would be no ransacking or making a mess. He remembered that they were trying not to be seen and reported until the next morning. They were all bunched together and there was some MJ smoke that was obvious but not too much. Then at about 6:00 AM, the doo-doo began to hit the fan, as it were. Apparently, someone tried to get in, and that was the signal for everyone to stand up and wave. Moments later, campus police were everywhere, red-lights flashing and angry policemen with high, black leather boots banging on the door demanding that they be allowed to enter. Someone said they needed to write a List of Demands. He just happened to be sitting behind a desk in front of a typewriter. He said he would type it. The new leaders of the uprising, including Jerrie, gathered around the desk and they began to discuss the prospective contents,

They decided,

First, There will be no police allowed on the wide porch in front of the building, no closer than 300 feet.

Second, There will be no further involvement by the Administration in deciding what lectures are scheduled in any of the lecture halls of the University, provided they are approved by the Student Council.

Third, There will be no repercussions for these actions today or ever.

Fourth, They will allow one TV reporter and Cameraman to record their list of demands.

Fifth, The Administration will generate a letter/memo reflecting the above.

Sixth, Once we receive said letter/memo, we will remove all barricades and open all doors for resumption of business.

He typed up the demands and was also selected to deliver the "List of Demands." He decided that Jerrie should accompany him to signal the police that there were ladies and a lady with a baby involved in the uprising. Everyone thought that was a great idea. He opened the door and allowed Jerrie to go out first

and then he followed only a few steps behind. He then stepped forward and waved the envelope, laid it upon the cement, and returned. They then decided that everyone should stand in front of the windows and door at the front. This would indicate to the police that there were many, many students in the building.

About an hour passed. Then he noticed a man dressed in coat and tie and another man with a camera mounted on his shoulder approaching the front of the building. By this time, there must have been a hundred policemen with different colored uniforms surrounding the porch about 300 feet away from the door. But behind them there must have been a group of 500 or more students, silent, just watching.

The apparent reporter beckoned. He and Jerrie went out again. The reporter started to ask questions. He raised his hand for him to stop the talk. He unfolded the List of Demands, and he indicated that he was ready. A camera light was turned on and the reporter stuck the microphone up to his face. He read the Demands, and then said, "I will take a few questions."

Question 1. "What do you plan to do if the Administration refuses to comply with your demands?"

His answer, "There are a lot of records in the file cabinets on both floors of this building, I'm told. If they are removed from the cabinets and sent sailing and thrown around for the sole purpose of mixing up the records, it would require months for the Administration to get them back in order. Mind you, the purpose is not to destroy or otherwise damage the records. We understand how important these records are."

Question 2. "Is your group Communist-backed or do you have any Communists in your group?"

His Answer, "Absolutely not, and no, not to my knowledge. As students, we are here to learn. Marxism is something we wanted to know more about, that's all. Why would the Administration be afraid of that?"

The reporter started to ask another question when Jerrie leaned up to him and said something.

The reporter said, "What did she say?"

He said, "She told me that that was enough questions, and she had to pee."

There were chuckles making the rounds in the crowd outside when they turned heading for the front door of the building. He then noticed a number of men in dark suits and ties alongside the front windows frantically taking photographs of Jerrie and he as they disappeared inside. Some said that was the FBI making records of radicals.

About two hours later, they received a large envelope through the front door mail slot. It was a memo on OSU stationery that confirmed their demands and stipulated acceptance.

It was over, but the students were apprehensive when they came out of the building and walked slowly in all directions. The police line was melting away. The mass of students behind remained in place watching until all of the "revolutionaries" had merged into the crowd of students, at which time they began to yell and hoot as they took the proceedings as their victory too, which it was. Soon, they all went on about their regular business of college. He never knew whether that Marxist lecturer they wanted to hear was in fact Professor Richard Wolff, who had been born and raised in Youngstown, Ohio..¹⁷

¹⁷ https://en.wikipedia.org/wiki/Richard_D._Wolff

Jerrie and he went home and went to bed. They were awakened about 8:00 PM that evening. It was a call from Maxine saying that her phone in Lancaster had been ringing off the hook since the local news showed the story about “Revolution on OSU Campus” with Jerrie and he making the announcements. She said, “I am worried that you are going to get yourself into trouble with the university,” He told her about the agreement and she said, “Well, OK, I’m just glad that no one got hurt.”

She then proceeded to list the people calling, who all were asking,

“Maxine, has Michael turned into a radical?” Even Mrs. Fey called. Dwight Kane was expressing concern to Maxine, as well as Mr. Kessler, his high school math/chemistry teacher, and Mrs. Sprague, Dennis’s mother, the chief operator in Lancaster for Ohio Bell at the time, plus many more she said, some she hadn’t spoken to for years.

And that was that ... no residuals, except Dr. Pettyjohn called him a “revolutionary” in class but everyone applauded, which did not please Dr. Pettyjohn, who was a Marine and collector of German paraphernalia, but all was forgotten. But this was not the last political matter he was to be involved in with him and with others.

Until the “revolution,” he had few acquaintances in the department but afterwards there were many invitations to this and that party, but he still only really socialized with a few, only because he spent most of his spare time with Jerrie, by choice. One fellow who they did become friends with was Bill Riser, who visited often; he was one of the rising stars in the Geology Department, who was being encouraged to stay on for his Master’s degree. He looked like a movie star, he was that handsome, and spoke like one as well, being articulate and bright-eyed. He was an usher in his wedding. Years later, he heard that Bill went on for a Ph.D. at Johns Hopkins but, while in Morocco doing geological research in the field somewhere driving in an open Jeep, it hit a bump in the road hard enough to eject him. Bill landed headfirst on a small hard rock surrounded by soft soil dying instantly. Reportedly, there were no other such hard rocks for miles around. That was a major personal loss to he and Jerrie, and others of course, but also to the field of geology, because Bill would have contributed much.

One day that quarter, Dr. Lehr asked him to prepare some reviews and abstracts of a couple of hydrogeologic manuscripts submitted to the new journal, *Ground Water*. Dr. Lehr had just been appointed as the new Editor-in-Chief for the journal. He thought that was very fitting because he had read somewhere that Dr. Lehr was the first Ph.D. in hydrogeology in the U.S. He was another rising star he was sure because Dr. Lehr was a very good lecturer, if not one of the best considering those he had already observed. After a few weeks reviewing and submitting his abstracts, Dr. Lehr announced to him that he was appointing him as the Abstract Editor for the journal of *Ground Water* and he would have a special column in the journal.

A few years after he graduated, he learned that Dr. Lehr decided that he could make more money in the groundwater and the budding environmental industries than as an assistant university professor. He was appointed as the Executive Director of the National Water Well Association. His presentation skills and overall enthusiasm would come into play in this new position, and he was beginning to be recognized as an expert in Washington, D.C. Dr. Lehr was to play an even greater, pivotal role in his career some seven years later as well.

The Geology Department held guest lectures on a regular basis in the large lecture hall in the Mendenhall Building. He noticed on the Announcement Board that a U.S. Geological Survey fellow was going to give a

lecture on “Volcanic Crater or Impact Crater.” His name was Dr. Gene Shoemaker. That sounded interesting, so he attended. And Dr. Shoemaker was a great lecturer, but some things started to go wrong for him toward the middle of his lecture. The population was strictly segregated, with Full Professors in the front row, Associate Professors in the second row, Assistant Professors in the third row, and the Graduate Students next with all the Undergraduates behind them.

The full professors began to interrupt Dr. Shoemaker about the evidence he was presenting for particular geologic structures being caused by meteor impact and not from the collapse of a volcanic cone. This was the period just before the concept of plate tectonics was about to burst forth. The discussion became downright heated, with such accusations as, “You can’t infer that or this” or then “This is perfectly clear that” ...etc.” It was becoming obvious that those in attendance were getting uncomfortable by all the mumbling that could be heard from students talking to each other about the ongoing arguments. The behavior of two or three of the professors was then atrocious, and he was glad that they weren’t his current professors. Finally, Dr. Shoemaker held up his arms to quiet all the noise, and said, “Gentlemen, Thank you for your comments, but I am finished. You are stuck in the past,” and then gathered up his papers and overlays, turned off the projector, and departed. The audience began to applaud as he was walking out, but got louder and lasted for a long time, he remembered, which was clearly a show of support for Dr. Shoemaker. None of the Graduate students or Undergraduates dared say a word in that venue fearing repercussions later during courses.

For weeks after that, rumors swirled around the Undergraduates that the Department Chairman censured both of the professors who were clearly at fault, prohibited any salary raises for them for two years, and prepared a letter of apology for their signatures to be delivered to Dr. Shoemaker. Within the coming years, Dr. Shoemaker’s positions became wholly accepted. He and his wife, Carolyn, became even more noteworthy years later for her early discovery of the Shoemaker-Levy asteroid that broke up and plowed into Jupiter. They, as a team, have since been recognized, one of such awards was from the AIPG Texas Section..¹⁸ Dr. Shoemaker was killed in a head-on car accident in the Outback of Australia while driving on a curved single lane dirt road north of Alice Springs, while investigating newly identified impact craters. Carolyn was also injured but recovered..¹⁹

But then in February, Jerrie and he had a major disagreement and she packed up and left for Tucson where she had friends that he had never heard about before. She acted like she had last year before they began the relationship, so he was very concerned about her mental health, but she was gone.

During that period, the guys upstairs in his boardinghouse were having regular, noisy parties. Young ladies were everywhere in the house. One night one of them, Helen, came into his room and announced she wanted to kiss and hug. She didn’t seem to be drunk or high, just driven. She said, “Where’s your girlfriend I’ve seen you with here?” He said, “She’s gone,” and so he obliged her, especially since he and Jerrie were “splitsville,” as he remembered.

After a few weeks went by, Gary S., one the guys from upstairs came into his room and sat down, and said, “I have some shocking news,” He said, “What’s that?” Gary said, “Well, Helen just told me that she has the kissing disease and asked me to tell you and two others living upstairs that she kissed and hugged

¹⁸ Shoemaker Memorial Scholarship, <https://aipg-tx.org/memorials/>

¹⁹ Carolyn Shoemaker, <https://aipg-tx.org/memorials-carolyn/>

that night.” Although he hadn’t noticed anything yet, all four of the guys went to the university medical center the next morning to get shots and some drugs.

There were no more parties in the house after that. Everyone concentrated on their schoolwork. He saw a few weeks later in the school newspaper that it was widespread on campus and that everyone should protect themselves and others. He never saw Helen again.

One day Jerrie called and said something to the effect that she may have made a mistake. He thought she might have meant a termination, but she meant a mistake about their relationship. He was surprised and asked, “How so?” She said bluntly, “I want to come home and marry you.” He bluntly responded, “I haven’t been a good boy since you left.” She said, “I assumed so.” Then a long silence, one so long that he thought the telephone company systems might interpret the silence as no one was on the line and would break the circuit, but they didn’t. He then made what he knew was one of the most important decisions of his life, and said, “Get your butt home and we’ll talk.” She only said in reply, “See you soon.”



In the late spring they were married. Jerrie’s folks wanted to put on and pay for a real marriage ceremony at the Methodist Church near campus, although they didn’t care one way or another. He invited his folks; his brother Steve was Best Man and sister Carolyn Sue and Mary F. came of course. He also invited Chuck T. and John and a couple of other SAE brothers, and his guys from high school that he knew were at Ohio State or around town, like Tom, Joe, Phil, Chuck A., Steve B. He didn’t remember if he had invited Julianne H., Nancy S.,

Donna W. , or the other ladies of his high school. But certainly not Helen from the rooming house days.

It was quite an affair; Jerrie wore an expensive white wedding dress and veil.²⁰ The dress was quite tight and revealed for all to see that she was carrying a passenger to arrive in about 5 months. He wore a rented tuxedo. They left under a shower of rice, which was obviously not needed. The concerns inherited from the days of the *Yellow Jacket* attack had faded away.

That summer he decided he had better find a job with the approaching arrival of the baby. He figured he would have sufficient course-hours to graduate by the end of next summer. One day he saw Mary F. at the Student Center and they had a sandwich and a Coke. She was taking some sort of special teaching course that summer. She asked about Jerrie and how the baby was developing, and he asked her about Greg and if she was pregnant yet. She frowned and didn’t want to talk about that subject for some reason, so he didn’t press. He mentioned to her that he was going to have to find a job. She thought a bit, and then she said, “I know, let’s go over to my parents one night soon and talk to my Dad. He’ll have some ideas.”

A couple of days went by, and Mary called him at home one evening and spoke to Jerrie, telling her that she would pick him up tomorrow night about 7:00 PM. He had informed Jerrie of this potential meeting and she was fine with it, only because she had been advised of the nature of their friendship. 7:00 PM arrived just as the train was rolling by. Mary came in to see the baby and commented on the train. Jerrie said, “One gets used to the racket.”

²⁰ <https://i2mconsultants.com/downloads/corp/WeddingNewspaper65.pdf>

They went to Mary's folk's house in Upper Arlington and her father was sitting in the living room. He got up when they came into the room and they shook hands warmly. He asked about the baby and about school. Mary served coffee and she sat down and talked about some project that had been assigned to the course she was taking. After a while, she left saying that she wanted to speak to her mother who was in another part of the house.

Mr. F. then surprised him, for he said next, "I don't know if Mary mentioned it or not, but I am the Chairman of the Democratic Party of Ohio, and it is my responsibility to recommend certain appointments in the state, both state and federal. I have some influence in the U.S. Post Office downtown." He handed him a note card with a name and address and said, "I would like for you to go see this fellow tomorrow about 2:00 PM. He knows you are coming, so try not to be late."

He said, "I certainly will. Thank you, sir."

About that time Mary came into the room, saying, "Are you gentlemen through talking yet?"

Mr. F. said, "I believe we are" and got up and they shook hands.

As they were heading for the door, Mrs. F. came into the foyer to say goodbye.

They departed. On the way back to his house he said to Mary, "I can't thank you enough for what you are doing," he said.

She said, "O Shush, you would do the same for me. What are friends for but to look after each other?"

The next day, he headed downtown with note in hand in order to find the address. He found the street and went back and forth but couldn't find the number on any of the buildings. Then he realized that it was the big building, The U.S. Post Office. He parked and walked through the big, heavy front door. At the first window he came to he said he had an appointment. The postal fellow asked for his name, and he told him, "Oh, he is on the top floor."

He went into the elevator and punched Floor 12. When he arrived, he looked around and noticed there was only one office on the floor with a big door, The Postmaster General. He went up to the receptionist and indicated that he had an appointment. She confirmed his name, picked up the phone and announced his arrival. A voice on her box said, "Send him in."

The Postmaster General was all smiles and they shook hands. He said, "John (Mr. F) tells me you are looking for work."

He agreed.

The PMG then said, "Tell me a little about yourself."

He then provided the PMG with a five-minute summary of his work experience, from Anchor Hocking dismantling blast furnaces to Diamond Power helping to manage their parts distribution systems, to Diamond Electronics as a corresponding sales engineer for industrial CCTV systems, and that he was Senior at Ohio State and the undergraduate research assistant for Dr. Jay Lehr in the Geology Department.

The PMG then said, "Well, you are already way overqualified for the job I have for you, but if you need the work you can certainly have it. You would be carrying the U.S. mail. I think you would be especially useful in Region 8. That's mostly colored people, but it's not too rough there. You are probably darker than most of them. You would not be conspicuous." He was thinking to himself, 'Good thing he had been in the Sun a lot the past quarter,' He was rather darkly tanned that summer.

The PMG said, "OK, then it's settled." He wrote a few lines on a piece of paper and handed it to him. "That is the Post Office substation address you will report to on Monday 8:00 AM. I'm sure you know how to handle yourself. We'll keep our eye on you."

He thanked him and they shook hands, and he was off this time to be a mailman carrying the U.S. mail.

That summer was arduous work, especially when the thick magazines and catalogs were in his box and his carry bag. When the social security checks and other checks were on the way, people were very glad to see the mailman. He was wearing standard PO blue shorts and a blue and white shirt and a dark blue pith-helmet. He only experienced one problem all summer. There was a dog, a middle-size dog, that always met him at the gate of one of the houses on his regular route. He was always barking and growling when he saw him coming and would lock his teeth onto his sock and ankle and shake it every day, even when it was raining. He would shake his foot. That would generally dislodge the dog's teeth, but the dog persisted. No one ever came to the door to call him off as with other houses with noisy dogs. And he never saw anyone in the windows or door looking out of the house, which was often the case.

One day the dog got an especially hard clamp on his ankle, and he swung his leg real hard to dislodge it and the dog went flying and hit the side of the porch and then hit the dirt. He did not move. He went up to him and saw that his mouth was open and his tongue was sticking out, but his were eyes closed. The next day when he delivered the mail to that house, no dog. Problem solved.

The summer passed quickly, and he was probably in the best physical shape of his young life. He had met a number of mailmen during that summer. The chief of the sub-station said that he could always have a job at his substation, if needed. He remembered thinking that that was the nicest compliment he had ever received. August 20th was his last day and he handed in his post office pith helmet, uniform, and mailbag.

And that was that as a U.S. Mailman.



Their son was born at the end of August. Jerrie's water broke one afternoon, and they hurried to the University hospital. As Jerrie got out of the car, she said later that one of the baby's feet was on its way out as she carefully sat down into a wheelchair an orderly's had hurriedly provided and they disappeared through the automatic doors and down the hallway. No more than 15 minutes later, the nurse came into the waiting room to say that Jerrie had a wonderful delivery and that the baby was checked and he was perfect. She said he could see her in a few minutes.

He went into her hospital room and there she was, looking as calm as ever, and the baby looked healthy.

Later that afternoon, Dr. and Mrs. Dr. Wiseman appeared, peaking around the doorway, with balloons and a large card with German writing, saying 'Happy Birthday, August 29, 1965'. They were smiling.

Jerrie was introduced and was obviously very impressed and was immediately in a conversation with Dr. Mrs. W. They then asked, "What will you call him?"

Jerrie replied, "We decided to call him, 'Michael David Campbell, II' and call him David."

This name met with approval from both parents; it would be after her brother, David, but also be "II" (the second), which he thought was very cool. The namesake was a pilot and flew helicopter gunships in Vietnam at the time (and reenlisted twice). Although she was not pleased that he was in the war, for safety and political reasons, she loved him dearly and feared for his safety. He struck quite a stance and had to be at least 6 feet tall and weighed around 250 pounds. A handsome fellow.

Mrs. Dr. said, "That's a good Hebrew name."

They were still there when Maxine and Clarence came through the door, also carrying a bunch of flowers. Maxine, in her usual social manner, said, "Well, who do we have here?" referring to the Wisemans. And it was in no time that Maxine was talking about her German great grandmother. After a while, the Wisemans said their goodbyes and left. He never knew how they were alerted to the event. Oddly enough, he remembered, their support had contributed materially and personally to building his self-confidence in academic matters.

Maxine sat on the bed next to Jerrie, and said, "How did it go, Sweetheart?"

Jerrie said, "The doctor said it was like playing football, he slipped right out and all he had to do was catch him. No damage along the way and the placenta looked very healthy."

You could tell Maxine couldn't wait to get her hands on the baby. The occasion arose a few weeks later after Jerrie had fully recovered. They wanted to have a night out and go to dinner. Wintry weather arrived early that year. They had made arrangements with Maxine and Clarence to drive up to campus and babysit for them; Maxine was more than happy to do it. They arrived at their new house they leased many blocks from campus. They sat around in the new living room and began to talk. Off in the distance, they began to hear a train, getting louder, and louder. The racket was so loud that everyone stopped talking, and the vibrations of the noise transferred to the floors and walls of the house, which was located only one house away from the main railway line. They froze for to about 15 seconds and it was over. He said, "The neighbor told us that was the 7:00 PM train to Chicago. There are other trains, but we haven't figured out their destinations yet."

Jerrie left instructions for Maxine, if necessary, to call the restaurant. It had become cold and was raining when they left. They had traded away the MGA, for reasons related to needing more space in the car over style. They had acquired a black VW. The restaurant was near campus; two hours later as they headed home, the wind was blustery and blowing and it was still raining, if not sleeting. They pulled up in front of their house and they instantly noticed that his parent's Barracuda was no longer there. They rushed into the house, but no David, and no Maxine and Clarence. Jerrie went a little crazy, and he was concerned as well. Something must have happened to David and they had to take him to the hospital. Maybe they were in a rush and just forgot to leave a note. Jerrie called the University Hospital to see if they had arrived, and 20 minutes later, she called again.

About an hour later, Maxine and Clarence drove up with baby David. After they came in, Jerrie tore into Maxine for exposing the baby to the harsh weather and leaving without a note. He had to interrupt Jerrie

because Maxine was tearing up. Enough was enough, he figured. Jerrie picked-up the baby and went upstairs and slammed the door. Maxine said she didn't think there was anything wrong with going a few miles to some old friends they knew nearby. He said, "But Mom, you should have left a note."

She said, "I'm sorry, I should have."

He said, "That's OK. Don't worry about it."

As they were putting on their coats, she said, "That one's going to be hard to handle, Son." And she didn't mean the baby. And they left. He went upstairs and Jerrie was in their bedroom on the bed with the baby, sobbing quietly.

Jerrie said, "I have never been so afraid that something had happened to the baby."

He comforted her as best he could. She never forgave Maxine for that and would speak disparagingly of her to other members of the family on numerous occasions. He had to ask her to stop the trash talk often. She would look for any way to criticize her. One of her favorites after first seeing my birth certificate was to remind him that he was a seven-month baby, as if that made Maxine a bad person. He always reminded her that David was a seven-month baby too, but that had no impact.

Fall quarter was about to start, but now he had to drive to campus instead of walking. Jerrie had dropped out of school to look after son David. Initially, she said that she could always finish school later, but he talked her into finding an appropriate day-care center where five-month-old babies could be looked after. Ohio State sponsored a couple of them, but they were almost always full and expensive. But, arrangements were made, and for the winter quarter she took classes and that made her feel much better. Although the costs of starting a family were going up rapidly, he reassured Jerrie that they'd find the money somewhere.

Although he had made pretty good money carrying the U.S. mail, they had to make it last for at least three quarters, he calculated, based on the courses he had to take yet for both his major and minor degree requirements.

One of his courses was another hydrogeology course. As another addition to the Geology Department's long-term needs, Dr. Wayne A. Pettyjohn was appointed as an Associate Professor in Hydrogeology.²¹ Ph.D was from Boston University, and he had a Law Degree. He was the opposite of Dr. Lehr. His lectures were adequate, but antagonistic as to what must be learned, and he treated many students with sarcasm-tinged humor, but everyone he knew thought Dr. Pettyjohn was a good instructor. This helped and hindered students, while toughening them up for becoming professional hydrogeologists, in Dr. Pettyjohn's view at the time. He had attended South Dakota School of Mines joined the United States Marine Corps. He had earned a B.A. degree and a M.A. degree from State University of South Dakota in Vermillion. He then went to Boston College where he obtained a Ph.D. in Geology in 1965. He read the law and obtained his license to practice law in North Dakota in 1968. Aside from becoming an outstanding Expert Witness in hydrogeology-related litigation, he had three distinguishing characteristics that contributed to Dr. Pettyjohn's lasting legacy that had a direct impact on his activities a few years later:

²¹ Wayne A. Pettyjohn Obituary, <https://memorials.strodefh.com/wayne-pettyjohn/2931411/obituary.php>

- 1) Because there was a growing shortage of well-trained hydrogeologists, Dr. Pettyjohn years later established summer courses for out-of-work petroleum geologists in the early 1980s. Of the 1,300 students who attended over the years almost all were able to attain jobs in environmental and hydrogeologic work. This concept was expanded in the 1990's in Houston, Texas during another downturn in the oil and gas prices.²²
- 2) Dr. Pettyjohn established a groundwater monitoring well field consisting of 10 to 20 shallow and deep monitoring wells on his home property, at least two wells of which were located in the middle of his living room capping the white PVC casings to form the support of a coffee table. The wells were drilled through the house slab below to depths well below the existing water table under his house. The data collected from these wells formed the foundations for a number of master's theses and a few Ph.D. dissertations. For some reason, his first wife reportedly did not approve, although his second wife relished the idea because she was a hydrogeologist as well.
- 3) Dr. Pettyjohn was a Marine and had a serious hobby of collecting German artifacts, especially WW2 Waffen-SS and other Wehrmacht military gear and weapons. In visiting his home, one would see hundreds of such items displayed on the walls, in display cases, and in the corners throughout his home, which appeared to be more of a museum than a home. During the visit, the reasons behind his desire to collect such troubling items were never discussed. Reportedly, his first wife did not approve, although his second wife tolerated it. When Dr. Pettyjohn visited Houston, he would be escorted to any and all available Army Surplus Centers to search for such trappings.

Dr. Pettyjohn did not approve of many of the students' attitude toward Bill, the General, for obvious reasons. He would often say as he arrived at class to give a lecture, "OK, Cut it out, you Morons." Dr. Pettijohn was a good communicator, nonetheless. He gave fair tests, although they always contained trick questions, which he no doubt he had learned that from law school. But he always scored well in the Pettyjohn courses, never below a B.

To meet the non-major requirements, he took courses in music appreciation of classical composers mostly, more history courses on *The Russian Revolution*, *The Industrial Revolution*, and one called *Race Relations*. The latter was especially interesting because he was becoming more aware of the race problems that had developed, or been revealed, in the American culture. He had heard from one of his guys at the wedding that Phil H. had gone to Alabama a few weeks before to walk with John Lewis and over 600 marchers across the Edmund Pettus Bridge in Selma, Alabama and got into a fight with local police. He was not injured and returned to Ohio, but John Lewis had been beaten senselessly.

One requirement of the *Race Relations* course was to conduct a project dealing with race relations in any form. There was an exceptionally pretty young lady that sat next to him in the class and one day he asked her if she would like to be his partner in the assigned project. Mandy agreed. They met at the Student Center to discuss and develop the project and then later in the Geology Lab. They decided on evaluating the potential impact of loaded words on two groups of humans, African Americans and "White" people. Over a period of a week, they set up a table and two chairs on the Oval, the geographical hub and heart

²² <https://i2mconsultants.com/downloads/ela-iet/site/index.html>

of the main campus, where a significant percentage of the student body would have to pass through to reach the classrooms in the surrounding buildings.

They prepared a short questionnaire that contained 10 questions with the only difference being one word, a noun or a verb, to test whether one was inflammatory to one group while not inflammatory to the other. As people passed their station, they would be arbitrarily picked to conduct the brief survey. Some refused, but many agreed to take the survey. Participation improved when they put up a big sign saying, "ON RACE RELATIONS." The results were startling. Their survey appeared to indicate that one group could be aggravated with certain words, while the other group was not. This had potential ramifications in many areas of the culture. They plotted the data and then conducted statistical assessments and wrote up their interpretation of the possible significance of their findings. Because of the limited numbers in the survey, although they collected almost 1,000 completed questionnaires, they concluded that their results were significant but indicated that further research should be conducted to explore the concept further. They received As in the course and a note from the professor on the first page of their report in red pencil, A+ "Best report I've seen in years. Good job."

Mandy wanted to meet more often for coffee at the Student Center. He thought she wanted to do more than that, but he was married, and she was about to be married to a Catholic fellow. He didn't encourage the matter, for the first time in his life.

As the months went by, financial pressures mounted, and he decided to go see about loans and grants from the Methodist Church and from the Masonic Lodge. He discovered that they both had offices near campus, so it would not be unusual to enquire. Both were very gracious and provided applications. He called Maxine to enquire whose name should he list as a reference for the Methodist loan application. Without hesitation she provided three names. He already knew who to put down for the Masonic Lodge application, Dwight Kane, but he also knew that he needed to call him to ask his permission.

He located Mr. Kane's telephone number after a few days and called. He recognized his voice and identified himself. There was slight pause, "Well, Michael it's good to hear from you. Been some time. What's this I saw on the TV news a while back?"

He explained the whole story, and then Mr. Kane said, "Maxine called a few days ago to explain as well. Then he said a strange thing, "Michael, you have one of the best personal public relations chiefs I've ever seen. Too bad we couldn't get her to run for the U.S. Congress. She would have been a Senator by now. Anyway, of course, I'll support your loan applications. That's what the programs are for" He asked how school was coming and he told him that he thought he had things going well.

Mr. Kane then said, "Be sure to let me know how you are doing. Will you?"

He said, "Sure will."

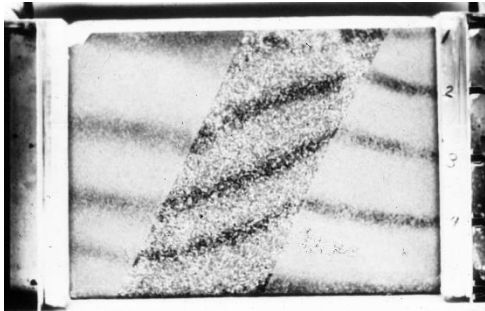
The next two quarters went by in no time, which happens when one spends 90% of the time studying. Jerrie was a great positive influence on his study habits. In the 5-hr Greek Mythology course, during the spring quarter, the course consisted mostly of memorizing names, Greek names and history at that, which was difficult for him. He always figured that he had a vacuum in his brain, but it was lined with lead from all the pencils he chewed on when he was young. In any event, Jerrie was taking the same course with the same professor. When she saw that he wasn't remembering all the Greek names properly, she spent hours and hours with him to drill the names into his memory, over and over again, even with the names

on flash cards. There was only one test in the course, the final. The finals came and went. He got an A, she got a B in Greek History, and she was very irritated, of course, grumbling about helping him, but she was pleased too, because there was a plan developing that would change everything.

There were two graduate students in the Department of Geology from Australia. In late spring quarter, while he was working on Dr. Lehr's large groundwater modeling tank in the basement of Mendenhall, Patrick stopped and looked through the Plexiglas 8 feet by 7 feet by 5 feet sand box he was sitting in connecting monitoring tubes, and said, "Can we talk, Michael. I have an idea for you?"



He stopped doing what he was doing and climbed out of the box. He lit up a cigarette, "What's up?" he said.



Groundwater Flow Refraction Across Permeability Changes

Patrick said, "I've been hearing from home that the mining business is about to go into high gear, and they are short of geologists. I think that you would make a great candidate. The government would waive immigration requirements for a fixed period, and even provide some relief from taxation provisions. I'll bet if you get yourself to Sydney and ask around you'll have a job in no time."

He thanked Patrick for the tip and climbed back into the box to continue where left off. That afternoon, he went next door to Orton Hall Library, named for Ohio State's first president and geologist, Edward Orton Sr., which was the only building in the world that was intentionally designed to reflect geologic time. He looked up the most recent mining journals, and sure enough they were filled with help wanted ads and articles about mining expansion already underway.

He went home and described the conversations with Patrick and his follow-up research on employment conditions in Australia. She said, "When can we go?" Her immediate response was surprising to him, but he was pleased. Then she took away some of the good news aspects of the day. Seems she was having trouble with her mother. The very next thing she said was, "I'll be glad to get as far away as possible from my mother and Maxine" He then said, "Well, you can't get much farther away than Australia."

And so, it was decided. Now for the planning that will get them to Sydney.

He finished the last of his geology courses, the last of his German (scientific) courses, and the last history of science courses for a total 237 credits, far more than was required, with a GPA of almost 3.0. If the first-year grades were removed, his GPA would have approached 3.5.

He was the first in his family to graduate with a college degree. The whole family was present for the summer ceremonies on campus. His folks gave him an official Ohio State graduation ring, silver with a top inlay of crossed hammers within deep green glass, signifying the geosciences. He didn't wear rings because his thin fingers were more suited for playing the cornet or piano, or even baseball than to wear such a large, ostentatious ornament. But it was nice to have it as a memento from my parents in any

event. It was loaned out to one of his lady friends a few years later, never to be seen again. It is probably sitting in someone's tray of such trinkets, she wondering about its history and its owner, inscribed within "MDC."

He still had to complete the construction/operations report for Dr. Lehr's new giant 3-D ground-water modeling tank. With Dr. Lehr's encouragement, he finished the report draft on the ship P&O Princess on the way to Australia.



Chapter Seven

1966, Heading for Australia and Beyond



Downtown Sydney and Harbor, Circa 1966

In 1966, inflation continued to grow in the U.S. in part by continuing to fund the war in Vietnam. Both the U.S. and USSR also continued in their space race to see who would be the first to land a human on the Moon. Crashing into the Moon did not count. Race riots continued to increase across cities in a few areas and police were called in to manage the situation. "Star Trek" debuted on NBC.

The Cultural Revolution was launched in China by Communist leader Mao Zedong in order to reassert his authority over the Chinese government. Believing that current Communist leaders were taking the party, and China itself, in the wrong direction, Mao called on the nation's youth to purge the "impure" elements of Chinese society and revive the revolutionary spirit that had led to victory in the civil war 20 years earlier with the formation of the People's Republic of China. The Cultural Revolution continued in various phases until Mao's death in 1976, and its tormented and violent legacy would resonate in Chinese politics and society for decades to follow. All this while President Johnson had nearly 500,000 troops in Vietnam, but was reportedly looking for a way out.

The United States was very active in space and orbital missions of NASA, likely to establish satellites in orbit to keep an eye on Russian and Chinese activities. The U.S. launched the Gemini 8 space mission during March. It carried astronauts Neil Armstrong and David Scott into space where they became the first mission to dock two spacecrafts while in orbit. Unfortunately, soon after they completed the docking the two spacecrafts began to violently tumble in what was also the first catastrophic failure during a U.S. Space mission that potentially threatened the lives of the astronauts on board. Armstrong and Scott were able to stabilize the crafts but had to abort the rest of their mission. Armstrong would later become the first person to walk on the Moon during the Apollo 11 mission in 1969.

Among the missions under way during 1966, NASA launched Lunar Orbiter 1, the first U.S. spacecraft to orbit the Moon. The Soviet Union had accomplished the same feat with their Luna 10 mission. The Lunar Orbiter 1 mission's main purpose was to photograph the Moon while also conducting experiments. The orbiter made it into the Moon's orbit successfully and took over 200 high resolution and medium resolution photos, including the first two photos of Earth taken from the distance of the Moon. The spacecraft continued to orbit the Moon until it was purposefully crashed into the surface of the Moon to conduct seismic studies.

The ATS-1 (Applications Technology Satellite) was launched by NASA as an experimental satellite that weighed about 750 pounds. It carried several experiments, including two for meteorological purposes. One of the experiments took full disk hemispheric images of the Earth every half hour. ATS-1 remained operational as it orbited around the Equator until 1978.

Soviet Union Landed Luna 9 on the Moon and the U.S. followed with the Surveyor 1 soft moon landing. It was the first mission to take and transmit photographs on the surface of the Moon back to Earth. The craft measured the radiation that was prevalent on the Moon's surface and determined that potential future landers would not sink into the surface as thought by some Earth-based observers. The signal from the Luna 9 spacecraft stopped after a few days, ending the mission.

NASA's final Gemini mission, Gemini 12, carried Buzz Aldrin and James Lovell into space where they conducted several experiments during its four-day mission. The Gemini program paved the way for future missions in the Apollo program, which also led to the Moon landing in 1969.

The Soviet Union's Luna 10 spacecraft became the first man-made object to orbit the Moon during April to observe the environment of the Moon, and to experience how to complete orbital operations in preparation for a potential manned-mission. As the craft orbited the Moon, it collected data about the lunar magnetic field, radiation levels, its gravity field, and the composition of the lunar surface. Luna 10 completed a total of 460 lunar orbits during its 56 active days before it lost communication abilities when its battery died, ending the mission.

Ohio State football in 1966 was absolutely miserable, losing to University of Washington, Illinois, Michigan State, even Minnesota and Michigan.

His planning went into high gear for making the trip to Sydney after graduation. Jerrie, he, and David, now 1 year old, would have meetings sitting around the kitchen table. David was clearly a very bright little boy. Sitting between Jerrie and he, David would watch and listen to Jerrie speak and then when he spoke, David's head would swivel to meet his and then her eyes and listen. They didn't notice his reactions at first, but after a few meetings, Jerrie stopped speaking and leaned over and said to David, "And what do you think about that, Master David?" He must have instantly recognized that was a question. He would look at his father and then break out into a big smile, start vigorously banging on the table with the spoon, and move his feet and legs excitedly.

Jerrie would interrupt the noise with "the hand" to stop. He always did. She would say, "OK, our next topic is" He would return to the listening and watching mode, back and forth. That got to be a fun game they played. But he outgrew that game and would bang with utensils at any time until a loud voice of his parent would quiet him down. They were pleased that David was with them.

Anecdotes of a Lifetime

Jerrie's parents owned a very nice, silver Airstream trailer that they didn't use very often and she talked them into driving the three of them, plus two large trunks containing their belongings, to San Francisco. His parents paid for the gasoline and for some of the expenses, which they couldn't afford but did it graciously.

They decided to take the P&O Princess Cruise ship to Sydney. Her parents paid for the trip. It wasn't First Class, but nearly so. He was shocked by how high the price was and made a point to let her parents know of his appreciation. When cost matters were discussed, her mother would always say that they had been saving for something special for Jerrie, for a house down payment, or something else, like a one-way ocean trip.

Later, Jerrie would also crack a joke around the fact that her mother shipped her off as far as possible with a one-way ticket. That was rather funny, he figured, because Jerrie felt the same way about her mother, for reasons he never knew, and maybe just as well.

They boarded at San Francisco then sailed to Vancouver for a two-day layover. The crossing to Honolulu and then Auckland went smoothly, finally arriving Sydney in the early hours just as the sun was rising in the east.

One of the biggest decisions they had to make was what to do with Fats and Flossie. They were beautiful medium-sized, orange, longhair mixed-Maine Coon cats. The cats had been with them since they first got together. After they moved into the house by the railroad, they quickly learned to climb the tree next to their bedroom upstairs, and try to open the sliding window, which they could if left even slightly ajar. It would slide with minimal paw pressure. Either at sun-up or if they just wanted in, they could often enter at will. They would arrive in the AM, assess the conditions of the window, and if able to get past the window, they would slide through the thin vertical opening and jump down onto the bed and slowly creep up to faces of the occupants. He remembered many mornings being wakened by the loud sounds of purring on his ear and paws massaging his neck. It was perfectly clear that they had learned that if they did that they would get fed sooner than later, but if the window was shut tight, they would have to settle for sitting in front of the back door, waiting for one of the humans to remember them and provide food.



They could not take the cats with them on the trip out of the country for a number of reasons. Steve or somebody agreed to take them. He wondered if they would miss their humans. Probably not.... Food first. Purr later.

Goodbyes were made. Maxine emoted, as usual, sobbing during their hug that Australia was so far away and that she was afraid that she would never see him again. Dad even gave him a hug; he thought he noticed that his Dad was tearing up as well, but he turned away. But they were serious goodbyes and possibly true; Jerrie and he had no concerns whatsoever, he remembered., because they knew they wouldn't be gone very long. They stopped by Grandma's house (Retta's) to say good-bye to her for the last time.

And then they were off, the five of them. The weather was hot during the day and the car's air conditioners were fairly new and created a cool environment. Jerrie's parents had a Mercury Park Lane 4-door, which provided a surprisingly smooth ride, and the engine was powerful enough to easily manage the climb into

mountains behind Denver pulling the Airstream trailer behind. They stopped a couple of times for him to look at rock outcrops of special interest.

Jerrie's mother was not the sociable type and didn't speak much except when asked a question. She reminded him of Bea Arthur (Maude in later years) by look and by manner of the character at least. Stiff, but maybe just quiet. Jerrie's stepdad barely spoke a word the whole trip. As with her mother, he would respond to a question pleasantly enough, but he never offered a subject for discussion. Watching and listening to Jerrie and her mother and stepdad interact with her, he got the impression that both parents were afraid of Jerrie for some reason, not physically, but mentally like she was holding some big secret over their heads. None of that was ever resolved.

He noticed the sunlight was changing as they were driving across the fertile lands of California to San Francisco; it reminded him of the times he lived in California, only five years ago. He also remembered that he was carrying the geological hammer and leather belt packed away in one of their trunks that Larry and Mr. and Mrs. M. had given him for Christmas that year.

They arrived in San Francisco a day early and had time to look around the dock region, especially the numerous restaurants. There was a convenient parking area for campers near the P&O Princess boarding ramps and U. S. Customs house. Jerrie and he were relieved that they made it in time and without incident.

When the time came to embark, they said goodbye to her parents. He made a point to thank them again for supporting their move to kick off his professional career in Australia. They responded politely the best they could muster, and they were off.

They boarded and were taken to their cabin on the huge ship. People were everywhere hurrying about. It was a very nice cabin. It sported two port holes and had two very small rooms, one with a bed and the other was a very small living room, with a small couch, leather chairs with a huge window. It also had a bathroom with a very small shower. All no more than they needed. It was called a *Petit Suite* as described in the literature in one of the drawers. No wonder it cost so much.

After they unpacked, the three of them went up on deck and watched the Golden Gate Bridge disappear as they headed for Vancouver. He noted that the big bridge was not golden but red in color. They walked all over the ship to learn where the restaurants were, the location of the children's playrooms, the swimming pool and the work-out rooms. There were also shops of several types. Based on the accents of the maids, waiters, and many of the passengers, they had definitely entered a foreign environment.

Once under full steam, he noticed the flying fish with the binoculars that they had brought with them for such occasions. These critters were about a foot long and would leap up and out of the water, extend nearly transparent wings, and after flapping quickly for about 5 seconds airborne, they would back into the water. At times there were many, some other times just a few. But it was fascinating.

When they returned to their cabin, they all were tired and took a nap on the new bed. It was dark when they awoke. Jerrie looked at the schedule and noticed it was time for dinner, so they changed clothes and went where instructed. It was a beautiful, very nice dining room. They noticed right off that there were no children. Jerrie said, "Our first faux pas," as the *maître d* appeared; he looked at David and confirmed that children had their own dining room, but he said that he would seat them anyway, off to the side, because it was the first night on the ship, actually next to a big window, but it was dark outside by then.

Anecdotes of a Lifetime

A waiter brought in a highchair for David, and they had their first great meal, primarily because they hadn't had a good meal since leaving Ohio. David was good and made no racket, only because he was getting sleepy and tired, no doubt, but not cranky, as might be expected of the little guy.

After the meal, they took a little walk on deck in the cool sea air with shore lights and overhanging low clouds. They returned to the cabin and prepared for bed. David would sleep between them so he wouldn't roll off the bed at night. He decided to set up his work area in the living room. He took the cover off his red, portable typewriter and assembled his notes and began to work on his report draft for Dr. Lehr, which he would then use to write Dr. Lehr's final report to the government in response to providing federal project funds to build his 3-D sandbox for ground-water modeling.

The next morning Jerrie took David to breakfast. When they returned, Jerrie was fuming and full of stories. Apparently, the British people turn their children loose during breakfast. Although there were young ladies attending the event, the place was filled with yelling, screaming children, with pieces of pancakes flying, and a plastic cup of water hurled into the wall, splashing many kids who then began to cry. And this was only a few of the incidents, Jerrie had said.

The next day, she found out that there was a better place for David's breakfast after all. There was another children's room, but for somewhat older, more civilized children. She at first wasn't allowed in because David was only 1 year old, but after pleading, the attendant gave in and allowed him a special dispensation because she said that he was a quiet little boy, and they bought it. It turned out to be true because for the rest of the cruise, he was a perfect little boy, no outbursts or unruly behavior to his mother's relief. There was also a service where they could hire a lady sitter that would stay with David while they had dinner alone once in a while.

About three days before they arrived in Sydney, he completed his report to Dr. Lehr. Jerrie proofed it for verb busts, or other issues. In a week or so, he hopefully would have the opportunity to send it off to Dr. Lehr by Air Mail with the return address of his new employer, whomever that might be.

At each stop, they got off the ship for a look around in the dock area only, which was nonetheless interesting and worth the walk. One by one they checked off the stops and short trips before reboarding, Vancouver, Honolulu, Auckland, while getting farther and farther away and then Sydney, which was by then about 9,500 miles from Lancaster, Ohio, and which appeared in the mist that morning as the Sydney Harbor opened up in front of their ship. The tugs came out to help dock the ship. This was interesting to watch as well, but the ship was finally secured at its dock. Then everyone had to have their papers and visas checked before being released with a colored ribbon tied onto their baggage and attached to each passenger to signify that they had the appropriate documents for the first phase of the customs review process. Afterwards the Customs Officer came by their cabin and reviewed their papers and visa. Jerrie left a nice tip for the maids and attendants who looked after them during the trip.



The valet arrived with their two big trunks and gathered up their suitcases, one of them being his brown Samsonite suitcase that he took to California, now getting a ride downunder. They disembarked and with the valet leading the way he delivered them to the Australian Customs line. Jerrie also gave the valet a nice tip.

They went through the final Customs officer's grilling and when he asked what his occupation was, he said "Mining and Environmental Geologist." The Officer looked up and said, "Welcome to Australia, I heard we need you guys." With no further questions, he passed them on through and they rolled their trunks to the Avis Rental Booth and filled out the paperwork. It wasn't long before they had loaded the trunks and baggage into the back of the small truck and got in.

'There was something immediately wrong with the view,' he said to himself. The steering wheel was on the wrong side. He then remembered that Australians drive on the other side of the road, like the British. He flashed on whether that meant water drains down a hole going the opposite direction and whether dogs curl up to go to sleep in the opposite direction in the southern hemisphere than in the northern hemisphere. He reminded himself to check these matters one day.

He started the engine of the truck and then stepped on the clutch but then encountered yet another impediment. He had driven many types of stick-shift vehicles, from tractors, to cars, to trucks, many times in his past, but always shifted with his right hand, never his left, which then felt very awkward. He found first gear and let out with the clutch, but then he had to find 2nd gear by trial and error, making all sorts of grinding noises. Was it up to neutral and then up to the left or to the right? More gear grinding sounds. Finally, he found second, and so it went by trial-and-error into the morning rush-hour toward downtown Sydney. Jerrie thought it was hilarious.

About an hour later, they finally found their way to Bondi Beach, the most famous beach in all of Australia. It was about 11:00 AM in the morning on a weekday and the beach was already filled up with beach umbrellas and people everywhere, big and little and some very nice-looking women in swimsuits, he noticed. Jerrie couldn't help but see hundreds of well-muscled men in tiny bathing suits. They found a parking place just off the beach-side street and got out to explore. The sun was very bright, so he found a tourist shop and bought some sunglasses for Jerrie and David. He also got a little brown hat to cover the top of his head. They continued their walk. They soon saw an Avis Rental sign, which was good because they had a week's rental on the truck, enough time they figured to find a place to live.

Then next door was a sign saying, "Rental Real Estate" office. They went in and a pleasant-looking lady with a very thick accent greeted them. He explained to her that they had just arrived from the States. She said, "What part of the States are you from?" He said, "Ohio." She then said, "I have relatives in Cleveland." They became instant friends. Her name was Sheila P. and about 40 or so. He went on to explain that they needed a short-term apartment for a week or so until he finds a job. She thought a minute and then said, "I have just the place for you. Follow me." The four of them walked back through the office out its back door and into the back door of a house. She said that a couple had just left, and it was cleaned up that morning. He opened the door to an older refrigerator and saw milk, eggs, and butter. Even the breadbox had fresh bread in it. He asked her, "How much on a weekly basis?" She said, "150 Australian dollars, and I'll throw in the milk, eggs, and butter for free." They all laughed. They agreed and she went to prepare the rental papers. They walked around the little apartment house. It was a little dusty, but the bathroom and shower were clean. Even the drawers were filled with towels, etc. It even had a telephone. It was fully stocked. Just what they needed.

The rental agent returned with the document and a bottle of Australian wine from South Australia. He signed the rental agreement and then the agent produced three wine glasses from the cupboard, opened the bottled poured out the wines and she raised her glass and said, "Mr. and Mrs. Campbell, welcome to Australia." They clinked glasses and she talked about Australia, the good parts, and the bad parts for the next hour at least. She departed when she saw him yawn and said she better get back to the office across the alley. After she left, Jerrie turned to him and said, "How lucky can we get?"

David seemed to like the new place too; he explored every nook and cranny and opened every door and drawer. They all went to bed early that night. The next day was also going to be pivotal as he began to look for employment to begin his career as a professional geologist.

The next morning, he found the telephone book and looked-up "geological consultants" and for the one with a prominent advertisement. He selected one and called. After going through two or three secretaries, he finally spoke to the VP of the group. He indicated that he was looking for employment, and after they discussed his courses, grades, and that he was from Ohio State, the VP fellow said, "When can you come in? How about 2:00 PM? He said, "See you then."

The next issue was that he didn't want to drive the Avis truck and try to find parking, so he decided to take a taxi. He put on a coat and tie, with shoes shined, he walked across the alley into Sheila's real estate office and spoke to her for a few minutes. She said he could get a taxi out front. She said, "Good luck" and he walked out to the street. Sure enough, a taxi was bearing down on him, so he waved his arm and the taxi stopped. He got in and taxi driver turned to him and said, "Where are we going, Mate?" in a very interesting accent. He gave him the address and off they went. They talked along the way about his accent and about the taxicab driver's and actually had quite an enjoyable time of it.

It didn't take nearly as long to get to his destination, even with mid-day traffic, then it took them many hours before from the docks to Bondi Beach. They pulled up, and he said, "That will be \$25.00 Australian. He gave him \$25.00 American. They then talked about the exchange rate and gave him another \$10.00 in U.S. dollars and that seemed to satisfy him. He, with his briefcase in hand, stepped out onto the main street of downtown Sydney.

He noticed it was only a little after 1:00 PM so he went into the designated building and looked for the marquee indicating the company name and the floor. He found it. He figured that now that he knew where he was going, he would take a walk. He went back out onto the sidewalk and stood and watched as he developed his first impressions.

The streets were jammed with fellows in suits and ties and business hats on occasion. The ladies were also wearing office attire, all looking very stylish. He studied some of them carefully without being too obvious and after a while he concluded these people look a lot like they do in Columbus, Ohio, except they spoke with a variety of Australian accents he was to find out, depending on where they grew up in Australia. Regional accents, just like in America.

He wanted to be on time, not early to be sure, but not late either. He went back into the building, and into the elevator and up he went. He walked through the large glass door of the company and went up to the receptionist's desk and was about to identify himself when she said, "You must be Mr. Campbell?" in a voice with no identifiable accent. He said, "Good guess." She smiled and then took him down to the corner office and said to the occupant, "Mr. Campbell is here," and turned, smiled, and walked back down the hall.

Anecdotes of a Lifetime

A rather short fellow in a coat and tie greeted him and they sat down. His name was William P. After just a few minutes of discussing his company's projects all over Australia and Papua, New Guinea, geological background, he said,

"You know ... I just got off the phone from talking to one of our American clients. The fellow said that he just received the OK from corporate to build a staff. I mentioned to him that I had spoken to a new arrival in Australia from the States and suggested to him that he might want to talk to you about his plans before we scoop him up and put him to work."

He went on, "So, why don't you go down to the IBM Building next to the Sydney Harbor Bridge and speak to him first and, if that doesn't work out, come back here, because I have a couple projects, I could plug you into today, if you like. The fellow's name is Robert Arrington, he is Vice President of Exploration in Conoco's mining group in Australia."



He said, "I can't thank you enough. Sounds great. I owe you a big one."

William P. said, "I think we'll be seeing a lot of you. I'll tell Arrington that you are on your way. Good luck."

And off he went. He arrived at the building after a rather long walk, went through the doors and found the building marquee listing opposite the elevators and there was "Conoco Mining Group, 5th Floor."

When he arrived and stepped up to the receptionist, he indicated that Mr. Arrington was expecting him, and then sat down in one of the comfortable leather chairs. In a few minutes, Mr. Arrington appeared, and they shook hands. He then followed him back to his office. It had a fantastic view that overlooked the entire Sydney Harbor Bridge. The ship they arrived on (the P&O Princess) was still at its dock. Mr. A. asked him how the trip went, and about his wife and son. He was immediately impressed with this tall, soft spoken Texas fellow. He had graduated with a Master's from University of Texas at Austin had focused on oil and gas in the beginning for Conoco International. He and his wife, Dottie, who was from Mississippi, were based in Argentina for about five years and he then was reassigned to Sydney to head-up Conoco's new mining group in Australia. He was about 6 feet 3 inches tall, at least.

Mr. A. indicated that Conoco had recently acquired Agrico in the U.S., which had an operation creating fertilizer from the phosphate mined in central Florida. The commodity focus was to be on potash, phosphate, and other commodities of opportunity, he had said. But Australia was in particular need of fertilizer because the population was growing quickly and the cultivated lands in southern Australia were expanding. Their current sources of phosphate were from Christmas Island and Naru Island and they would be depleted soon. The British first began mining followed by the Germans, then New Zealanders and finally by Australian companies to meet local needs. These deposits, although of high-quality bird guano, had been about mined out so Australia needed new supplies of phosphate, potash and other commodities to support their population growth. The large phosphate deposits in Morocco and the smaller deposits in North Carolina, Florida, and Idaho were too far away to be economical to develop for the Australian market, so the hunt was on in Australia to locate and mine new deposits.

They talked about salaries, reviews, benefits, and about the possible tax relief he said that he might be able to get approved, which a few months later in fact was approved by the Australian government along with an indefinite visa based on the needs of Australia, which meant they could stay in Australia for as long as they wished, which was a big deal at the time.

Robert then said, "Well, what do you think? You want to join me in building a group here in Sydney?"

He said, "Count me in!"

Robert said, "Great! Let me show you around." There was a vacant office next to his. He said, "This is your office." It was not quite as big as Robert's but big enough, and it had the bridge view and a large desk and credenza behind it next to the wall, with a telephone.

He was soon instructed to call him Bob, but he always thought from the beginning of their relationship that he deserved a more formal name and called him Robert. He also chuckled a bit when he called him Robert, instead of Bob, because he said that was what his folks in Texas called him when he was growing up.

There was the new copying machine, the Xerox 914. "This is very useful for us," Robert had said. He had never seen a copying machine before. Incredible. He wished he had had one of those at Diamond Electronics, but they probably have one by now, he thought at the time.

He was introduced to the whole staff one by one. The office was basically there for Conoco's oil and gas exploration activities in Australia; Robert's new group occupied a part of the 5th floor. They went back to Robert's office, and he began to fill him in on what was going on. Robert described the drilling currently underway in Queensland and said that both Robert and he would be heading up there to stay for a week or so.

He asked Robert what title he should use. Robert said that he had decided that they will build the group of young Australian field geologists to report under him, saying, "So let's say you use the title, Staff Geologist. I'll reflect that in the organization chart for Corporate Conoco in New York."

He asked him where they were currently staying, and Robert said that they should consider staying on the North Shore in the general area where he was living. He said they could get a long-term lease of a house for reasonable money. He said, "Why don't you take the rest of the week to find a house, buy a car, and get rid of the rental truck. After you have moved in you will be ready to start work. But let's call today your first official day of work," he said.

He then asked him if he needed help with the financing, such as pre-payment for the house lease and car purchase arrangements. And Robert then added that their accounting will manage things just like they did for him when he arrived in Australia a few months ago.

A couple of oil & gas geologists came into Robert's office "to meet the new arrival," they said. Robert said, "Why don't you guys continue your talk in my office." Robert had to go to another meeting and he was off. John Abbott was an older geologist and was from Mississippi and had been with Conoco for 15 years. They all had conversations and generally got to know one another. After a while, someone said that he needed to get back to work and they all departed. John was the Chief Geologist in the oil & gas group.

He sat in his new empty office and took a deep breath. 'That's over' and then he thought that he should

let Jerrie know what's going on. He swiveled around to the phone. Got the piece of paper out of his coat inside pocket and dialed the number after figuring out that he had to get an outside line first.

Jerrie answered and he said, "I have a job and have just been appointed the Staff Geologist for the Conoco Mining Group. Salary AUS\$7,000.00 plus car allowance and normal benefits, including dental.

She said, "That's wonderful. Talk about good news."

He said, "Suggest you talk to Sheila about getting a house rental on the North Shore. When I get home, we'll need to think about buying a car, so think about that."

She was very excited and said, "This is going to be fun." Jerrie was very good at managing such things and by the time he arrived in the taxi at Bondi Beach, she had plans underway. They decided it would be appropriate to buy a VW, an inexpensive but reliable vehicle. But they encountered a 1957 black Citroën Traction Avant on a used-car lot and bought it after they had a mechanic look it over for a price that was less than the cost of a VW. It had the gear-shift on the dash, front-wheel drive, forward-front car doors, and other cool features. They figured if there ever was a time to buy a funny car like that, it was then.

They picked up Sheila in front of her office and drove north over the Sydney Harbor Bridge for the first time and then around to the area called Clontarf, which was just west of Manly, a popular tourist spot with a sheltered beach, shops and restaurants. Manly had Ferry docks.



The four of them visited three candidate houses. They picked the one with bay frontage and magnificent view of the Ferry going between Manly and downtown Sydney. He remembered that he took a photo of David in his field boots with funny hat to commemorate their first place in Sydney. Turned out there were three ways to get to work in the mornings. One was to drive, which took about 15 minutes, sometimes in heavy traffic. Another way was to take the Ferry, which took 30 minutes, but was almost always a pleasant ride, except in harsh weather. The

third was to take the Hydrofoil from Manly to downtown Sydney, which was five times the cost of the Ferry, but only took 15 minutes and was a hoot to ride, except in bad weather.

Sheila and Jerrie completed the paperwork. She made contact with Conoco accounting people, and they led her through the procedures and how the real estate people were to be paid, which was similar to paying for the "new" car.

After closing the deals, they had a drive around Clontarf and Manly. There was a hospital in Manly. It was truly a beautiful place, with the houses either fronted on the bay water, as was their new house, or were perched on top of the hills. They took Sheila back to her office and settled up with her, which was reasonable for the rental and other costs, and packed up their personal belongings, and suitcases and loaded the "new" car. They encouraged Sheila to come for a visit one day, which she did that first year.

He retrieved the Avis Rental truck and the two vehicles headed for their new home. When they arrived, he had to drag the two trunks down about 30 steps and into their new place. They had found an Avis Retail office in Manly and made arrangements to drop the truck there, which he did in no time, as it was only about four miles away. He and Jerrie had said many times to each other how easy it was to get things done in Australia, and that never changed for them over the years there.

Finally, the three of them were together in their new car, now having just moved into their new place with a new job in a new, beautiful country of nice people.

They hadn't arranged for a new telephone yet, so he decided to go open a new account at a bank he had noticed in Manly. While there, he thought he would borrow their phone to call Robert and let him know that everything was in order. He said he was happy to hear that and that he'll see him on Monday morning.

They had the whole weekend to do whatever they chose. They decided to go to the beach and just relax. David loved digging in the sand and finding little pieces of something. He would look at them very closely.

Monday morning arrived, and he decided to drive into the office for his first day. The drive was at first a little nerve racking, being on the wrong side of the road, and all, over that huge bridge. He turned right off the bridge road then down the street to the IBM building and into the parking area below. He asked the parking attendant where the Conoco parking was and he said any of those, and pointed out the numbers printed on the wall.

He had to carry the geology books that he had brought with them in one of the trunks making three trips up and down in the elevator to finally get them installed into his bookcase and on the credenza behind his desk. He hadn't had the time yet to get his Ohio State University diploma framed but planned to do that soon. Turned out there was a frame shop just across the street next to CSIRO Building.

He arrived in his office and sitting in the middle of his desk were his new business cards. He went next door to Robert's office to announce that he was "open for business." Robert laughed and got up and pulled three or four thick notebooks out of his bookcase and handed them to him saying that he should have a look at the reports to get him started. They were reports by Fitzpatrick and Grasso Consultants, PTY, Adelaide, South Australia. He could tell from their salutations that Brian F. only had a Bachelor's degree like him, while Rossi G. had a Master's degree, all from the University of Adelaide. There was a rolled-up map of Australia that Robert had put in the corner of his office, so he tacked it up on his side wall with push pins. He found Adelaide, and after reading some of the reports, he found Mt. Isa, in NW Queensland, and then a place called D-Tree, where Conoco had just drilled finding only a little phosphate but a lot of vuggy dolomite in the Beetle Creek Formation of the Lower-Middle Cambrian sedimentary rocks.

Later that day, Robert came into his office and announced that they would be leaving for Mt. Isa on the coming Wednesday and explained the plan he had developed. He lived in one of those houses along the top the hills of Clontarf and would pick him up at 6:00 AM and drive to the airport, where they would board a flight to Brisbane and then change to another flight to Mt. Isa. Brian or Rossi would meet them at the airport and drive them to the field camp some 90 miles northwest of Mt. Isa.

After work, he drove home to bring Jerrie up to date on his travel plans. He was thinking as he drove home that evening that Jerrie had been a joy to be with since the incident of Maxine running off with David in harsh weather. When he arrived home, Jerrie had dinner ready, her first in a long time, and it was even better than the typical Christmas dinner. He remembered it as being outstanding: a walnut salad, tasty porkchops, mashed potatoes, lima beans, and bread rolls. He wondered for a while whether things just taste better downunder for some reason? He dismissed that thought and assumed it was because he was just very hungry after his first full day at the new job.

The next morning, they decided that she was going to drop him off at the ferry so she could go to the grocery and other functions. That became the primary way of getting to work. It was pleasant even though the weather was a little hostile. The ferry was very wide and not likely to have a problem even in bad harbor weather. The walk from the downtown ferry to his office was uphill but not bad. 'It would just make him stronger,' he thought.

That night they talked about how long he would be gone, and what he would be doing. It was obvious that Jerrie was a little apprehensive, but she was also trying to play it down. It would be the first time they would be apart since her inexplicable trip to Tucson a few years earlier before they were married.

Robert picked him up at 6:00 AM, but what hadn't been expected was that the vehicle was a large black limousine. He carried his suitcase up the steps. The driver stored it in the back. He got into the limo and off they went. There was enough space for seven people in that limo, including a little jump seat. Once they arrived at the airport, he was surprised at how small the airport terminal was. As he was walking toward the plane, he realized that he had never flown in a plane before. Robert and he climbed the portable stairs to the plane and found their seats and buckled in. As they took off and turned north toward Brisbane, he could see downtown Sydney, Bondi Beach to the south, and then the Sydney Harbor Bridge and Opera House, which appeared to still be under construction. What a sight! And then he could see their house near Manly and then into the clouds they went.

After going through some bumpy clouds, they landed in Brisbane and walked into the terminal, which was even smaller than the Sydney terminal. They had lunch in the airport restaurant, and it was very tasty. A couple of hours later, they boarded an *Ansett Airlines* plane. It had four propjet engines that made the runs from Brisbane to Mt. Isa on regular schedules barring weather delays, which were frequent they heard from a stewardess.

During this first trip to Mt. Isa, he spent most of the time looking at the ground for outcrops and their characteristics. As they approached Mt. Isa, he saw large areas of tailings ponds and waste dumps and what appeared to be slag of some kind. He hoped that one day he would be able to go down in that deep underground mine, which had been mining copper, lead and zinc and silver for a number of years. He



understood that it was at least 5,200 feet deep, but they had had some serious spalling problems and miners had been killed by flying rock. The company also had union problems over wage and safety disputes.

The Outback NE Queensland In the Spring,
But Summer Not So Green

They landed at Mt. Isa airport after only minor weather issues and diversion of flight plans. The terminal was a small building where people picked up their baggage. A fairly short fellow with a wide-brimmed hat recognized Robert and shook hands.

Robert introduced Rossi to him. Rossi had a pleasant, kind face. He was obviously of Italian descent but spoke English without a noticeable accent. They loaded the grey *Landrover* and headed west on the Barclay Highway in the direction of the Northern Territory. This highway terminates to the east in

Townsville. It was a wide, single highway paved with asphalt. The Australians called asphalt, bitumen, sounding like "bitchemen."

After driving for about an hour and half, Rossi turned off the main highway onto a dirt road heading northward. There were three types of ground pathways in the Outback, 1) a highway, usually with improved drainage along the sides, some with bitumen, some not, 2) roads, always of reddish soil, graded, narrow, without drainage improvements, and 3) tracks, these are barely observable unless standing on top of the vehicle, usually seen only by vegetation differences. There is a fourth type, called "going country" or more commonly "cross country," meaning just go and try to miss natural potholes, trees big enough to tear up the vehicle's grill, or puncture tires. But tall weeds were game, although rock outcrops can also be hidden among the tall weeds, so drivers moved through them with some caution. A few years later, he experienced one such hidden object with a large "U" shaped tree branch that knocked off the oil filter that was mounted on the side of the engine block in the older Landrovers of the day.

Off in the distance, he could see a number of brown tents with Landrovers parked around them and a few men standing around. They drove up and got out. Rossi walked up to the men as they joined them. Rossi told them that one of the men just got his arm crushed on the drill rig when casing became unlashed and caught him between two 300-pound casing sections. Someone just took him to the hospital in Mt. Isa, which they must have passed on the way out.

Brian Fitpatrick appeared, and Rossi introduced him. Brian was curt and stiff. Robert later told him to ignore Brian. He was concerned about the fellow that got injured.



Robert and he were taken to their tent, and they assembled their belongings. A meeting was called to be held in the dining tent. There were about 14 men and two cooks present. Brian went through the safety issues that needed to be considered when working around the drilling rigs. Conoco had employed four drill rigs. Two men per rig plus an off-sider. Brian was serving as Chief Geologist for the operations and Rossi provided geological support, which included preparing geological logs for each shallow drill site and collecting samples

for subsequent laboratory analyses, when merited.

When Brian finished with the safety briefing, Rossi got up and introduced Robert as the Vice President of the Conoco Mining Group and him as the new member of the Conoco management team as Staff Geologist. Rossi indicated that he would be bringing him up to speed over the next few weeks in sampling and logging.

He had read all the reports on the drilling results to date and on the sampling and logging that had been conducted in the past. Brian, but especially Rossi, had spent the past two years combing the area for geological indications of potential phosphate beds having sufficient grades of P_2O_5 that might merit mining, given other favorable issues that also supported mining. They had prepared the paperwork to apply for claimed large areas called tenements by the Government, which would be either approved or rejected, based on the company's financial ability to pay for geological activities, such as geological field mapping, drilling, coring and associated analyses. A few months before his arrival in Australia, the Queensland government approved the formal tenements of the areas claimed by Brian and Rossi's work on behalf of Conoco. They led Conoco into the area of potential phosphate deposits.

An Australian company, Broken Hill South, had earlier reported the discovery of the Dutchess phosphate occurrence, which was large in tonnage and high in grade, which should have been in the range of 20% P_2O_5 to be of commercial interest. But since phosphate is a bulk commodity, the closer to a seaport or other mass transportation the better. The areas Brian and Rossi selected were much closer to the Gulf of Carpentaria and in proximity to the main all-weather Barclay Highway and associated railway to Mt. Isa. than the Duchess deposit was at the time.

Robert departed to return to Sydney the next day and Rossi and he drove Robert to the Mt. Isa Airport and saw him off. On the way back, Rossi and he talked about families, but they also talked about what they would be doing over the next couple of weeks. He was instantly impressed with Rossi on many levels, he remembered. He spoke clearly (i.e., without noticeable accent); he had very broad experience in the mineral deposits in Australia, particularly in the South Australia and Queensland, and he was just an all-around pleasant man, no big ego, no need to impress. He asked him about Brian and Rossi said that Brian has always had a bit of an ego issue, and he warned me that he had learned over the years with Brian as a partner, that it would be better not to confront him, even if he knew something to be wrong, just ease into the issue slowly. He responds well to that approach, Rossi said. He adopted that approach henceforth in his dealings with Brian, which turned out to be outstanding advice from Rossi.

The approach would be put to the test a week later. He had been with Rossi doing the daily rounds as they visited each drill site; one of the four drilling rigs was still drilling, but sometimes the drill site only had the lines of samples laid in 5-foot intervals, next to the hole, which had been covered by a green plastic plate, with a small hole the diameter of one's little finger to allow the hole to "breathe," someone said. The



breathing aspect was to become important, but the impact was only revealed decades later.

Rossi Grasso, Conoco Consulting Geologist in Queensland Mapping, 1967

After a few days of this routine, it rained one night which brought traveling by road or track problematic, so Brian called it a "rest morning" before resuming drilling. Rossi wanted to show him a few outcrops that were near the camp so off they went. He had previously noticed at his office in Sydney a few days earlier a couple of outcrop areas that he had observed on the geological maps made by the BMR (equivalent to U.S. Geological Survey). Rossi showed him some outcrops with Precambrian rocks that were igneous and metamorphic in type and origin. He then steered Rossi to the area he wanted to see and pointed the way, cross country. About five-miles later, he saw what looked like a fault trace that had emerged from the red soil. They pulled up to it and got out. With his "new" hammer, he knocked off a few fragments and handed one to Rossi and they began to look at the rock with their hand lenses that were strung around each of their necks. They looked at their pieces for quite a while moving their heads around to find the best possible sun angle on the fragment for better lighting. They looked up at each other and he said, "Is this what I think it is?" Rossi said, "Yes, I'll bet this contains high-grade phosphate." Rossi said, "Brian and I have spent nearly two years mapping this area and checking hundreds of outcrops, but they have never found an exposure with high-



Plus 100° F in Early Summer, NE Queensland

grade material.” They dug out a vertical sample of the material to examine later at the office and to send to the lab for chemical analyses. They then began to sample the smaller outcrops surrounding the main outcrop to determine possible extensions. By the time they had finished, they had gathered about 50 to 60 sample bags of the mineralized rocks and associated material, which were all calcareous. This was indicated by the fizzing caused by a drop of dilute hydrochloric acid on a sample from the small plastic bottle that most geologists carried in their leather pouches on their belts.

By the time they returned to camp, it was nearly sundown and dinner time. The camp had a cook and cook’s assistants, two young boys in their early teens. As they sat down at the long picnic tables, there was fresh-baked bread and butter on a plate, which he was soon be munching on. He had learned the Cook would not serve until all drillers and associates were accounted for and sitting down at the tables in the mess tent, they called it.

Brian came over and sat down next to him and was quite pleasant saying, “What have you guys been up to?” Rossi slid one of their samples to him and motioned for him to give it Brian. He had a big smile on his face. He picked it up, handed the fragment to Brian, and said, “What do you think of what Rossi and I just found?” Brian took a look at it and immediately put his hand lens on it, straining to catch the light. Brian said loudly, “Holy Shit, Rossi, this is the phosphorite from the Beetle Creek Formation of the Lower-Middle Cambrian. Let’s go run a Shapiro test on it to confirm.” This test was a rapid field method for determining P_2O_5 in phosphatic rocks based on visual colorimetry. After crushing with a mortar and pestle and the sample powder dissolved in dilute nitric acid, the color due to organic matter is removed and an aliquot of the solution is then reacted with a mixed molybdivanadate reagent in a test tube.

The intensity of the yellow color of molybdivanadophosphoric acid is matched with a range of yellow intensity colors exhibited in the test tubes of standards similarly prepared of known values. The results by this well-known method are well within normal sampling errors. It was known to be very useful in quickly evaluating the phosphate potential of an area, as they were doing in their project. All samples were to be also confirmed at a laboratory in Adelaide under more controlled conditions to declare the actual values.

The three of them got up and went to the lab tent where such tests were run in the evenings. Sure enough, the test indicated $>28\% P_2O_5$. Brian said, “This is almost stoichiometric,” meaning that it nearly had the maximum amount of phosphate chemically permitted for the phosphate mineral in the rock. This could be called “ore” phosphate rock. He had never seen Brian so happy.

They heard the dinner ring of a big, steel spoon on a knife-sharpening rod from the Cook to confirm everyone was present and dinner would be served. Brian put the rock down and they headed toward the mess tent. He was the last one out and scooped up that rock sample of known P_2O_5 value, more or less. He retained the sample for decades.

When they arrived at the mess tent the cook was waiting for them to sit down. Rossi and he sat down, but Brian didn’t. The mess tent of men quieted, and Brian spoke,

“I have two items of interest this evening, gentlemen. The first is that the doctors in Mt. Isa said that Bobby’s arm was broken and he will be in a cast for about 4 to 6 weeks and rehabilitation for two weeks. So, he should be OK eventually. Second, the map of drill sites you were given at the beginning of our program is no longer relevant. Rossi and Mr. Campbell have located an outcrop with at least a 5-foot zone of high-grade phosphate. This means that we have been drilling in the lower part of the section when we should have been drilling in the shallower part of the section

We will prepare new maps of drill-site locations and will have them ready for you in the morning. Any questions or comments?"

Brian always called him Mr. Campbell, for reasons he never knew. Even Rossi didn't know, he said later.

Brian sat down quickly (he likely didn't want to hear questions or comments) and turned to them and said, "Are you ready to get your darts out for the dartboards tonight?" They laughed and had a great meal and then made the new maps for drillers of the new hole locations. They moved an odd-shaped grid to the east about three miles as best he could figure. They recopied the simple maps four times showing tracks and dry creeks and new hole locations for the drillers to follow.

Overnight the weather had changed from humid to hot and dry with temperature into mid-90s by mid-day. No one had mentioned to him anything about the primary issue of the Outback, but it became clear that very day, Flies! *Drosophila* (or fruit flies, or regular flies to him). When there was no wind, they were everywhere. Buzzing and landing on his mouth, trying to get into his ears, around his eyes, all mad for fluid of any kind. He would hear Rossi and Brian call them "little cheeky bastards" when one or more would climb into their noses, or ears, or corner of their eyes, which was the most dangerous place. If he happened to swat a fly to get it away from his face near his eye and happen to catch it with the fingers and mash up the fly allowing some very small bits of body juice to enter the corner of his eye fluids, in no time, he would be getting "pink eye" and, if left untreated, it would soon represent a threat to his eyesight. That meant that someone would have to drive to the nearest doctor's office, but in the Australian Outback, they are few and far between.

It became difficult to take notes or do calculations in the lab tent because the flies would be aggressively seeking any form of moisture. This included going personal #1 and #2 in the field. The first would need to be done as quickly as possible, waving above it to keep the flies from landing on it. For #2, that had to be done even faster. The first time he did it, while up against a tree, vast numbers, masses, of flies appeared

buzzing underneath, with no apparent source; but they must come from thousands of yards away, as if by signal from built-in super-sensitive sensors in the fly.



Drilling in Phosphate Zone – Note White Dust, NW Queensland.

As soon as the sun set and the temperature declined, the flies disappeared, as if by magic, so it was best to do your business at night, if possible. In years past, he had remembered seeing movies about the Outback in Australia with

a "bloke" in a wide-brimmed hat with corks dangling from strings all around under the brim of his hat. The constant movement of the corks apparently "bothered" the flies and would keep many of them from entering the face area. During days with constant wind, the flies would hide. He once went looking at the bladed grasses around, and found rows/columns of flies on the underside of the grass waiting for wind to die down or for the sun and heat to reappear. Rossi told him about a government program that was about to go into effect of introducing sterile flies into the wild populations around the Outback, which should decrease the populations over time. Whether that works or not, only time will tell, he thought at the time.

But, occasionally, he would have to spit one out of his mouth or grab his ear. He would then listen to his closed fist to hear for the buzz if he caught one and, if successful, then dispatching the little bastard in his closed fist in irritation. He would need to wash his hands with antiseptic soap as soon as possible.

After a while, he learned to tolerate the irritations and became accustomed to standing around talking to people while waving his arm and hand at intervals when one or more of the little cheeky bastards landed on his face somewhere. Everyone else was doing the same thing.

Occasionally, he would have time to look around at the wildlife. But it was usually when Rossi and he were looking for other outcrops when they would encounter interesting critters. Rossi would point them out. The birds were especially interesting, *Galahs*, with pink and grey markings, Kookaburras, Wedge-Tail Hawks, Magpies, many species of parakeets, White Owls, Black and White Cockatoos, Emus, and the dangerous Cassowary, Baraga cranes, black swans and many more that he encountered during his weeks in the field in Australia. The kangaroos were of three or four sizes, and the red kangaroo was more of a brown than red. Males could stand a muscular 6 feet tall. Then there was the grey kangaroo, with males topping out at about five feet tall, but not so muscular. There were many smaller species and varieties. And they could occasionally see the Koalas high in the gum trees eating the leaves.



Rossi told him that the only real dangers were the snakes, certain spiders, and the occasional monitor lizard. He also added that the Gympie-Gympie stinging plant is one of the world's most venomous plants and causes extreme, long-lasting pain. Rossi described what the plant looked like.²³

On the third day in camp, he was presented with a new bush machete, the holder of which was to be attached to his field belt along with his hammer, a small acid-bottle pouch, and a larger leather case for his new *Brunton* compass presented to him by Robert in Sydney as standard field gear paid for by Conoco. That evening as he, Rossi, and Brian prepared for bed, Rossi picked up his machete and asked him, "Do you know what this blade is for?" Brian sat down in a canvas chair and lit up his pipe. He said, "Well, I assume for cutting underbrush and tall grass?" He looked over at Brian who began to smile. That gave him some concern. Rossi continued in a very serious tone,

"Let me be clear. In the event that any of us get bitten by almost any of the snakes in northern Australia, each of us has only a few seconds to determine what finger had been bitten and then to extend it and whack it off by their blade, and then jam the stub into the soil and twist while you scream. If you do not do that you will die. The snakes, especially the brown snakes, are nasty SOB's and are very aggressive and very poisonous. There is no antivenom yet that I know of. So, it is very important that you keep your machete sharp and clean. Do not reach under big rocks! Any questions?"

He said, "I understand."

²³ <https://imb.uq.edu.au/article/2020/08/native-stinging-tree-toxins-match-pain-spiders-and-scorpions>

Rossi then asked Brian if he would like to comment. Brian then raised his right hand; two fingers were missing. He hadn't noticed that before and blurted out, "Shit, Brian, when did that happen?"

Brian said, "I was a young buck a few decades ago and I picked up one too many big rocks to see the underside. One of the big browns struck my hand as I released the rock. I pulled my machete out took a whack at the big brown cutting him in half and laid my hand on the rock and took another whack and then stuck my stubs in the soil, which helped to minimize blood loss. I left the two fingers with the venom on the rock for the Dingos."

During one of the field reconnaissances of that period, after they had climbed a steep outcrop and stood on top seeing the faraway horizon, Rossi retrieved his binoculars and scanned the horizon. He stopped scanning and said, "There are some!" and handed him the binoculars and gave a compass direction 120 degrees. The first rule was always to know where due north was when one was in the field. He looked 120 degrees and sure enough there were about 10 or 12 camels on the far horizon walking slowly. When he said, "10-12 camels..." Rossi corrected him by saying, "Those are not camels, they are Dromedaries. Camels have two humps. They were released from the Darwin Garrison at the end of WW1 and they have since flourished all over northern Australia, but they are very shy and appear to be hiding from humans, just like the Dingos, the wild dogs, which were also released in WW1 and have bred with the existing wild dogs." The sighting of the Dromedaries must have been an unusual occasion because Rossi mentioned it to Brian that night at dinner, and he was pleased to hear about it.

One night they also talked about the habits of the trap-door spiders. Apparently, the snakes roam at night looking for spiders and rodents, so walking around without a flashlight was not recommended. After that night of instruction, he felt different about the Outback, but at least the geology was interesting even if the environment was hostile. A few days later, he decided to see what happens when the dark-red dirt floor of the central open area of the staff tent was swept smooth before they went to bed that night. The bed frames were old metal, Australian Army cots with springs supporting thin mattresses that were elevated two feet above the ground by metal supports. The next morning, he awoke early just as the sun was rising. He looked at the floor and was astounded by the tracks that were perfectly obvious in the dirt on the floor. Robert and Rossi were also rousing and were looking at the floor too. Small lizard and mouse footprints were numerous. Rossi confirmed the identifications. But what was most concerning was the odd en échelon markings that originated at the front of the tent and ended at the rear of the tent wall. Rossi said that those markings were made by a snake that moved quickly through their tent without stopping. It was a rather large snake, probably a brown snake, Rossi said. Rossi and Brian talked about the finding and decided to have the bottom edges of the sleeping tents at their camp covered with dirt on top of the tent edge so nothing could get under the tent walls.

Brian also noticed Dromedaries and Dingo prints at the entrance of their tent as they departed for breakfast. Brian said they must have snuck into camp and looked around for food and probably sniffed at the front opening of their tent and smelled humans and moved on. To say the least, all that new information was rather disconcerting.

In the second week of his first field trip in Australia, a fellow from Mt. Isa arrived at the camp one evening. He was the contract manager for the project; he supplied the vehicles, drilling rigs, camp, and cooks. His name was Jack S. Rossi later told him that Jack once was the Queensland Golden Gloves Champion in the 1930s.

Rossi introduced him to Jack. He had to maintain his composure because Jack's handshake offered no special signal. It was just very firm. Jack said, "Another Yank?" Everyone chuckled, but him. Jack looked like a boxer; his nose was a little crooked. He knew what was going on in the region, primarily because he provided vehicles of all varieties to other mining and exploration companies in the area. He had known Brian and Rossi for decades and they were quite good friends and drinking "mates" with Brian in Mt. Isa it turned out. There was no alcohol allowed in the camp. The four of them sat around the big fire and he listened to their conversations. Jack had what he came to know as a Queensland accent, which was quite different from those to the south as it was rather pleasant and easy to understand.

There was news that Broken Hill South had also made a discovery near the Conoco eastern boundary of its northern tenement. Jack stayed the night and the next morning. Jack, Rossi and he took a drive to the BHS camp, which was about 5 miles east of Conoco's camp. They pulled up and Jack talked to a fellow that came out to meet them. Jack spun up a story that they were looking for the Lady Annie mine, and the fellow provided the information.

As they began to pull away, Jack said, motioning, "There is the shaft where the discovery was likely made."

He said, "They can't be mining yet what's the shaft for?"

Rossi said, "It is probably to get a bulk sample for metallurgy investigations. Jack agreed. "Sure would like to get a sample from that shaft," Rossi mused from the back seat of the Landrover.

He then had an idea. It entailed making a rope ladder and then having Jack lower him down to get samples on the whole section, top to bottom. The three of them discussed the matter and began to make plans. A few days later, Jack came to camp with a rope ladder that he had made and two lamps. Jack said the lamps were for him to use in the shaft so he could see what's what. It made a directed light that wouldn't shine upward. Rossi, Jack, and he put together the plan, which ultimately consisted of first lowering him down to the bottom of the shaft, which Jack had said was about 200 feet deep. That would give him an opportunity to look at the artificial outcrop and take samples going down and then up. Jack had brought a crank in case he was too heavy.

They figured it would require four trips if only to retrieve the sample bags. Rossi had some red flagging with stiff wire stems he could use to mark the source of each sample relative to its depth from surface, and where he left off each trip.

The night came and they decided that they were ready to do the deed. He mentioned to Rossi that it might not be a good idea for him to be present as he should know nothing about the deed. Rossi agreed. If they were discovered, Jack said he could manage it, which Rossi instantly believed with some confidence. 3:00 AM came and Jack and he drove cross country to the BHS camp and shaft. The shaft was about half a mile from their camp tents. The shaft was surrounded by yellow marking tape. Jack set up the crank and rolled out the ladder for him. Over the edge he went, and Jack unrolled the ladder and rope foot-by-foot and then faster and faster. On the way down, he kept pushing himself away from the rock exposure to minimize noise and drag, as planned. Then he felt the bottom with his feet. There was no water on the floor of the shaft, so the water table must be rather deep in the area. He then jerked the rope line and Jack began to crank him upward. This run was for taking notes and descriptions of the bedding, thickness, and other features. It required about 15 minutes to make the traverse. The next phase was to get the zoned samples at two-foot intervals. It required five traverses to get the full vertical zone sampled. All

told, it took almost two hours. They recovered and loaded the sample bags and crank and ladder into the Landover and withdrew quietly from enemy territory.

They pulled up at the camp bonfire a few minutes later where they had left Rossi sitting. He reported to Rossi that everything went perfectly and that they now have a geological log and samples for the entire phosphate discovery of the BHS section of the shaft. Rossi bound he and Jack to keep the deed to just the three of them, Jack, Rossi, and him until he had a chance to discuss it with Robert and Brian.

The samples taken weighed about 300 pounds. Samples were selected, marked as “outcrop samples,” and sent to Amdel Labs in Adelaide, and that confirmed that it was a zone of relatively high-grade phosphate, and therefore well worth the deed. He asked Jack to send the rest of the bulk samples in a crate to the Conoco office in Sydney. Jack said he would.

One day, he and Rossi had to go to Mt. Isa to pick some critical supplies. A new airstrip had been recently constructed with a small Caterpillar next to the Fly Camp, as they called it. A single engine high-wing plane landed and picked them up for the 40-minute flight to Mt. Isa. Along the way, he learned that he was subject to motion sickness. But they landed at Mt. Isa and Jack picked them up for a quick ride into downtown Mt. Isa. This was a true mining town, with the Mt. Isa mine complex being a part of the town with huge tailings piles, waste rock and other waste products everywhere. There was one large, very tall smokestack that could be seen for miles around. The whole town had a gray, dusty quality to the air like a dust storm had just passed through the area. If it weren't for the people and vehicles, the street scene reminded him of the photographs of the American wild west of the early 1800s.

On the outskirts of the town towards the airport was the new two-story Barkly Hotel, which they would use from time to time for meetings with Robert or with other Conoco people that came from the States. It had a standard bar plus a small ensemble who played music from time to time on the weekends. This was where Brian and Jack would do their drinking, he soon understood. But neither Rossi, Robert, nor he were drinkers, although they would drink enough to be sociable.

When Rossi and Jack completed their activities, Jack took them back to the airport for the short plane ride back to camp. He was dreading the trip but pressed on in any event. Once the plane was airborne, the feeling returned, and he became dizzy and began and maintained periodic dry heaves into a bag all the way back. Once they landed and the plane came to a full stop they all climbed out and loaded the boxes of supplies into a nearby vehicle. Rossi nudged him and pointed down the landing strip about 25 yards. It was a brown lizard about a foot high. Rossi said, “Watch this,” and he began to walk fast toward the lizard with arms and hands up like he was a monster. The lizard reacted and began to run at Rossi and then abruptly stopped and displayed a large halo of red flapping skin around its head. Rossi stopped and they stared at each other for a few seconds then the lizard gave up and tucked away its display and ran off into the bush at great speed.

Rossi came back chuckling and said, “That, my friend, was the famous frilled lizard of Australia.” The first two-week period in the drilling program went quite fast but they figured it was going to require two or three additional drilling periods to complete the drilling program. They had to be finished by early October before what Rossi called “the wet season” would be upon them. When it rains in that part of Queensland the roads become impassible very quickly, Rossi said.

Near the end of that season's drilling period, Robert A. came for a visit to bring field supplies. This time he took a helicopter from Mt. Isa because Robert wanted to have look at the Westmoreland area near the

Gulf of Carpentaria. As they approached the area, they noticed the creeks to the north were already in early flood stage, which meant that “the Wet” would be early that year.

Hovering Over a Creek in Flood Stage, NE Queensland



The approaching wet season brought the drilling to a halt for everyone, which was customary practice. He boarded the large plane and flew to Brisbane and then took another flight to Sydney. He arrived as the sun was setting. He took a taxi that passed through a section of Sydney that was heavily industrialized and smelled terrible, he remembered; he never knew what had caused that smell every time he took a taxi home, but once they got to the Sydney Harbor Bridge all that was soon forgotten. That sighting always impressed him.

When he arrived home, he walked down the steps and into his house and sat his briefcase and heavy suitcase down inside the door. David was sitting in the middle of the living room surrounded by toys. He looked up and he picked him up for a big hug. Jerrie came around the corner hearing the commotion and saw him and hurried to him for another big hug. She was obviously glad to see him, and vice versa, he thought. They decided to all go out for dinner that night at a new restaurant Jerrie had spotted a few days ago. He got into their “new car” and he had to think about how to operate it. It started, he put it in first gear, and they were off to Manly only a few miles away.

The weather was beautiful, and they sat at a table that overlooked the beach and they chatted about what each had been doing over the past three weeks. Jerrie said that Dottie, Robert’s wife, appeared at her door last week carrying a casserole and bottle of Australian wine for them, which was really an excuse for she and Dottie to become friends. She liked Dottie and they had made plans to meet for lunch at least once a month. “Dottie held David on her lap for nearly the whole time she was here,” Jerrie said. Sheila came over too also with a bottle of wine. Jerrie seemed to be happy. She told him some of the things she found out in city life. For example, she went to the butcher to get some hamburger and tried to buy some kangaroo meat to cook instead of beef, but butcher informed her that they do not eat such meat because it was loaded with *Trichinosis*, and was for domestic cats only, but not dogs.

She also found out that people in the neighborhood kept an eye on each other because one day she had gone wading next to their one-boat wooden pier at the bay’s edge and decided to cut off a bunch of small black clams attached to the pier and cook them up in butter. But as she was walking back up to her house, a lady from next door came out and engaged Jerrie saying that the clams were contaminated with toxins this time of year and should not be consumed. She said that they had a lengthy conversation about sea-food cooking and trap-door spiders in the area, with the lady saying that she would bring a batch of such clams over to her when the clams come back into season.

He filled Jerrie in on his drilling and sampling activities and about the birds and other critters he saw, and about Rossi and Brian, but not about the dangerous items that might give her reasons for concern, e.g., the snakes, the machete, the 3:00 AM shaft sampling, and the severe motion-sickness syndrome he experienced in small planes, cars, and small boats, but not helicopters.

Two weeks later he was off again to Queensland to complete the drilling program.

The drilling that summer went well. Robert and he had hired two part-time Australian recent graduates as field geologists. He supervised their logging and conducted most of the high-grade analyses on the samples to make sure such were justified before sending them off the lab in Adelaide. The end of the Dry Season was becoming apparent with the dark clouds to the north getting closer every morning.

There were three holes remaining in the drill plan, so he decided to send the support staff to town and he would finish off the drilling that morning and catch up with them at the Barkly Hotel in Mt. Isa that afternoon and catch the flight to Brisbane the next morning. Over the next few hours, the driller finished the last of the holes scheduled leaving about 90 five-foot sample piles on the ground in two rows at each site. They had to be examined, characterized, and written up, each sample tested by the Shapiro field method, before deciding which samples go to the lab. These samples were bagged and tied shut securely with drawstrings and knotted to avoid spillage.

As he drove up to the second hole, he hadn't noticed but the weather front was approaching fast. It began to rain, big drops at first and then rain, lots of it, like the sky had opened up and dumped buckets of water all at once. He finished the second hole and had only one more to go. Getting to the hole site was a little difficult; the thick dust on the tracks was turning into a thick soup. He finished the samples for the final hole and repacked all the sample bags into one big bag and tied it off. He folded the Shapiro table and loaded it into his little field vehicle. By this time, the track was covered with water as he plowed across it on his way northward from the Sherrin Creek area heading toward the Barkly Highway. He estimated that he was about 10 miles from the dry land of the highway.

The field vehicle he had was a front-drive, small-wheel vehicle low-ride with a large flat plate on the bottom to protect the engine undercarriage and transmission. It was used for this purpose of driving cross-country on wet roads, but pretty soon he noticed that the area he was approaching required a right turn through a gate. He noticed that the gate was open, so he increased speed while making an arc in approaching the gate, which by then was surrounded by water. As he turned, he felt the vehicle hydroplaning more than being guided by the front wheels and he slammed into the gate post creating a huge splash of water that went up and then down on top of his small vehicle. He was prepared for the impact at the last minute so there was no problems there, but restarting the vehicle was another matter. It wouldn't start; he figured the water must have flooded the engine's ignition system. He climbed out of the vehicle on the passenger side and stepped down into more than a foot of water, which was pouring into the floor of the vehicle. He grabbed the bag of samples and abandoned the vehicle at the gate. He remembered thinking that his lab box of tools and the lab table could be retrieved by Jack after the area dried up, but that may not be for a few months because the "wet season" had obviously arrived. He felt around in the water for his hammer and Brunton, machete, field belt, and found them, buckling the belt around his waist. He then took a few steps with the sample bag over his shoulder and realized he could no longer see the track ahead. The area was all covered with flowing water. He remembered thinking, 'You are in the middle of a flash flood.' He used the gate at his starting point and then began to slosh his way northward in the general direction toward the Barkly Highway.

He walked and walked. He looked at his watch and it said 2:00 PM. As he walked, he began to notice the water level was getting higher and higher on his legs. After a while, it was over his boots and then up to his chest and the walking was getting even more difficult than before. He remembered that the track was straight for some miles, so he made an effort to maintain his line of direction. He pressed on but then he noticed the water level was going back down to his waist and water velocity was also decreasing, he was assuming he had walked through a once-dry creek, now serving its purpose. He had noticed circular rafts

floating by before, but one was about three-feet in diameter and floated by right in front of him. He instantly saw that it was a mass of red fire ants that were clinging together to form a raft to save themselves. 'How clever,' he thought at the time. He kept going, but the sample bag was getting heavy, or he was getting tired, he didn't know which. But he knew the samples were important, so he shifted the bag to his other shoulder and pressed on.

After about an hour, the water was still at his waist and he saw another floating item, a large tree limb with branches and green leaves still attached. As it passed in front of him, he got a big shock ... there was a very large brown snake entwined 4 or 5 times around the tree limb. He could see the snake's head looking around, perhaps looking for higher ground. Based on the direction of flow, it wasn't a problem for him, but then he realized that he represented higher ground and instantly stopped and lowered his body into the water down to his knees so that only his head was sticking out of the water, no longer being high ground. The snake float moved on and then out of sight. Monitor lizards were also known to look for high ground. Rossi had indicated that he heard about a tall fellow being climbed upon one day in tall grass. Luckily, it did not bite him because they carry all sorts of infectious matter in their mouths.

He got on his feet again but realized his feet were getting heavy and the ground he was walking on was mushy and sticking to his boots, making walking even more difficult. He pressed on for what seemed like forever when he noticed it was beginning to get dark. He looked at his waterproof Omega watch. It was 6:20 PM. No wonder, it was getting dark. He pressed on faster now. He was concentrating on the horizon because somewhere out there was the Barkly Road and dry land. He pressed on. It was still raining, sometimes pouring, but it was not uncomfortable, his wide-brimmed hat kept the heavy rain from hitting his face and glasses. The water was rather warm in fact, he remembered. He pressed on, and realized he wasn't all that tired, and still had a good sense of purpose and was only concerned, but never fearful, which surprised him, he remembered.

Then, through the rain, off in the distance, he could see a stationary line of lights. About the same time, he noticed that the water level was dropping but his boots were picking up more and more mud. He pressed on. He then was able to see what the lights were. They were vehicle headlights at the intersection of the Sherrin Creek road and the Barkly Highway. He realized that he had made it when he stumbled over a big rock below the water level and fell down, and he went all the way down swearing all the way. As he was trying to get up, two or three guys had him in their grasp, taking the sample bag, and retrieving his hat that was about to float away. The three of them climbed up out of the water onto the edge of the Barkly Highway and sat him down finally on dry land. After a minute, he got up when he saw Rossi coming his way. They hugged, and he then saw Robert, who had just arrived from Mt. Isa a few hours before the rain came earlier in the day. He put his arm around him with a gentle hug and said, "I'm glad you made it. I've been worried about you," and he and Robert talked about the day surrounded by the drillers who had come back from Mt. Isa after closing down the field camp. They had heard that he was late coming out of the Sherrin Creek area and feared that some of them might have to go looking for him down the Sherrin Creek road. Brian patted him on the back and said, "Good job." Jack did the same and said, "Way to go, Yank." He told Jack that his field vehicle was up against the first gate and asked him to save his lab box and table for next year's drilling program. Jack said he would.

All the cars loaded up and they all returned to the hotel on the outskirts of Mt. Isa. Jack had packed up his personal effects at the field camp and moved them into the room at the Barkly Hotel. A hot shower felt especially good that night. He went down to the bar and walked in. Over in the corner, all of the drillers, a few of their girlfriends, and Robert, Jack, Brian, and Rossi were sitting around tables. They all got up and

made noises and banged their glasses on the tables when he showed up. That was some kind of recognition and he assumed that it was something Australian.

Everyone sat down for a meal and drinks on Conoco that night. The hotel had hosted musical entertainment for that weekend and the place was soon jammed. The hotel manager made the announcement, "Here's Little Patty." Everyone hooted and hollered like they knew of her. He didn't.

She appeared from behind a curtain. She was little alright, he immediately thought, but what a beautiful face. The accompanying guitar, bass, and piano began the introduction and after a few bars she began to sing. She had a big voice! and sounded a lot like Patsy Cline. All the guys were transfixed. He had a few beers that night.

The next morning, the four of them boarded the flight to Brisbane. Robert and he then took a flight to Sydney; Brian and Rossi took one to Adelaide. So much for that field season. Robert and he began to evaluate the sample data as they were generated by the lab and they began to plan a budget for the next year covering the phosphate project and for other possible projects of opportunity.

The holidays finally arrived and Jerrie, David, and he spent their first Christmas in Clontarf. In the stores, all the trees were artificial, but with a few colored lights they looked like Christmas trees. They bought one and took it home. He remembered it was a warm Christmas, which reminded him of Christmas in California. They called Maxine and Clarence and spoke for about 20 minutes and said hi to brother Steve and sister Carolyn Sue. They were all well. Jerrie called her folks but only talked for a few minutes. Jerrie said they were fine too. The next month's telephone bill was large.

The next weekend, Robert and Dottie held a New Year's party and Jerrie had been concerned about finding a suitable babysitter for David for those few hours. A few days before, she was hanging clothes on the clothesline outside, and the next-door neighbor that Jerrie liked came over and helped Jerrie hang up the clothes. Jerrie soon steered the conversation toward the New Year's party and Connie, the neighbor, found herself volunteering to babysit David. Connie was a bank teller at their bank in Manly and lived alone but was looking after an aging mother and father in her house.

New Year's eve arrived and they drove the few miles to the party knowing that David was well-looked after. When they arrived, Dottie and Robert were greeting everyone, taking coats and hats, etc. Their place was beautiful and looked out over Manly Bay and over Sydney Harbor off in the distance. He knew at the time that sight would soon not be forgotten, and it wasn't.

The place was loaded with people with drinks in hand, laughing and telling stories. Dottie put her arm around him and introduced him to practically everyone present. She was at such ease in this meet & greet function he thought that she must have been doing this most of her adult life. He noticed Robert was doing the same with Jerrie, who seemed to be having a lot of fun. One of the first fellows he was introduced to was William P., the VP at the consulting company downtown he first met coming from Bondi Beach who was responsible for his introduction to Robert and Conoco. He was happy to see him and reached out and shook hands vigorously saying, "I hear you are doing great at Conoco. I also heard the story about your recent escape from the flash flood in northwest Queensland," and patted him the back. Dottie guided him onward. After all the introductions were completed, he was allowed to float among his new acquaintances wanting to find William to talk with him in more detail.

Jerrie found him and guided him to a corner in the room and squared up to him and said rather sternly, "Why didn't you tell me about the flood? Almost everyone I met asked about the details. They figured I knew about your experience."

He said, "I didn't want you to worry. It wasn't a big thing."

She said, "The hell it wasn't. You don't have to protect me. I want to know these things."

He said, "I'm not sure you do, but OK."

Someone found them and wanted to talk so the subject got postponed until later that evening. Those in attendance at the party were mostly Americans from the office and the Australian secretarial and drafting staff, but also people from the larger consulting companies that supported the oil and gas exploration, and mining company management people that Robert knew. There was also a couple from the church Robert and Dottie were attending.

This party was where he met an interesting fellow named Jeremy C. He was a mining engineer and a few years older. He was already a VP for one of the larger consulting companies in Sydney, with offices in Kuala Lumpur, Malaysia, and London. He was a graduate of the Royal School of Mines, Imperial College, London. Jeremy was another one right out of central casting; he was quite handsome, very articulate with only a light British accent and very pleasant. He could have easily been a movie star. He instantly liked him and so did Jerrie.

Jeremy's wife Priscilla was from London, where they were married. They had been in Sydney for about six years. She had a rather thick English accent and was somewhat reserved. She and Jerrie would soon become friends; they both had one-year old's. They lived in one of the larger houses on the ridge in Clontarf just down the street from Robert and Dottie. Jeremy also introduced him to his boss, John, the president of his group and the three of them spent the time telling stories to each other, although he spent more time listening than telling, because he had few to tell. He gathered that Jeremy and John were clearly excited about what they were building in their company and indicated that one of their spin-off companies would soon be coming to the Australian Stock Exchange.

About one o'clock the party was still going strong. He literally ran into Jerrie and asked her if she wanted to go home and she said anytime was OK with her, which he interpreted meant now would be fine. They began to head for the door, but people were still wanting to chat, so they obliged and spent another 30 minutes or so. Robert came up next to him while Jerrie was talking to one of the guys.

Robert said, "Looks like Jerrie is having fun."

He said, "I believe so" and then he told Robert what a great bunch of people he had rounded up and thanked him for inviting them.

Robert said, "Hell, you guys were the star attractions. New blood from overseas, just from the States. That's how ExPats are. I'm glad you could make it."

Dottie had started to talk to Jerrie and the four of them moved toward the front door. They hugged and shook hands wishing each other a Happy Year for 1967.

After they arrived home, they had a quick talk with the babysitter. David had been asleep the whole evening. When they were alone, Jerrie said, "OK, tell me what you think I shouldn't know."

He said, "Ok." He began by asking her if she knew what the purpose of the long-knife he brought back from the field on his first trip and why he was keeping it clean and very sharp.

Jerrie said, "I suppose it for some weeds and other macho-man purposes."

That response irritated him right off, but he remained calm and asked her what she knew about the snakes in Australia.

She said, "Most are poisonous."

He went on by saying that yes most of them are poisonous but that they are so poisonous that if a person were to get struck in the fingers, which is generally the case, he would have only a very few minutes until the venom would get into his main blood vessels and heart and kill him. The finger or fingers must come off as soon as possible and that's what the big, sharp blade is for, to cut off fingers followed by other procedure to minimize the blood loss."

Jerrie's first repose, "Are you kidding me? That's craziness. Isn't there anti-toxins to be taken in the field for such incidents?"

He said, "No, the snakes here are not like the rattlesnakes in the U.S.; they are far less poisonous than the Australian snakes and there are antitoxins available in the States for them, not in Australia so far."

She then said, "Are you sure these snakes are that poisonous?" He said, "That's what I have been told by those who should know," and after thinking for a minute, she said, "Then that must be why Australia is in need of geologists, theirs have been killed off or have been frightened away from majoring in geology that would require field work, like yours." He said, "Maybe so," and then tried to change the subject to talk about the people they had met at the party. But Jerrie then insisted that he ask Robert for a raise in salary. A few days later, he told Robert what Jerrie had said. Robert said, "Tell Jerrie, I'll work on that with Corporate." He couldn't tell whether Robert was serious or not, but they both shook their heads and chuckled before moving on to discuss more important subjects.

In the office, Robert and he spent the next few months preparing maps, evaluating lab data on the drilling samples, and writing progress reports on the findings. The reports were submitted to the Queensland Government as proof of expenditures in order to maintain control of the land tenements. Robert drafted reports to his boss, Jimmy Royds, who was the Executive Vice President at Conoco Corporate Center in New York. Robert told him that Jimmy was the first geologist to reach that elevated level in Conoco history.

Robert had begun to evaluate the potential for industrial diamonds somewhere in central Australia in southern Northern Territory northwest of Alice Springs and began to look at some reports he had just received on potential sources of phosphate on the shallow sea floor of between Cairns and Port Mosley in New Guinea in the Coral Sea and in the Islands of the Caroline Islands of Palau. He asked Robert where these leads came from, and he remembered exactly what Robert said, "We (meaning Conoco) have people" and then changed the subject. He figured that Conoco had contacts inside the government (i.e., State Department, or the U.S. Geological Survey or the U.S. Department of Mines), and let it go at that. He was thinking that if Corporate approves their new budget for next year, it ought to be downright interesting.

Robert and he discussed the coming summer field program. Robert asked him if any additional holes were needed in Sherrin Creek or the subbasin adjacent to it. Based on the reports, he responded that after

reviewing the available reports, it looked to him that the Beetle Creek formation occupied isolated lows in the underlying faulted blocks of Precambrian rocks, Sherrin Creek area being one of them. The area in the D-Tree area might have been another faulted block containing the Beetle Creek Formation and its phosphatic intervals. They concluded that their phosphate grades were not as high as those reported by Broken Hill South. All told, the potential for the tenements so far was marginal at best.

It was at this point in the meeting that he informed Robert that the bulk sample had just arrived at their office. Robert asked, "What bulk sample?" He then explained what Jack and he had accomplished without incident a few months earlier involving the 3:00 AM BHS shaft-sampling program. He went to his office to get the file and then laid the section log, with the recent P_2O_5 lab values inserted, on the desk in front of Robert. His soft-spoken, very polite Texas boss at first was irritated and then after he examined the section's log in some detail, he got a smile on his face and looked up and said, "You know of course I would not have approved this little errand of yours?"

He said, "Since you were not around, I figured that's what you would have wanted done, so Jack and I put the plan together."

Robert asked, "Did Brian or Rossi know about this little plan of yours?"

He said, "No, but Rossi did after the fact."

Robert said, "That was really dangerous. Jack and the crank system could have failed, and you could have fallen down the shaft and died or have broken many bones at least from the fall. I don't even know what repercussions there would be if BHS had discovered you guys in their shaft? We probably would be fined or something by the government or worse. How far is that BHS shaft located from the Conoco tenement boundary?"

He said, "Jack is very good at such things. It wasn't the first time he had done this sort of thing for others. And we were quiet and kept the lighting to a minimum. No one saw or heard us, and finally, the BHS shaft is about 1,000 feet from the Conoco boundary. By the way, those P_2O_5 values appear to be higher than our drilling results."

Robert then said after looking at the section log and lab values for a while longer,

"I have been thinking that we needed a bulk sample but figured that would cost a lot...like for a shaft. We could have asked BHS if we could sample their shaft in some way that wasn't so dangerous, and in the daylight, but I've heard they are not easy to deal with, so I have been putting any decisions off on that. Now it seems you have already anticipated our needs, without incident, as far as I know. I don't know whether to kick your proverbial ass, like I can just hear Brian demanding, or give you a star for your forehead, like Rossi would suggest, no doubt. Tell you what, let me think about this for a while and we'll see."

The next morning Robert came into his office and sat down in one of his visitor chairs and said, "OK, I've spoken with Jimmy at Corporate in case this thing blows up. After hearing the details and the results, Jimmy told me to give you a big star and put you on a plane with the bulk samples and send him to Ponca City so our lab can evaluate your samples from the shaft."

He said, "Great! So, when do you want me to leave?"

Robert said, "I'll get our travel people to arrange your trip for next week, OK?"

He said, "Could I come back through Columbus?"

Robert said, "Sure. I'll arrange it."

When he arrived home that evening, he told Jerrie about the trip and about Robert talking to his boss in New York about the shaft-sampling event a few months ago that he had forgotten to tell her about.

She said, with hands on her hips, "What shaft-sampling event?" This set her off in a way he hadn't seen since their last fight in Columbus years before. As he explained the episode and associated details, the angrier she became. He finished by saying that the objective was achieved without incident or discovery. And that it was really important for the company to have a bulk sample at this stage in the project. But she walked away in mid-sentence, and he remembered that that was the first sign that there was something not quite right about their relationship. She had a certain perspective about what a relationship should be, and it didn't match his.

In a few days, Jerrie brought up the subject to say that after some serious thought, she was sorry about her responses to both the snake and shaft incidents because she had not realized how dangerous his job actually was. After that, he relaxed about worrying about Jerrie, and in fact they were having fun together again in good times. She mentioned the idea that maybe they should live in another part of Sydney. She said it might be fun to experience. He figured that since she spent almost all of her and David's time at home, if she wanted a new view, it was fine with him. She said she would talk with Sheila about looking around for a new house.

That next week it was time to leave for Ponca City. Many of the Americans in the office would drop into his office to talk about the trip and how fun that would be for him. But Jerrie didn't want to talk about the trip and left him guessing as to why.

The trip was fantastic. Sydney to Fiji, Fiji to Honolulu, to LAX, to Denver, to Oklahoma City and the Conoco plane to Ponca City. He met and spent two days with the lab guys. They found a number of interesting features of the Australian samples. All the higher-grade samples contained three key features, one good, one of possible significance, and one very bad feature. The elemental determinations showed the phosphorite contained rather high values of rare-earth oxides, plus yttrium and other elements that were unexpectedly high, like radium and uranium, but in low concentrations only at the top of the main zone, which was similar to the phosphate mine in Florida that also had a radioactive zone at the top of the section.

The bad feature was that all six of the subzones within the phosphatic interval contained an unusually high amount of silica, but not just any silica, it was volcanic silica. Based on its size and shape it looked like it was small enough to be airborne volcanic ash. This immediately meant that the material would not be suitable to make phosphoric acid, the key product in making fertilizers. The interesting geological aspect of this was that this indicated that volcanism was ongoing at the time in the lower middle Cambrian when, or just before, the subject sediments were being deposited. This was interesting.

He spoke to Robert on the phone and told him about the results and that the lab report would follow in the mail soon. Robert said that they were going to have to determine the geographical distribution of the ash before they get too disappointed. He agreed, and advised the geochemists in the lab, in case they reported elsewhere. Robert said it was interesting about the radioactive top because they could use that

to confirm that the zone was the top of the Beetle Creek formation. He was going to see if the oil & gas guys in the office could find them a logging truck with a natural gamma logging tool.

He had a great meal with the two Conoco geochemists and their wives that evening in Ponca City. The next morning, he left for Columbus to visit his folks. He had called them the previous night to let them know the flight and time of arrival, and Maxine was excited.



He arrived mid-afternoon and Maxine was at the gate waiting. He hadn't considered it before, but it was mid-week and everyone would be at work or in school. Maxine departed work early. DCSC (The old Army Depot) was very near the airport, so it worked out fine. On the way to Lancaster, they talked about everything. She was doing a lot of traveling herself, between Columbus and Washington, D.C.. She was one of the senior buyers, GS-14, whatever that meant, buying more than just bombs and bullets for the Vietnam war, which he soon found out was all over the news. In Sydney, they were barely aware of it going on. She enjoyed her work in that she felt like she was contributing to her country. She said that she normally sat in weekly meetings with generals of almost all varieties and executives from the defense industry discussing needs and estimated times of arrival. She was the only woman in the lot, and she groused about that.

Over the next couple of days, he spent time with his family which he hadn't done for years. Nothing much had changed. Dad was still looking good, and Steve and Carolyn Sue had changed the most. Won't be long until they would be all grown up.



He had an early flight to Chicago the following day. Maxine could drop him off on the way to her office next door, more or less. After Chicago, he re-traced his trip all the way back to Sydney. After a layover in San Francisco, he made it to Sydney without incident. Pan Am was such a nice airline. When he arrived at the airport, he called home but there was no answer, so he called his office and spoke to Robert, just to let him know that he had made it down safely. Robert then said that it was good he called because he had a message from Jerrie asking him to tell him that he had moved, and then Robert gave him his new home address in Beecroft located in the western suburbs of Sydney. Robert thought it was funny. He covered the story with the fact that he already knew that this was going to happen when he was away, which he didn't of course. Moving only consisted of loading two trunks and a couple of suitcases and some clothes, and that was it, so it was really no big deal, he thought, or was this a little getting-even business by Jerrie?

He hailed a taxi and headed west toward the Blue Mountains and three Sisters that separated the Sydney lowlands from the New South Wales outback. He saw the forests of eucalyptus trees, also known by its common name, gum trees, which are almost entirely Australian in origin. Their leaves are highly flammable during dry periods. Indeed, these are the trees that koalas eat and spend their lives.

He pulled up in front of the address provided, paid the taxi driver in Australian money this time, and walked up to the door and knocked. He waited a few minutes and Jerrie opened the door and she and

David, who was hugging her leg, were pleasantly surprised to see him. She didn't think he was supposed to be back until tomorrow.

She told him that Sheila had found this place last week, so they just moved in yesterday. It's about the same price as on the Bay and twice as quaint, which it certainly was, he thought at the time. There was a zoo not far from their house and the train station was just a block away. That would be his new way to work in the morning. The trouble was, on weekday mornings the trains get jammed with people going to work and home in the evening. It took 45 minutes to get to work now. It crossed his mind that Jerrie may be playing some kind of a gotcha game, but he ignored the whole subject as unlikely, though not impossible. It was the end of the ferry and hydrofoil, but only for a few months.

He had breakfast the next morning, drinking his coffee, with David at one end of the table. The window was next to him and it overlooked the driveway and a tall wooden fence on the far side. Next thing he knew, he heard an insistent tapping on the window. He looked up and saw a rather large bird that could be none other than a Kookaburra staring at him. He reached up and slid the window up. Mr. K. did not move and when the window was opened, he stepped onto the sill inside the window and just sat there and looked around, showing no fright at all, no more than 3-feet away from his elbow.

He spoke to him, saying, "Who do we have here?" and he would not have been surprised if Mr. K had replied. They decided he had done this before with the previous owners. Jerrie went to the refrigerator and pulled out a couple of old hotdogs. Jerrie placed them in front of him and Mr. K. saw them too and began to make little steps like he was thinking about making a move of some kind. He picked up one of the wieners and offered it to Mr. K. Almost politely, Mr. K. took the wiener lengthwise and then backed up a step or two over the threshold and he jumped up and flew backwards to the fence. He moved the long wiener around in his beak, and then began to snap it against the fence below his feet, and then again, and then swallowed half of it. The other half fell to the ground, which he retrieved and began snapping once more and then swallowing all of it. He wiped his beak on the fence and flew back to the window, then did the same thing all over again.



Mr. K. was apparently killing the snake with the snaps. After the second snake was taken and dispatched, and then eaten, he flew away, but every morning after that Mr. K. came for breakfast. He would tap the window looking for a handout, which almost every day either he, Jerrie, or David provided.

Taking the train to work got to be old pretty quickly, but he certainly received the exercise walking from the central downtown station to the IBM Center every weekday. He observed how remarkable it was that hundreds of similar-looking people, if not thousands, would rise every morning, dress for the office, file into very clean railcars and then go non-stop, very fast and then stop and get off, scattering to their respective offices downtown, and then do the same thing in the evening. Robert asked how he liked the commute from Beecroft, and he told him not so much. They were waiting for approval of the year's budget that Robert and Brian had presented for their first comprehensive report of the findings of the Conoco phosphate exploration program to date.

One evening, after he arrived from the train and had a great meal that Jerrie cooked up, he noticed that she was unusually happy and had been so since his return from the States. She came over and sat on his lap. David was snoozing away for the night. She whispered softly, "I think it's time for another little one.

What do you think"? He said, "Let's get some more time between the two and maybe there would be less bickering when they get older, like Steve and him."

"At least 4 years?" She said, "That's a plan. I'll put it on my calendar."

A few weeks later, he and David were out back gathering up trash and was monitoring a small trash fire. After they burned the leaves, he got the watering hose and splattered all around the burned area, everything next the little utensil shed was very wet and soggy. They finished and put everything away and went into the house.

He and David were laying on the sofa taking a nap, when he was awakened by seeing a couple of huge, ornamented helmets run by the driveway window toward their backyard. He got up and went out the back door and saw the little shed and trees and the grass around it on fire. There were three hoses on it spraying water everywhere and up into the trees. He was standing there with his arms folded against his chest when a fellow with the biggest, most ornamented helmet of all came up and said, "Are you the Yank who started the fire?"

He said, "That whole area was soggy wet when I left it."

The Chief said, "Yes, but flammable material is very thick under these trees. The surface may be wet, but the subsoil material remains dry and continues to burn. What you didn't know is that burning anything has not been allowed for the past 20 years in this area. If you'll note, the Eucalyptus trees have mostly merged at their crowns which means the whole areas could catch in a matter of very few minutes. It's all dense now with highly flammable leaves. Lightning, or a little fire like this, plus a little wind, could wipe out this whole neighborhood."

He said, "I see. I am sorry."

The Chief said, "Normally, this infraction would cost a citizen who knew better AUS\$500.00; since you didn't know better, I'm going let you off this time. Thanks to your neighbors for keeping an eye on you and we caught the fire in time."

He said, "You are right, I should have known. Here is US\$100.00; Could you put this in your Fireman's Fund for your guys?"

The Chief said, "Sure, Thank you. We appreciate it."

Jerrie never came out to talk with the fellows with the ornamented helmets, probably because she was too embarrassed. She didn't mention a word about it later for some reason, but he knew why. Later that afternoon, they were talking around the subject when she said that she had no idea how flammable the trees were around there.

The next week Robert called him into a meeting in his office. He said that Corporate had approved their budget. He also indicated that he had found one of Conoco's older well logging trucks near the site of a recent Conoco drilling program in western New South Wales. He asked him to go to Gundagai in western New South Wales and drive it back to Sydney to have it checked over. He said that he was going to ask one of the young oil & gas guys to do that, but he thought he might like to see that part of the country. He was right. He was looking forward to that trip, he remembered.

But that weekend, they took a road trip to Canberra. He had a meeting scheduled on Monday with the geologists with the Australian Bureau of Mineral Resources (BMR, similar to the U.S. Geological Survey in the U.S.), who were doing the geological mapping in the NW Queensland area. That provided valuable information on his research in the Northern Territory just across the border. Canberra is the national capital of the country and was laid out similar to Washington. D.C. Notice in the photo, David was studying a big statue.



Since the budget had been approved for the Sydney office for the year, a meeting was to be held where the Vice President's present this year's Australian programs to the staff, all of the geologists, geophysicists and technicians in the Conoco Sydney office, involving about 40 people. Earl was to present the oil & gas exploration activities and Robert was to present an outline of the mineral division's exploration activities for the coming year.

The next morning, Rossi and Brian arrived from Adelaide for the meeting. Everyone assembled in Conoco's large meeting room. Earl brought the meeting to order and began to talk about his programs. Drilling will commence in the next few weeks in Western Australia in the Carnarvon Basin north of Perth and drilling will also commence in western New South Wales near Gundagai. He had the geologists and geophysicists present their findings that justified the drilling in both areas. That was certainly interesting, he recalled.

Robert was then introduced and then began his presentation,

"First, We plan to complete the drilling on the NW Queensland phosphate project. Also, the gamma-logging truck the oil & gas group has generously loaned us will be on site this year for gamma logging all holes. We also will be gamma logging as many of the previously drilled holes as possible, hopefully without getting the probe stuck.

"2nd, Our Mr. Campbell has been working up the data to assess the shallow geology in the Northern Territory and the budget has been approved for drilling and logging five holes.

"3^d, We will be going to Palau to check out the reports that the Japanese were mining guano phosphate in those islands during the war. This area may be similar to the occurrence on Christmas Island or Naru Island.

4th, We are also going to do some seafloor geophysical surveying and sampling off northeast Queensland in the Coral Sea between Cairns and Port Moresby, New Guinea.

5th, We have been discussing having a look at the Daly River Basin in the area from Katherine to just south of Darwin. First, there are many government core samples held in Darwin by the Northern Territory Geological Survey that we will review.

And if we have time this year, we will have a look at the Westmoreland area near the Gulf of Carpentaria for uranium and other minerals."

Then the meeting was over. Robert, he, Rossi, and Brian retired to Robert's office. Robert indicated to Rossi and Brian what their roles would be in the coming years. Brian would be managing the NW Queensland drilling as usual. Brian then spoke up and said that he saw little justification for Mr. Campbell's

drilling in Northern Territory. That comment took Robert by surprise, and he looked at Brian and said, “Well, Brian, since you guys have been working the D-Tree area for many seasons and missed the faulted outcrop of the Beetle Creek and phosphate zone, and you missed the presence of the BHS Shaft that was located near our north-eastern tenement boundary, I think it would be appropriate to give Mr. Campbell a nod on his proposal for drilling in the NT, don’t you think?” Brian said, begrudgingly, “Well, maybe so.”

Robert then went on to say that after the drilling has been completed, they (Robert and he) would be going to Palau to manage the seafloor geophysical surveys and sea-floor sampling. Robert then indicated that he and a new Australian graduate geologist would then be managing the geophysical surveys and sampling in the Coral Sea. When that was completed, Rossi and he would drive to Darwin from Mt. Isa and have a look at the cores in Darwin and then do some reconnaissance in the Daly River Basin. And if there was time before the wet season, he, Rossi, and Brian would have a look around in the Westmoreland area.

The meeting was over, and as they got up to leave Robert asked Brian to stay. Rossi and he went on into his office next door and shut the door. Rossi instantly said to him that Brian just screwed up badly by openly criticizing your efforts. Robert will no doubt take him to task in his very polite Texas way, but he’ll hear about it later. Then Rossi said, “Maybe he can get Brian to not feel so threatened by you.”

He took a Conoco company car the next morning for the four-hour drive to Gundagai southwest of Sydney. He took the shorter route toward Wollongong then turned west among lush trees and vegetation.

The area began to thin out and become dryer and dustier as he



David was beginning to read.

drove westward. The Blue Mountains were still to the north of his route, which consisted of elevated, highly weathered sandstone formations that due to differential weathering created rock pinnacles, in one place called the Three Sisters, which did not require much imagination. The lushness turned into flat brown rolling plains with scattered gum trees and some clumps of bushes.



When he pulled into Gundagai, he was impressed by the quaintness of this small, but bustling town. He drove by a large park with a gun-mounted memorial, likely from WW1 based on the antiquated look of the gun, he thought. Robert told him to be sure to see the *Dog on the Tuckerbox Pioneer Monument*. There was a sign saying “this way” so after about 10 miles he came across the memorial. Apparently, this area’s development was similar in many ways to the development of the American wild west of the 1800s. He promised himself to look into the history of this area in greater detail one day. He met up with the Conoco contractor, an Australian fellow with a different kind of Australian accent, although quite understandable and rather pleasant, who looked after Conoco’s equipment and who was to check him out on the Landover, the logging equipment, and the associated operational features of



the gamma logger. It was pretty straightforward. They exchanged keys to his car for that of the truck's; both doors carried Conoco's red triangle logos in big letters.

They went to lunch at a little restaurant nearby that consisted of white-bread sandwiches, chips and a soft drink, but that was a tasty lunch, nonetheless. They talked about his coming oil & gas drilling project in his area and he asked him about the Tuckerbox. The fellow spoke in proud terms of how popular that little dog's memorial was, how it commemorated the people who died during the robberies and skullduggery that went on during the wild gold-rush days in the area where he was born and raised. He thanked the fellow for his briefing, and the lunch and departed for Sydney arriving at his home in Beecroft in the western suburbs of Sydney just after dark. When he pulled into the driveway and was getting out, his little guy, David, came running up to the truck. He picked him up for a big hug. David loved the truck and wanted to touch it everywhere. Jerrie was right behind him with a big smile and an especially enthusiastic hug, although he had only been gone for less than a long day.

He told them about the trip and about the beautiful country, the Tuckerbox, and how the area looked somewhat like Colorado and New Mexico and the comparable stories of the Australian wild west, just slightly different. In telling them, he also remembered that almost all of Australia he has seen was like America, only just slightly different, like Australia was behind development of the U.S. by only some 10 years or so. The only stark exceptions are the snakes, lizards, kangaroos, etc., and the specific wet seasons that arrive timed almost to the day each year. The cities and country lands have strong similarities in people, where the people in the cities are like those in the rest of the world, in a hurry, while in the country, they are paced only by the necessities of life, as with many of America's country people.

He drove the Conoco truck to the office the next morning and Robert wanted to have a look, so he showed him the gamma logging equipment and probe, the latter was about 4-inches in diameter and about 4-feet in length. Robert said after looking over the probe that since he will be operating the logger, he should try not to get the probe stuck. He responded to Robert by saying that, although none of the holes had reached the water table, the intervals drilled so far have been very vuggy and heavily fractured rock, meaning he expected a number of holes would be blocked and many would have rock fragments on the verge of caving just by being touched and dislodged by the probe and/or wireline.

He said, "Bottom line, Robert, I'll be as careful as I can, but I'll bet the probe will get stuck and may be lost. I estimate a 60% chance of losing the probe."

Just then Brian showed up at the truck and listened to the end of his conversation. Robert repeated what he had just said to Brian, who then said, "Mr. Campbell is absolutely correct. I would even bump up the likelihood of loss to 70%."

Robert then said, "I'll see if I can get a back-up probe from our oil and gas people." Brian and he both said simultaneously "Good idea." They both laughed and went back to their offices upstairs in the building.

About noon, Robert asked if he would like to get lunch down at the pier and watch the ferries come and go. He agreed and off they went. Brian had just left for Adelaide and his offices with Rossi. As they walked down the street toward the docks, Robert had a lot on his mind. He was saying that they will have a lot of projects this season and they are going to get busy, especially for him and Rossi. He told him that Brian, although an experienced manager, his people's skills are those of the previous generation and not so good these days.

Robert said, "I must tell you that you managed Brian better than I thought you would. Brian loves to play mind games with people whom he perceives as lower in rank, as a way to maintain control. You did not play his game, and he disliked that even more. I have set him straight now, so there will be no further opposition from him."

He responded, "I appreciate your handling of Brian, but I kept thinking that Brian would come around. Rossi clued me in in the beginning. I have worked with older people like that before."

Robert said, "Brian has other issues stemming from WW2. He was a POW and got the hell knocked out him in Burma and nearly died more than once. When he drinks, the stories come pouring out."

He said, "My uncles were in the Pacific war as well. One of them drove an ambulance truck in Guadalcanal and was heavily shell shocked, but recovered, mostly with alcohol, he suspected."

They arrived at the shops and Robert asked what he wanted, and he said whatever he was getting. Robert ordered and received two small bags and handed one to him. They sat down on a large green bench with a curved back. The ferry and hydrofoil docks were right in front of them so it was a birds-eye seat. He did notice that there were almost no sea gulls or pigeons around. He later learned that they had methods of keeping them away....every month a few fellows would show up "shooting bird nets" that would capture the gulls and take them off to the coast some five miles away. Apparently, after a time, the birds just gave up coming into this area.

The bench looked like it had been there forever; it must have had a hundred coats of lacquer. He opened his bag and began to eat the chips (aka French fries) and then reached in and pulled out a big shrimp (aka prawn). Although it had been fried or baked, it still had its head, its tail, and all of its little feet. He had never seen a big shrimp *au natural* before. Maybe crawdads in the Hocking River at home, but no one would ever eat one. He glanced over to see what Robert was doing with it. He was pulling off the head and putting it back into the bag, and then squeezed the tail off and then pulled off the little feet. He got the protocol, and began the same dismemberment and took a bite, and although crunchy, he chewed it up and swallowed it all, with only some difficulty. Robert turned to him and asked him if he thought that it was rather crunchy. He said, "I noticed that too," and then bit into the second piece and finished it. He didn't eat the second prawn but put it in the bag in this jacket pocket for later.

Robert didn't say a thing to him at the time about it, nor did he until they were together some 30 years later when he said,

"Michael, I have to tell you before I get too old. Do you remember the time we had the Shrimp & Chips near the Ferry dock in Sydney, and you ate the shrimp with carapace still attached, only because you didn't know that you were supposed to take it off before you ate the shrimp?"

He said, "I remember eating the crunchy shrimp, but I didn't know that the carapace (exoskeleton) of the prawn was also supposed to be peeled until I got home that night and told Jerrie about the crunchy shrimp. She looked at the shrimp I had saved and noticed that it was crunchy because there was a carapace surrounding the prawn body that was supposed to be peeled, not eaten, at which time Jerrie broke into laughter, saying, "and you ate the carapace too?" She was still laughing and asked if Robert said anything to you? He probably hoped you hadn't noticed."

Robert had said later, "Oh I noticed that all right, but I didn't let on because I figured that would embarrass you. Dottie got a huge kick out of the story too. I have to tell you now that over the

years I told the story many times to my friends to all their enjoyment about this unnamed young geologist from Ohio who worked for me in the 1960s and who had never peeled a prawn before and ate the exoskeleton despite it being crunchy because he thought that's the way it came."

He told Robert, "Well, I guess being the brunt of the joke without knowing it is just as well."

Robert, patting him on the shoulder, said, "I can't tell you how much I have enjoyed working with you through the years."

The next week in the 1967 field season, Robert and he were off to Palau, but in order to get there they had to fly to Guam Island and then to Koror, the capital of Palau, via a Continental Airlines DC-3 tail dragger at that. They arrived in very humid weather, but the air smelled fresh. The very small airport was surrounded by Palm trees and white beaches. They were delivered by a rickety old truck of at least 1940s vintage to a compound of small cottages. They had separate rooms. There was a bar next to the cottages. Robert said to meet him at the bar about 6:00 PM and they would have a bite to eat.

After a short nap, he changed his clothes into shorts and a field shirt. All he was missing was a pith helmet, he chuckled to himself. He walked into the bar and country music was playing. He was expecting Hawaiian music for some reason. The bar was rather pleasant with native shields on the walls and jungle art in frames on the wall, and a few framed photos of very large island fellows, as might be expected. Robert asked if he wanted a beer and he said yes.

There were only two rather large native fellows in multicolored shirts and shorts sitting at the bar. They ordered white-bread sandwiches with ham, cheese, and bologna from the paper menu. Civilized, just like home, he thought at the time, in Gundagai that is.

Robert said that they have a meeting with geophysical contractor first thing in the morning at the docks. He laid out what he had gathered up over the past months about the project. "You may have wondered," Robert said, "Why Palau? and why now?" He agreed. Robert then formalized what they had been discussing for weeks that the Queensland phosphate had a metallurgical problem. Volcanic silica, in any concentration this made generating phosphoric acid a marginally economic operation. Unless they can find phosphate in other areas where the volcanic ash had not fallen or had not been washed into the accumulating phosphate deposits, the material that they have located so far apparently has only limited use. Australia needs a better-quality phosphate, like that of the bird guano deposits of Christmas Island and Naru Island in the South Pacific south of them. "These islands may contain the next large supplies of phosphate for Australian import, which is our primary objective," he said.

Robert had received information from the U.S. Geological Survey in Reston, VA. and from military sources with reports and maps by the Japanese. The information has been translated and new maps prepared. He laid out his map on the table. Robert said that the Germans had discovered rich phosphate deposits on Angaur by the early 1930s and had developed a producing phosphate mine with the products going to Europe to formulate as fertilizer and explosives. When the Japanese became aggressive in the area in the late 1930s, the Germans departed. Their successors not only expanded operations in Angaur but discovered additional deposits on neighboring Peleliu and built a refinery on that island to develop them. By the time of the Allied invasion in the mid-1940s, both mining and refining operations had been

abandoned. He showed him where the phosphate was to have been mined on Angaur and Peleliu. Robert added that there are reports that there had been major battles fought there during WW2.²⁴

Robert said that if they could confirm that such mining had occurred by locating evidence of high-grade bird guano phosphate, which would suggest that these islands would likely be similar to Christmas and Naru Islands before their phosphate deposits there had been mined out over the past 100 years. Then he said they could take corporate steps to acquire the mining rights to both the currently uninhabited islands. This he said would be a multi-million-dollar project, involving first clearing the islands of the military material and unexploded ordnance, then, either concurrently or followed by importing drilling equipment and associated supplies to confirm the presence of substantial reserves and high-grade of the phosphate ore. A resulting mining project could supply the much-needed fertilizer to Australia and the rest of the world for decades to come.

The geophysics showed some anomalies they needed to check out by a grid sampling in the shallow areas around the small islands to determine if this had been a bird rookery in the geological past. Robert said he had also been cautioned to watch for unexploded ordnance, by whom he didn't say.

That night the weather was cool with a slight breeze. The windows were louvered so they could be adjusted easily. It had been a long time since he had had such a restful sleep. He awakened with the dawn, showered, and dressed and went over to the bar. There were already 8 to 10 people there having breakfast. He found a booth and sat down, ordered coffee, eggs and bacon, toast, buttered. Robert came in about 15 minutes later. He sat down and he also said that he had had a great sleep. He offered that it must be the South Pacific air.

They finished and set out on foot to the docks which were only a few city block equivalents away. Robert saw two fellows, an older fellow, named Trevor, and younger guy his age, he figured, named Matt. They identified themselves as members of Western Geophysical, the group Robert had engaged out of Los Angeles. They were also responsible for assembling the sampling device they were to use to sample the sea bottom. Robert and he were conducted down to the part of the dock where they had a boat docked that looked like it came from a war movie. The boat was, in fact, a military landing craft left over from WW2. The end gate dropped down in shallow water or on the beach to unload soldiers; it was called an M-Boat, he heard. He was in white clothes; Robert was in the shade next to him. For their project, an engine operating the hydraulics of the drill was mounted on the extended gate and two rubber hoses were attached. One had a metal end that was to be pushed into the bottom and was to extend to the sea floor and maximum depth of water of 20 feet. There was suction to be created by the engine on the M-boat that would bring material via the hose and empty it into a long tray. The other hose returned the water overboard.



Robert explained that the system was designed to retrieve material at a particular site over a depth below the bottom of about 5 feet. That interval would be represented in the sample tray up on the M-boat, and it is that material he was to characterize and test using the Shapiro method for phosphate. Robert had the Western geophysical people assemble the chemicals and reagents required and a table with small canvas seat layout in the back of the M-boat for him to evaluate the material produced and run the tests.

²⁴ <https://www.historynet.com/a-bloody-assault-on-angaur-island-proved-the-folly-of-mopping-up-operations/>

Good thing he remembered to bring a sample of high-grade phosphate from Queensland as an external quality control test to confirm that the chemicals and reagents the boys had supplied had been appropriately selected. They could not carry these chemicals on his flights, but they did somehow, he never asked how.

The Western Geophysical fellows were responsible for operating the M-boat and for operating the pump and guiding the probe to the bottom by air lines for breathing while Matt, the younger fellow was on the bottom. They had been evaluating the equipment and the procedures over the past week before they arrived and said everything worked great.

Robert asked, however, that before they set out for the islands, he would like to see the system in operation, just to make sure the system works, "If you don't mind, Gentlemen," he said. That's exactly what he would have asked had he been the leader on this project.

They said that would be no problem. They all boarded and backed the M-boat away from the dock into deeper water. They idled the M-boat and started the hydraulic pump engine that ran on gasoline, he figured. They threw both hoses into the water and Matt jumped into the water and disappeared below the water surface, but he could be seen moving down to the bottom with plenty of slack on the hose. Trevor was controlling the hydraulics on the engines and watching a valve gauge and adjusting a stopcock. They soon heard sediment coming out of the hose onto the tray. There was sediment being kicked up on the bottom, but it was being swept away by the current and not interfering with Matt's field of view.

In only a few minutes the tray was full, and Matt's head popped out of the water, and he said, "I got down pretty close to 5 feet. How did it go in the sample tray?"

Robert gave a thumbs up.

And Matt said, "Great."

Robert said, "Works great." With that, the fellows gathered in the hoses and turned off the engine, and Matt climbed into the M-boat to the controls, revved up the engine, and off they went back to the docks.

When they returned to the docks, the fellows took Robert and him into their office. The chemicals and reagents were present. He brought everything else that was needed, such as clip board, note pads, hand lens, etc. While Robert was talking to the contractors, he examined the reagents and chemicals in detail. None of the bottle seals had been broken, so no tampering. In the morning when he would make up the colorimetric standards, he would test them using the external sample to be sure.

The next morning, the special M-boat left the docks with Robert and he, and Trevor and Matt, on their way to the waters around [Angaur and Peleliu](#). Robert had budgeted 5 days of sampling. The trip to Peleliu required about 2 hrs. and to Angaur another hour. Robert decided that they would start with Angaur within the reef next to the shoreline on the basis that there was hearsay evidence that mining had occurred on that island, but Robert wanted to find unambiguous evidence of phosphate guano and old phosphate rock before negotiating with the Native leaders. After they arrived, it didn't take long to complete 10 or so sites within the lagoon on the southwestern side of the island. Phosphate was reported in the sediments sampled, but no concentrations greater than 1% P_2O_5 . He suggested to Robert that they might expect residual phosphate from the military bombings that had likely occurred there during WW2 more than 20 years before. Robert decided that the island of no more than 2 miles wide was too densely overgrown and too dangerous to explore on land.

One evening, after one of the long days on the M-boat, Robert and he decided to stop by the bar before they headed off to bed. They sat at the bar this time and had a sandwich and a beer. There were three guys sitting down at the end of the bar. Robert and he were talking and noticed the bar was filling up and only the seat next to him was available. He was listening to Robert when someone leaned toward him from the next bar seat and said, "Hey buddy, could you pass the salt and pepper?" He slid them to him and looked right into the face of none other than Lee Marvin himself.

He blurted out, "Lee Marvin, what are you doing way out here in the middle of nowhere?"

In Marvin style, he said, "Well, if you really want to know, I am hiding from my wife."

He said that he was sorry to hear that.

Marvin said, "Oh don't be, she is one SOB at times when she gets on the sauce."

He said, "How did you find this place?"

Marvin said, "I fought here during the war and got hit in Saipan. That was the end of the war for me, but I recovered. A few years later I was here doing a movie in this area and got to know the great guys around here. I can get a little crazy sometimes when I get to drinking and the boys can manage me pretty well, so I can't hurt them, and they don't hurt me much. They just recently finished building a native boat for me in the old style and we are going to try it out tomorrow."

Marvin then said, "What are you guys doing here?"

He introduced Robert indicating that he was his boss and that they were with the Conoco mining group. They understood that the Japanese mined phosphate before WW2 at Angaur and Peleliu.

Marvin said, "You can't imagine what went on during the battles for these islands."

He then said, "See you around" and returned to his large friends.

They finished eating and their beers and then departed. When they walked out the door, it was raining heavily, and it rained all night and most of the next day. Robert called a *force majeure* for that day. He spent almost all his free time reading *The Fountainhead* and then *Atlas Shrugged*.

During the rest of the days, they spent drilling in the lagoons and very shallow waters of Peleliu Island. In a few of the sites, phosphate concentrations as high as 5% were noted in the southeastern most lagoonal areas. The M-boat penetrated into the lagoons to water depths of 10 feet before encountering heavy overgrowths as well as numerous black and white banded sea snakes. The water was very warm. On the final day, they investigated a small lagoon on the inside of the northwest peninsula of the island. The last site sampled indicated 5% P_2O_5 in very shallow water. Abundant rusting military hardware, including large, mounted guns, tires, and fragments of large shell casings could be seen on the bottom after removing incrustations and overgrowths.

Robert said that they had seen enough and instructed the fellows to head for home. The M-boat had a modified engine so its speed was fast, but with the flat bottom, it was a rather rough ride outside the wave-dampening areas of the lagoons. It was more like riding a bucking horse than the smoother ride of a keeled boat. The difference was important because he had no signs of motion sickness, as in small airplanes and keeled boats.

Robert and he said their thanks and goodbyes to Trevor and Matthew of Western Geophysical. They had to dismantle the equipment and store it for use another day. Robert and he went to visit the leader of the Palau people in his office in the downtown of Koror, which looked at like Cairns and even Townsville in Australia with tourist shops, normal supply shops, butchers, grocery, and drug stores with signs almost all in English.

The leader was a large man. They were introduced and sat down in front of his large desk. Robert was perfectly direct with him by saying,

“Your Honor, with your approval, we have conducted preliminary investigations of the seafloor around the two islands and have picked up only minor shows of P_2O_5 . We also observed the surface of the uninhabited islands from our boat and have determined that nothing will be done until the ordnances, both live and exploded fragments have been removed from the islands. That process will be very dangerous and expensive to accomplish. There will also likely be both Japanese and Allied soldiers’ remains to be considered as well. As a representative of one the larger fertilizer companies in the U.S., Agrico Chemical, a Subsidiary of Conoco, I recommend that we combine our efforts to seek the support of the U.S. Government to manage these problems. Once the ordnances and military trash are removed, we will return with drill rigs to determine reserves and characteristics of the phosphate present on the two uninhabited islands.”

The Leader agreed that he will get his people working on that as soon as possible. They got up and walked out of the room together. He followed. Robert and he caught the plane to Guam the next morning. They arrived in Sydney the next afternoon. They took two taxis, Robert to Clontarf, and he to Beecroft.

Robert said he was going to take a long weekend off and encouraged him to do the same. He called Jerrie from the airport to let her know he was back. When he arrived home, the first thing he saw was David running toward him and swept up into his arms, and realized this little guy was getting big. Jerrie was in good spirits. David sat there listening as he briefed them on the project and on meeting Lee Marvin. He was very tired, and they all went to bed early that night.

Sitting on the windowsill, waiting for some attention that next morning, was Mr. K. He opened the window and he jumped all the way down to the table and just looked around. He did not move. Two wieners appeared on a plate. He looked at them, then at him. He thought Mr. K was waiting for him to pick one up and hand it to him. He did and Mr. K. took it crossways in his long beak and hopped back to the sill and then off to the fence to dispatch the apparent snake. After a few minutes, Mr. K. was back for a second round, and then off he went somewhere with an apparent purpose.

He asked Jerrie if Mr. K. had been on the table before and she said that he had been a regular since he left. Jerrie announced they have an invitation to visit Jeremy and Pricilla on Saturday night for dinner at their home in Clontarf. He thought that was a great idea. David could go too because they had a little boy too David’s age.

They arrived at Jeremy and Pricilla’s house in Clontarf. It was located on the Ridge, high enough to see the downtown buildings. Their house was super modern, linear, multi-level with mostly glass walls on the Harbor side. There were numerous pieces of modern art on the wall, all of which were original as far as he could see of the fabric and standing oil paint. The certainly were not prints. Also, sculptures and figurines dotted the living room and hallways. After a wonderful meal, Jeremy motioned for him to follow him into his study.

He asked Jeremy how the new company was going, particularly the project he mentioned on New Year's Eve. Jeremy said, "It is going much better than expected, quite frankly. How's your Queensland phosphate project going?"

He said, "Great," then he realized Jeremy was pumping him for G-2 and decided to play along to see if he had something particular in mind.

Jeremy said, "Pricilla said she had lunch with Jerrie last week and she said you went to Guam."

That is what he was after, he was thinking, and spun out a story to jam him up, "Yes, Robert and he met with a Japanese metallurgical group to work with Conoco on processing the phosphate."

Jeremy replied, "That's interesting. Have any trips coming up soon?"

He said, "I'll be going back to Queensland next week," and then he decided to pump Jeremy on his projects. "Aren't you guys into a major nickel discovery in WA?"

Jeremy said, "Where did you hear that?"

He said, "We have people. We should get back with the ladies."

The four of them soon gathered in the living room with the two little guys sprawled across their mothers' laps sound asleep. They had great conversations about the news of the day, and Pricilla mentioned the war in Vietnam, which Jerrie and he never discussed, except when Jerrie wondered about her brother, David, who was still flying helicopters in Vietnam. The subject was not discussed with anyone at the office because it just wasn't on anyone's mind. Jerrie responded to her by saying, "The younger people in the U.S. believe it is a civil war and we should butt out, but the older people believe we should make every effort to stop the spread of Communism."

Pricilla then asked a strange but understandable question, "Is the war the reason you came to Australia?"

Jerrie looked him and smiled and said, "Do you want to tell the story or shall I?"

He said, "You can tell it, this time, and I'll annotate if needed."

Jerrie then said, "Briefly, he blew his arm practically off in high school testing rocket engines. The U. S. Army classified him as I-Y, which means he would only serve under nuclear attack. Show them your scars."

He did, and Pricilla said, "OMG," and nothing more was said, or even needed to be about that subject.

On the drive on the way home, he told Jerrie that he thought Jeremy might be a spy of some kind, at least an industrial spy, maybe worse. He explained how Jeremy was asking questions, for example, about his trip to Guam, that she told Pricilla about it and she told Jeremy, and that he wanted to know why Guam. It was a good thing he didn't tell Jerrie where he really went until after he returned. He cautioned her to assess Pricilla the next time you have lunch with her to see if she asks more questions. He was glad Jerrie understood and supported his view on the matter.

The next Monday he told Robert about his encounter with Jeremy and about his concerns. He said he would look into the matter, about which he had no clue what that meant, except to leave it alone and stay on your toes around Jeremy. A couple of days later, Robert came into my office and shut the door. Regarding Jeremy and his boss, their group is in some kind of trouble with the Australian Stock Exchange about insider-trading or something related. He suggested that he stay clear of Jeremy.

While he was getting maps ready to leave in the next few days for Queensland to finish the drilling and log the holes and other tasks, Jerrie called to say Pricilla called and wanted to have lunch. He said sure, just be aware. That night he told Jerrie about Jeremy being in possible trouble. The next day she had lunch with Pricilla. She called right after to tell me how it went.

Jerrie said, "You would never believe it, but the doo-doo has hit the fan at the Caddy house. Seems you were right. Jeremy and his boss are about to get arrested and indicted for some kind of stock insider-trading and other matters. But that's only a third of it. Pricilla is packing up and going back to London. And Jeremy told her last night that during his many trips to Kuala Lumpur in the past two years, he had met and fallen in love with an older Chinese lady who is a prominent Communist, and left this morning for Kuala Lumpur and will not be coming back."

He could only say in response, "Holy crap."

When he arrived at the office the next morning, he went into Robert's office to tell him what he had learned. Brian was there when he came in and for some reason Brian got up and extended his hand to shake hands and then said a very uncharacteristic thing, "Good to see you," and patted him on the shoulder and they all sat down. Robert said, "Tell Brian about your mining engineer friend, Jeremy."

He said, "But there is more just this morning ..." and he brought them up to date on what Jerrie had said. He never saw Jeremy again, but he did see his boss, John, five years later:

In 1973, he was living in Houston and in graduate school at Rice University. He was invited to give a paper at a conference in Sydney. He took a taxi from the Sydney airport downtown to his hotel and was having a pleasant conversations with the taxi driver and just happened to mention that he worked for Conoco five years ago. He thought he recognized the driver's voice. He looked more closely and recognized who it was. He was Jeremy's boss, John V.

John told him that he had gone to jail about 5 years ago for some stock dealings and was just released but had been barred from working in geology, mining, or banking, so all he had to do was drive a taxi. When they arrived at his hotel, he invited John for dinner, and they talked until late that evening. John said that as far as he knew Jeremy was still with the Communist lady, but Pricilla went back in London and changed her last name back to her maiden name, and there had been a major scandal in the London tabloids and Jeremy's family, and there is still a warrant for Jeremy in Australia, so he can't go back.

He asked, "How did you two get yourselves into such trouble in the first place?"

Jeremy's boss, John said, "It was easy. Greed. We thought we were smarter than everyone else."

When they parted, they had a big hug, and John said, "See you around," and off he went back to his taxi.

The next day Brian and he left for Mt. Isa to finish the drilling program in NW Queensland. This time it would be completed well before the beginning of the wet period. Jack and Rossi met them at the airport and took them to the field camp. Robert and he had hired a graduate geologist (Tom Z.) from the University of Sydney earlier in the month and had him drive the logging truck to Mt. Isa so it would be available when he returned from the Palau (and Guam) trip.

He helped Tom to get up to speed on logging the samples and on conducting the Shapiro testing of the sample for their phosphate content. This allowed him to go back to the old hole sites and log the holes with the gamma probe for the purpose of confirming the top of the Beetle Creek phosphate interval. This proved to be useful. He was also able to gather more information that the hole caps provided. Each hole cap had a hole drilled around the edge. With the cap installed and dirt placed over most of it. He had found earlier that some holes were allowing air to escape from the subsurface interval drilled through the site's hole cap's vent hole, while other hole caps' vent holes exhibited a negative pressure in that the air was being sucked into the hole and into the rocks exposed downhole. Placing a fingertip over the vent hole was employed to measure pressure differences.

Based on the fact that the previously discovered outcrop of the exposed phosphate zone and of that exposed in the shaft were characterized by vuggy and highly fractured rock, he had hypothesized only that the subsurface, being of mostly carbonate country rock, likely contained air passageways, if not cave systems, which extended well into the subsurface throughout the area. The subsurface pressure system was likely affected by diurnal pressure changes created by temperature changes, and by changes in the weather systems passing through the area. The Monsoonal rains also probably provided large volumes of water that recharged the groundwater reservoir, especially during flooding events, which were yearly events to one extent or another. In any event, none of the drilling to depths on 300 feet encountered the water table, but it was clearly present at greater depths than indicated by the Conoco drilling in the area. What the differential air flow meant to his drilling program wasn't clear as yet, but it would be soon.

One of the projects that Robert had approved was to have a quick look at a formation called the Westmoreland Conglomerate that he and Rossi had noticed a few months before that was mentioned in a paper they had reviewed that suggested it as a possible host rock for uranium mineralization of the roll-front type, not a hard-rock occurrence or related. Since that weekend was the beginning of a break for the drillers in Mt. Isa, they discussed a possible trip with Brian, and he became quite interested. He remembered Brian saying, "Well, gentlemen, let's take a drive." This meant a drive of about 150 miles north of the field camp, four hours up, and an hour or two to investigate, and 4 hours back, hopefully before dark. There were no assurances that the road was passable all the way there.

The formation had been mapped by the BMR and was located in an east-west trend within a few miles of the Gulf of Carpentaria. They took Jack as well in case they needed his survival skills should they encounter trouble along the way. They departed with plenty of supplies and extra gas in Gerry-cans strapped to the side of the newest Landover Jack had in his fleet. As they left camp before sun-up, the attitude of the foursome reminded him of a family outing, everyone was looking forward to the venture. And in a sense, they were family. This also had the feeling of going on an adventure with his guys in high school, but without the Deacon, this would be relatively dull.

They arrived in the area mapped and found the general site of the Red Tree outcrops. They spread out and took a few samples and recorded a few areas exhibiting higher radiation by his Geiger counter. They quickly decided the area had potential and decided to file tenements as soon as possible. Brian said that he would need to get approval from Robert, and he from New York, so it will likely take some time. Jack had been scanning the horizons with his binoculars for any field activity and he noticed two field vehicles off in the distance to the west along the same trend of the outcrop they were examining. Jack said, "Looks like we have some competition, guys." They all looked at the vehicles with their binoculars and agreed they weren't tourists.

They hurried back to camp and arrived just before dark, an all-around perfectly planned trip. Brian and Jack went to Mt. Isa that night to call Robert and report what they had found. When he returned the next morning, Brian said Robert had agreed and was in the process of applying for the tenements, but first needed to get approval from Jimmy Royds in New York before proceeding.

He and Rossi G. on the Barkly Plains, Eastern Northern Territory



The drilling resumed, as well as his gamma logging the previous holes. Later that week, Robert told him he had received approval from Royds and filed the paperwork with the Queensland government. Two weeks later, Robert received word from the government that the application had been denied because the land had already been filed upon by two other companies. Robert chose not to pursue fringe filing around existing claims, and that was that.

He had finished the logging and had managed the sampling and reviewed the logs prepared by his field assistant, Tom, who was doing an excellent job of learning their protocol and procedures. He then turned his attention to his project across the Queensland border in the Northern Territory. He had been giving some thought for the last few months to the presence of volcanic ash in the Queensland phosphate making it nearly unusable in making phosphoric acid for fertilizer formulations until processing technology improves.

His thought was that if the phosphate had formed on the seabed during lower-middle Cambrian time many miles away to the west some 40 to 50 miles, any phosphate zone in the NT might have been out of the range of the volcanic disturbance and/or upwind of ash clouds, and therefore the NT phosphate might not contain the ash. This would, of course, improve the usability of the phosphate material, assuming the P_2O_5 grade was high enough.

He interpreted and projected the Beetle Creek formation equivalent into the Northern Territory's tablelands on the assumptions that the zone might be present at shallow depths below a subsequent zone of erosion leaving no trace of the Beetle Creek formation that contained the phosphate interval elsewhere in Queensland. He and Robert had made two tenement applications months ago, one large area north of the Barkly Highway and another South of the main highway.



A few weeks later, the tenements had been approved by the Northern Territory government. He and Tom left the Conoco field camp early one morning with a drill rig, water truck, and offsider truck, and logging truck heading westward on the Barkly Highway. They made the turn northward toward the Alroy Downs Homestead. He stopped at the Homestead to advise them of their presence. The caravan moved east and north and stopped where he indicated and they spudded Hole Alroy #1. There were some minor signs of phosphate in the samples.

Then they moved south a few hundred feet and spudded Alroy Hole #2. The drilling was difficult and lost circulation was a severe problem which meant the interval was fractured and vuggy and the high-pressure air from the drilling was bleeding into the formation and not returning rock-chip samples. The depth was difficult to determine so he had them re-drill. Then, at a depth of about 60 feet below the surface, there was a well-developed zone of reasonably high concentrations of P_2O_5 over a thickness of about 20 feet, but he figured that that cavings likely have exaggerated the actual thickness of the phosphate zone.²⁵

It should be noticed here that since the Conoco drilling some 40 years ago, subsequent phosphate exploration programs have supported the above views and other companies have been successful in developing substantial phosphate reserves without deleterious ash content in the Northern Territory, for example,

In 2010, Avenira acquired the Wonarah Phosphate Project located just across the Barkly Highway south of the Buchana Dam area, the sites of Alroy drill sites A-2 and A-2A. With subsequent drilling and sampling, the company is in the process of proving up one of the largest known phosphate deposits in Australia. The project is part of Avenira's long-term strategy, and requires an enabling technology, such as the IHP Process, to be commercially viable.

Wonarah currently has a large resource:

- Measured and indicated resources 300 million tonnes @ 18.2% P_2O_5 (10% cut off Grade)
- Inferred Resource 542 million tonnes @ 18% P_2O_5 in beds roughly equivalent to the Beetle Creek Formation in Queensland. Both are of lower-middle Cambrian age.

Avenira reported that Wonarah has the potential to become a major center for the production of superphosphoric acid.²⁶

By 2017, another company, Verdant, was developing the Ammaroo Phosphate Project located in the southern areas of the Georgina Basin, south of the Barkly Highway in the Northern Territory. The phosphate deposit is also considered to be one of Australia's largest phosphate resources,

- Measured, indicated, and inferred resources of 1.1 billion tonnes at @ 14% P_2O_5 10% cut-off Grade, also in beds roughly equivalent to the Beetle Creek Formation in Queensland. Both are of lower-middle Cambrian age.²⁷

After drilling a few holes in the 1960s, the decision was made to begin to entertain corporate partners to continue the assessment and potential use of the known Queensland reserves, leaving the new discovery in the Northern Territory as a positive unknown.

He and Tom returned to the field camp and discussed the findings in the Northern Territory with Rossi and Brian. Brian advised him to go to Mt. Isa in the morning to fill Robert in on your findings. He asked Brian if he would like to go too, he said, "No, you can handle it," with a big smile, which was unusual for him.

²⁵ Northern Territory Discovery, <http://www.i2mconsultants.com/downloads/corp/MDCAlroyNT.pdf>

²⁶ Subsequent Phosphate Discoveries, <https://avenira.com/other-projects/wonarah> URL Replaced by: <https://avenira.com/dso-project/>

²⁷ Beetle Creek Equivalents, <https://resourcingtheterritory.nt.gov.au/minerals/mineral-commodities/phosphate-and-potash>

The next morning, he arrived at the Barkly Hotel and the Conoco room they kept under constant lease to serve as an office for impromptu calls like this, from Brian, and now from him too. He called Robert and filled him in. He was delighted, but he emphasized that they needed to get the Amdel lab conformation of the values before they make any claims of the properties' potential value.

Robert agreed and asked, "Are you about finished drilling and logging there?" he meant regarding the Queensland drilling, and

He said, "We should be finished by Friday."

Robert said, "OK, I'll have them make the reservations leaving Mt. Isa on Saturday morning for you and Tom and for Brian and Rossi, and you guys can pick up the tickets when you get to the airport. Oh, by the way, Jerrie called today and asked me to give you your new home address. You are moving to a new house in Clontarf she has found."

He said, "That is great. Beecroft was too long of a train ride. Glad she found a place," but 'this was the first time he had heard about this,' he thought to himself.

Robert said, "Glad to hear. See you next Monday in the office."

They finished the drilling and they departed on the plane from Mt. Isa and Tom and he arrived in Sydney late in the afternoon. He waved goodbye to Tom and took a taxi. He was about to say Beecroft, but he then remembered he didn't live there anymore, and looked in his briefcase and found the paper with his new address in Clontarf and cited the address to the driver. He sat back to enjoy the ride after they made it through the reeking zone and passed through that beautiful bridge on the way to the North Shore, as the locals called the general areas of Clontarf and Manly. He settled in and enjoyed the ride. He wondered if the Beecroft neighbors were glad to see the Yanks go. After the incident of the burning shed, he was quite uncomfortable learning how flammable the trees were, as the fire chief had described. But he was also looking forward to hearing what prompted Jerrie to make such an abrupt move.

The taxi driver pulled up in front of the given street number. He retrieved his suitcase and sat it in front of the mailbox. But there were many steps up to the house, and he wasn't exactly sure this was it, so he asked the driver to wait, and he left the bags and climbed up the stairs to see what's what. He appeared at the door and rang the doorbell. It had a beautiful sound, and the door opened, and it was Jerrie. She instantly said while hugging, "What do you think of the area?" "Looks great, let me get my bags and pay the driver," he said. He went back down the stairs and told the driver this is where he lives, which gave the driver a bit of a chuckle and shaking his head, saying "OK. If you say so," and he departed. He carried his briefcase and suitcase, with the rock samples of course, up the 32 steps to the front porch of the house. The house was one-story, furnished, modern design with mostly glass facing the Harbor. It was located in a *cul-de-sac* almost on top of the Clontarf Ridge, but the Manly Ferry dock could be seen below, plus the view from the living room of the Bay and Harbor was fantastic at night



and day for that matter. The steps were built alongside the garage, and the top of the garage was fenced in with fancy iron work that didn't block the view. The porch was covered and looked out over the top of the garage area. Inside, Jerrie showed him around. The house had an accessible area in the middle with a fountain and outdoor seating areas, with three bedrooms with all glass windows facing the inside fountain area. All the kitchen appliances looked new. The place was perfect, he thought.

David had been holding on to Jerrie's leg as she conducted a tour of the house for him. When they came back to the living room, he sat down on the new comfortable couch and said with outstretched arms, "How's my big guy?" David broke into a smile and came running and jumped up onto his lap. It was interesting how David never insisted on being recognized, he just waited to be recognized. He wondered whether that would be a personality trait when he gets big.

After a while, he turned to Jerrie and said, "Tell me how this happened so fast."

Jerrie said, "Sheila called last week and said she had a lead on a house that a couple were going to be in London for a least a couple of years and wanted a good renter. She took it from there and talked the price down somewhat, she said."

He asked, "How much?"

She said, "\$400.00. per month"

He said, "Great. Excellent job."

She said, "I didn't think you would mind. Dottie came over yesterday and she approved of it too."

They settled in and began to enjoy the house, the view, the shops, and the ferry ride to work passing by the big green bench on the way up the hill to the IBM building. He was thinking of asking Robert to lunch at the dock one day soon for prawns and chips but didn't. He should have, just to erase any memory he might have harbored of him chomping away on a crunchy prawn.

Jerrie said that there was only one problem with the house. The Citroen can barely make it up into the garage. The next morning, he walked down the steps and into the garage and started the Citroen and put it in reverse gear and let out the clutch slowly. All of sudden he was moving very fast down to cul-de-sac level and hit the bottom and bounced across the drive area of cul-de-sac coming to a stop against the curb. Jerrie was standing on top of the garage porch leaning on the iron work, and said smiling, "See what I mean?"

When he tried to get it up the drive into the garage, it wouldn't make it the first time. For the second attempt, he backed across the cul-de-sac top get a running start, so to speak. That worked, barely. He got out of the car, lowered the garage door and noticed the neighbor across the cul-de-sac at what appeared to be her kitchen window. He waved and she waved back. It wouldn't be the last time he would see the neighbor lady in the window.

When he came back into the house, he said, "What kind of new car do you want to get?"

She said, "I don't know, but it should be something safe. I saw a couple of used cars lots down on the Manly road. We could have a look if you like."

He said, "The sooner the better." Jerrie agreed.

On Sunday, they went looking for a new car, and it turned out better than they might have thought. At the second lot they visited, they pulled up and got out. A fellow approached and greeted them in a heavy accent.

He asked, "How much will you give us for the Citroen. It's in decent shape and it's fun to drive." The salesman said, "I'll bet, and then he said how about a trade?"

He said, "Let's see what you have."

The salesman showed them 3 or 4 cars of the value he was thinking, and they didn't show any interest.

Then he noticed a fairly new white Volkswagen Beetle, and said, "What the price for that?"

The salesman said, "Oh no, That's way more than the trade-in."

He then said OK and started to walk away.

The salesmen then said, "Hold on, let me talk to my associate about this," and disappeared into his office. In a few minutes, the salesman came back with a friend. He wanted him to take it for a ride to check it out. Off he went and came about five minutes later and mentioned something to the salesman.

The salesman said, "OK, we'll trade straight across, but you have to pay the taxes."

He spoke to Jerrie on the side, and she liked it. He said, "OK, but we want to have the VW checked out before we pay you the taxes."

The salesman said, "Deal. Here's the keys." They exchanged keys and off they went. He didn't go into work that Monday so he could get the VW checked out properly. They took the VW home and tried going up into the garage in first gear and it was easy.

Town of Mt. Isa and Mt. Isa Mine in the background



He had it checked out at a repair garage down the street, and it checked out in good condition and didn't have a lot of miles on it and looked brand new. He went back to the salesman and gave him the title to the Citroen and paid the sales taxes. The salesman signed the title over on the VW. Done deal!



That next morning, he took the ferry to his office and life was good again. Jerrie was happy and that evening they were having a great Australian Chardonnay and she asked if then would be a suitable time to cast their votes again. He said that sounds like a great idea and they went to cast their votes once again just like last time. They took a long week-end vacation at Robert's encouragement. They drove to Brisbane along the coast highway. Bribie Island was the only Queensland island connected to the mainland by bridge. They stayed at a very nice hotel. The new VW worked quite well there and back.

Over the following few weeks, he was reviewing the geological reports on the Daly River Basin. Rossi and he had been tasked by Robert to get familiar with the basin with a preliminary reconnaissance of the area and by examining and testing selected core samples in the warehouse in Darwin. Robert was making the arrangements for their preliminary sampling of the seafloor northeast of Cairns and southwest Port Moresby, NG. He was looking forward to that as well.

Rossi and he arrived in Mt. Isa and Jack, as usual, picked them up at the airport. Jack told them that he had arranged a trip to the mine that afternoon. As it worked out, Rossi knew one of the senior geologists at the mine and he offered to take them on a quick tour. They deposited their suitcases in their Conoco room in the Barkly Hotel and the three of them were off to the mine headquarters just a few blocks in-town. They parked in front of the building and went in. Bill L., Rossi's friend from his university days, met them and took them into his office. He gave a 10-minute presentation on the geology and mineralization present in the mine. The mineralization was first discovered in the early 1900's and the mine converted from an open cut pit to an underground operation some twenty years later. The mine and adjacent smelter were of world-class and have produced large copper ingots and lead-zinc silver ingots over the years, transporting them by rail to Townsville where they were further refined and then loaded onto ships destined for the world markets.²⁸

Bill indicated that they would be going down to the working face currently at the 5,100-foot level. He then took them to the "ready room" and outfitted them with helmets, masks with small oxygen bottles and heavy-duty safety vests, plastic glasses, heavy gloves, and knee-high rubber boots. Once on, the equipment weighed a ton, it seemed.

The four of them went to the mine elevator and it opened. The operator asked for destination and Bill said, "51" and down they went fast. As they descended, Bill said that they might hear large booms and cracking sounds, but that only happens once in a while. Because the shafts and adit walls in this large mine complex were under such great loads, wall fragments will sometimes spall off with great force. They have had a few fatalities over the past few years, he said. He remembered that Rossi looked at him with raised eyebrows but said nothing. After what seemed to be a long time, they reached the 51 level. The elevator door opened abruptly, and they stepped into a large accessible area with a ceiling of maybe 20 feet high or so in an area that was surprisingly well illuminated and dry. There was no sign of groundwater leakage although the adit walls were wet from the ambient humidity from the condensation supplied by the mine's ventilation system. Bill indicated in his mini lecture that the mine's huge pumps have kept the area dry for decades and that was what contributed to the spalling as the rocks were still adjusting to the differential pressures in the huge rock mass in the mine complex.

Multiple adits took off from the main elevator room. Small vehicles, carrying what looked like ore were rushing around here and there. They boarded a little train on small tracks and rode it to where they were breaking ore out of the working face and loading it with small front-end loaders into small cars in front of the little train they had arrived on. They watched for about five minutes. Bill picked a hunk of ore out of one of the cars and pitched it to Rossi. Rossi hit it with his hammer and broke it up and flipped a large piece to him..²⁹

²⁸ Summary of Mt. Isa Mines, https://en.wikipedia.org/wiki/Mount_Isa_Mines

²⁹ More on Mt. Isa Mines, <http://www.portergeo.com.au/database/mineinfo.asp?mineid=mn042#~;text=In%20the%20Mt%20Isa%20mine,and%20sandstone%20at%20the%20base>.

Rossi and Bill were talking and pointing, but he couldn't hear their conversation with all the machine noises and because his ears were covered with the helmet and the attached heavy cloth hanging down to his shoulders. After a few minutes, they turned to board the ore train to return to the elevator room. As they sat crumpled up in the cars, all of sudden they felt and heard a large cracking sound and the lights flickered but did not go out. He saw the little cars in front sway as the pressure wave passed them or as the wall's rock mass moved. When they arrived at the elevator room and were getting into the elevator, Bill said that spalling action felt really close. They ascended to the surface and as they emerged, they heard a loud klaxon alert and they stood aside as 5 or 6 guys with serious looks on their faces with gear rushed into the elevator and disappeared. There was potential danger and the guys knew it.

As they were walking back to Bill's office, Bill had heard that level 43, an unoccupied ore transfer adit, had experienced a wall failure and that the team they passed had been dispatched to assess the damage. Bill was summoned to a safety meeting, and they were quickly ushered to the head office and departed. He never heard what happened, but apparently that was not uncommon and part of working underground. That sample from the mine a mile below the surface is in his rock collection somewhere.

They arrived back at the Barkly Hotel around three that afternoon. The mine tour took longer than Rossi had expected. The three of them discussed their staying overnight before heading off for the reconnaissance of the Daily River Basin. Jack said they should wait because it wasn't safe to drive the Barkly Highway toward Darwin at night because critters of all sorts liked to hang around the warm asphalt highway at night. But Rossi and he decided to press ahead.

They waved to Jack as they pulled out of Mt. Isa northward. They decided not to stop at the field camp along the way only because Brian was likely out with one of the rigs and such a side-trip off the highway would likely have slowed them down even more. They crossed the Queensland-Northern Territory border about dusk and witnessed another beautiful sun-set. This was the tablelands he had seen before during his recent drilling program. The area was flat, to an uncomfortable extent, and the flat-Earthers would have cited the area as proof, no doubt.

By the time they made it to the intersection with the Alice Springs-Tennent Creek road, and turned right onto the Stuart Highway toward Darwin. It was pitch black. No lights, no Moon, only their headlights as far as they could see. No oncoming headlights were encountered that night. He was driving the Landrover going about 70 mph. Rossi noticed his speed and suggested cutting it back to about 60 mph. He obliged without question. He then noticed what looked like white statues standing alongside the road at the very edge of the asphalt. They did not move when they passed, although wind pressure of the passing must have been noticeable to them. He began to slow down in case one of them stepped into the truck's path. Then at crawling speed, Rossi said those are white owls watching and smelling for dead meat on the highway from the previous day's traffic. Rossi said, "A good example of adaptation." They agreed. He returned to 60 mph and the owl statues became a blur again.

About 20 miles from the very small settlement at Katherine, their destination for the night, they were moving right along when off in the distance they saw what looked like a group of eye shines either on the road or near the road. Just as they saw that, a large, red Roo appeared out of the darkness from the side of the road and ran directly at the truck. A second later, it hit the truck and he slammed on the brakes safely and stopped in the middle of the road. They got out. Rossi had a large lantern that shone down the road; a large reddish-brown kangaroo was laying on his side motionless. He thought he might be dead, but Rossi cautioned him to not get too close. They walked up to about 10 feet and stopped.

The Roo was coming around and trying to get up and after a few tries he made it up and was shaking his head. Rossi said, "That Roo took a hit to his head, but looks undamaged otherwise." The Roo stared at Rossi's big light and didn't move. Rossi turned it off and, with only his small flashlight, they watched the Roo take off with amazing speed disappearing into the darkness again. They walked back to the Landrover to inspect the damage. There was a major dent in the side, but the left rear door still opened, more or less. "Guess Jack was right. Maybe next time we'll layover," Rossi said. He agreed.

As they continued down the road, Rossi explained, "Kangaroos are highly susceptible, like rabbits, to tharn when presented with a bright light, where their instinct tells them to freeze, not run. If you noticed back there, the Roo froze when I held the light on his face, and then took off after I turned it off." He said, "Yes, I did notice that." Rossi went on by saying that makes them especially easy to hunt and kill, which people do a lot these days. Just hold up a bright light in a field where there might be sleeping kangaroos and the big males will stand up tall and stare at the light. "It's like shooting fish in a barrel," Rossi said in disgust. He also said the meat shouldn't be eaten by humans because of the high incidence of *trichinosis* in the meat. The meat is sold in butcher shops as cat meat only. He told Rossi that Jerrie got the same story from her butcher in Sydney.

Off in the distance, they continued on the road, carefully now. After a while, they could see a couple of electric lights and Rossi said that must be Katherine. They pulled up in front of a small, one-story shop of some kind. There were no advertising signs at all. It had to be open because there were three or four pickup trucks sitting in front. He could hear music when they climbed out of the truck. They walked through the door into loud music of some kind he didn't recognize, but it still smacked of country and western. The screen door slammed as they entered and almost everyone of say 10 maybe 15 men and a few women glanced their way, sized them up and then went back to talking, smoking and/or drinking. Everyone in that part of Australia were accustomed to seeing geologists at the roadhouses, drinking beer. He looked at his watch, it said, "1:30 AM," then he realized they must have driven across at least two time zones, making it only about 11:30 AM in their time.

They sat down at the bar and ordered two Pilsners, a very tasty Australian beer. Rossi ordered white-bread sandwiches, which were very good. He didn't know what was in the sandwich but the white bread was nice and soft. Rossi asked if there were sleeping quarters available and the bar lady winked at Rossi and said, "We'll find something for you fellows."

They finished their meal, had another beer, and began to talk with the people around them. They wanted to know what they were looking for. Their standard response to the nosy question was "gold," but most people would say "There's no gold around here, Matey." They listened to new Australian jokes and joined in with the laughter, but with little understanding of the jokes. He let Rossi determine when it was time to call it an evening. Finally, the very nice middle-aged lady led them to the back of the establishment to two small rooms, which were surprisingly clean and comfortable. Before he settled in as best he could, Rossi stuck his head in his door and said, "When you shower in the morning, you should probably check for ticks and other bugs." He did. All clear.

They had breakfast the next morning. Rossi suggested steak and eggs and he agreed. Rossi was conducted by the waitress to a large refrigerator with huge steel door. He followed. Inside were rows of individual steaks hanging on a rope, maybe 30 to 40. Rossi said to pick his choice of the steaks. The trouble was they all were green with white wavy veins and looked rotten to him. Rossi picked two and handed them to the waitress to cook as ordered.

He suggested to Rossi that those steak might be “off,” but Rossi laughed and said that the green color was only superficial and that was a good sign that the steak was good. After the steaks had been cooked and served, he looked carefully at the steak, which was about the size and thickness of a hamburger patty. It looked OK, but he couldn’t eat it. The fried eggs and toast looked fine.

After this trip, during the first dinner Jerrie and he had downtown Sydney, he ordered a steak but it arrived bloody. He pushed it away with the thought of the green, bloody steaks with Rossi a few weeks before. He has ordered well-done steaks ever since. Cooks hate to do that apparently.



That morning they departed southwest out of Katherine into the Daly River Basin looking for outcrops, but the grass was so high they could only search by standing on top of the Landrover and scanning the area by binoculars. Only a few were found that day and those found were in the riverbanks; the sections consisted of carbonates, no silts, no indications of low-energy sediments capable of creating phosphate accumulations. They saw no reason to spend more time in the basin area until they had reviewed the cores from earlier drilling in the Daly River Basin, which might direct them to particular areas.

They decided to head for Darwin after they had a quick reconnaissance of an old uranium mine up the Stuart Highway a few miles north of Katherine. They took the road mapped to the site, but the jungle had grown across the road and blocked further access at a creek crossing. The site was only about a mile by creek. This was a rather odd creek too. There was no water running in the creek and it was filled with large blocks of granite and some odd-looking metamorphic rocks. The blocks were about the same size, measuring 4 to 5 feet across. The only way to get upstream was to climb over the rocks one by one. After about a mile, they rested, sitting on top of individual angular rocks. They then started the climb once again. Rossi was leading and they came to an especially high rock that had to be climbed with care. The jungle had grown to the edge of the boulders and there was no place to walk other than climbing up and over the boulders. As Rossi led, which was customary for senior geologist protocol in the field, he climbed almost to the top and reached up to the top edge and pulled himself up. He was just behind him. As Rossi was about to boost himself over the top, he heard Rossi yell, “S-S-S-nake !!!” and he instantly turned around and began yelling himself and running, only stepping on the tops of the boulders with Rossi just behind trying not to slip and fall on these hard rocks. After about 20 steps they stopped, fortunately no one fell, but they were out of breath. They were nimble that day.

Hanging onto the edge of a large granite wedge, he said, “Rossi, are you OK?”

Rossi said, “Yes, that SOB missed me by a half an inch. It was sunning itself and half asleep. My head coming up like that just inches away must have scared the snake as much it did me, because he stared at me a lot longer than might be expected.”

Rossi then said, “I have had it with this creek. Let’s give it away,” which was Australian lingo for ‘Let’s get the hell out of here.’

He agreed. So, they climbed back down the creek more cautiously than before and reached the crossing and their vehicle. It was about 4:00 PM. There was just enough time to make it to Darwin before nightfall. Back to the Stuart Highway and then north to Darwin they went.

They pulled into the southern limit of Darwin just as the streetlights came on. Not that Darwin was a large city, but it did have a few streetlights. Another noticeable aspect of Darwin was that it only had one building with two stories near the center of town. Rossi talked about how his Dad had told him about Darwin having been heavily bombed by the Japanese during the early part of WW2 when Japan was in their expansionist phase, grabbing as much land as possible. They leveled everything except the Hotel Darwin. It was to be used by the Japanese General Staff to administer the occupied lands of the Northern Territory, or so the plans said by the recovered documents. The allied navies stopped the Japanese from landing in Australia and were turned away towards Burma instead.

They had a reservation at the Hotel Darwin that night and for the next few nights. They had been driving closer and closer to the equator and thunderstorms were more common in this low latitude. The wind picked up just as they drove up in front of the hotel. A fellow came out and managed the baggage and they walked into the lobby still with full field gear, sweaty, broad-brimmed hat, hammer on his belt with machete, etc. There were a few people standing around in travel clothes and looked like they might be tourists. They stared at them like they were jungle people. He and Rossi were especially dark complected now after being in the field some much in those days and they ignored the tourists. As they approached the front desk, the fellow behind the desk spoke out in a loud and full southern-Australian accent, "Ah, the boys from the jungle. Welcome. We were expecting you, Mates, just in time it sounds like," referring to the thunder and approaching storms.

They were polite to the receptionist but didn't encourage the fellow. They went to their rooms and their baggage was delivered. He threw his wide-brimmed hat on the chair and took his field belt off and placed it in a pile on the rug. He fell onto the bed and closed his eyes. After only a few minutes, he popped back up because he was hungry. He got up and washed his face and hands and went to Rossi's room and stuck his head in the door and said, "Are you ready to eat?" Rossi said, "Why don't you get us a table. I'll be right down." He said, "OK, I haven't changed my clothes, just cleaned up a bit." And he took the elevator down to the first floor and walked into the dining area. A waiter appeared and said, "For one?" He said, "Two," and he was led to a table next to a big window. He sat down and saw a big dock and pier at the end of the street. It began to rain harder, and the streets were filling up with running water.

He asked the waiter if there was a phone. He said, "One moment," and returned with a phone with a long cable, and sat the phone on their table. He said, "Great, Thanks." He called Robert at home first to let him know they made it to Darwin and briefed him on their negative findings to date and that they will begin looking at the cores in NT warehouse tomorrow. He didn't mention their run-in with the brown snake or the Roo. Robert mentioned that he had completed the arrangement for the Coral sea bottom-sampling trip to begin in two weeks. He said that should give him enough time to get a break after his current trip.

He called Jerrie next and she answered on the first ring. He told her that he was just checking in to let her know they made it to Darwin. He told her that he had seen all sorts of interesting things that he would tell her about when he returns. Then he asked her how she was. She said, "Pregnant, I missed my period, so we are probably on." "That's good," he said. She said, "Yes, it is good." He told her that he was going to fly back to Sydney from Darwin in the morning. Rossi was going to drive the Conoco truck back to Mt. Isa for storage before flying home. He also didn't mention his run-in with the brown snake or the Roo.

Rossi appeared as he was completing the call with Jerrie. He said that he would like to call his wife but it's way too expensive from Darwin. He handed him the phone and told him it would be on his hotel account

so have at it. He liked the idea. He told Rossi that he was going to get a newspaper and would be back when he finished his call. He said, "I appreciate that."

The meal they had at the Darwin Hilton that night was a real meal, with a real steak, hot rolls, and great coffee, among other side dishes and desserts. By the time they finished the meal, they both were beat and full. He said, "How about we plan to be at the NT office at 10:00 AM, instead of the crack of dawn?" Rossi appreciated his turn of a phrase and said that was good to do that once in a while.

They arrived at the NT office the next morning at 10:00 PM as planned, and with the help of the NT geologists, they began to systematically look through the hundreds of boxes of cores from the hundreds of holes from the Daly River Basin....that day, and the next day.

That night he wanted something to drink and went down to the bar. There was a well-dressed, distinguished-looking fellow with perfect graying hair about his Dad's age sitting on the far side looking down at his drink in apparent concentration. The barmaid asked what he wanted and he asked what single-malt Scotch she had. He picked the one he recognized. It arrived and he began to sip it. The fellow in a corner some 6 barstools away turned to him and said, "What part of the States are you from?" in a very thick, but northern German accent.

He responded, "Ohio. What part of northern Germany are you from?"

He laughed and said, "All you Americans are always so quick."

He said, "I wasn't judging you, but I could recognize your German accent because I took a lot of German language and speaking courses at the University."

The German fellow then said in German, "You don't say. I am Hans and I was born and raised in Hamburg."

He said, "I take it you were in the German Army?"

Hans said, "You take it correctly. But I left before the war. Your German is a little rusty."

He said, "Your English is pretty good," and he finished his drink, turned to Hans, and said, "Auf Wiedersehen." meaning 'goodbye and hoping to see you again sometime.'

As he was going back to his room, he was thinking that he wouldn't be surprised to learn that Hans was a German General still on the run, or maybe he had left just before the war as he claimed.

He was about to go to bed, but the weather had turned nasty and strong thunderstorms were over Darwin that night. The flashes and red lightning were so close that he got out his camera to perhaps catch some lightning in action. He adjusted his new reflex camera to its fastest shutter speed, opened the window and set the camera down on the sill toward the dock and waited in hopes of catching a flash. After 10 or so attempts, he finally anticipated a strike right on time, he thought. He put the camera away and reminded himself to get the film developed when he returned to Sydney. He then watched the storm pass on northward in the direction of Melville and Bathurst Islands.

The excitement of the thunderstorm had keyed him up and he wasn't ready for bed yet. He decided to take a little walk down to the docks and to the pier that he could see from his room window. There was no one at the front desk as he passed through and things were quiet out front as he turned right toward the docks. With the storm still rumbling off in the distance, there were only a few lights to guide his way. He had brought a small flashlight with him that provided just enough light. The dock was new, at least the

wooden planks of the pier looked new covered in creosote oils. When he arrived at the end of the pier, he stopped abruptly and saw that the tide was out and there was at least 50 feet from where he stood to the muddy bottom below the pier. He decided to sit down with his feet over the edge. He turned out the light and sat there and looked up at the clearing sky. It was an incredible view of the stars, planets, and Milky Way; the Moon had not risen yet.

He leaned back with both arms and placed his hands on the moist wood, but one was placed on something that was moving and it startled him, so much so that he almost fell off the end of the pier. He composed himself, and while still sitting, he turned on the little flashlight on the pier wood that he had just walked on. What he saw also startled him.... hundreds of reddish-brown cockroaches of some type about 4-inch long were scurrying in many directions. He decided to get the hell out of there and got up carefully and then began to run down the center of the pier, not out of fear but out of disgust. Every other step he could tell from the sounds that he was mashing the cockroaches that happened to be in his path. When he arrived at the steps of his hotel, he inspected his boots and saw pieces and masses of what could only be cockroach parts and guts all over his boots and even up on his socks. He went to a nearby puddle of water and sloshed his boots around. He then hurried to his room and loosened and kicked off his boots into the shower and then ripped off his socks threw them into the wastebasket, and then jumped into the shower to first clean off his field boots and then any residuals on himself that he hadn't noticed. He hadn't expected cockroaches this size, but there they were.

The next morning, he awakened refreshed and did not think of his little walk the night before, until, that is, Rossi asked him what he did last night. Rossi had heard him leave his room. Rossi couldn't sleep either, for some reason. He told Rossi it was too bad he didn't join him last night in meeting his new German acquaintance and then in this walk to the pier and back. They were eating when he got to the part about smashing cockroaches, Rossi said, "Well, that will put anyone off their breakfast," and he put his fork down. He recovered in due course and began eating again. They talked about what could be their final day at the core warehouse. Rossi said that he needed to take the Conoco truck back to Mt. Isa, and Rossi suggested he might look into getting a flight out of Darwin to Sydney. He said there might be a nonstop flight. He already knew there was but that it wasn't a daily flight, only every other day.

He agreed and offered to drive back to Mt. Isa with Rossi, but he said there was no need as he has made the drive many times in the daytime. They spent the day looking for any positive geological clues in the rock cores but none were found by about 3:30 PM so they decided that they were done. The geological staff at the core warehouse had been very helpful and, after discussing other matters, they thanked the fellows and he gave them his new business card. Rossi said he would start out in the morning. He asked the desk person about flights to Sydney, who consulted the schedules and advised that the best flight would be to Brisbane and then to Sydney. He asked him to book him for tomorrow morning.

Rossi and he had a pleasant dinner that evening and talked about the coming activities. Rossi had said that Robert had asked him to be available when they begin the farm-out negotiations sometime after the holidays, but certainly early in the new year. He said that Robert told him as well. He told him about the coming Coral Sea sampling program with Tom. Rossi said that could be very interesting.

Rossi also allowed how there was talk by Brian that he should go with Gene Pendry, who was the Conoco expert coming out from Conoco's Denver mining group to oversee the big hole drilling for oil and gas, but also looking for potential potash zones during the drilling in the Carnarvon Basin north of Perth. He said

he hadn't heard about that. Rossi then said, "When you get back to the office, let Brian bring that up and don't tell him I mentioned it to you." He said, "Sure."

When they finished dinner, it was late, and Rossi said he wanted to leave very early with sun-up the next morning for his trip back to Mt. Isa. He told him to tell Jack about their hitting the Roo and running into the large brown snake. Rossi said, "Sure, Jack will no doubt get a big kick out of both." They said their goodbyes.

The next morning Rossi got off early and a few hours later he was on his way to the Darwin airport.

He arrived in Sydney late that afternoon and took a taxi to Clontarf. When they arrived at the bottom of his hill and then walked up to the garage and then up to the house some the 32 steps, he saw Jerrie and David talking to the neighbor lady they had seen in the kitchen window across the street a few weeks before. They all waved, and he climbed the stairs to the house and went in.

Jerrie and David came in a few minutes later and she said, "I figured we should get to know our neighbors, this time, in case something comes up." They played with David on the living room floor. He was beginning to talk, and one could tell that he was a very bright boy. He asked how she was feeling, and she said, with her hands around her new baby bump, "So far, so good, only a little morning sickness."



He asked, "Do you have a due date yet?" Jerrie said, "I saw the doctor last week, and he said it would be around mid-May." He noted that Jerrie had been in good spirits now for a number of months and was hoping that she had worked through whatever was bothering her. Life was clearly good.

While getting ready for the Coral Sea trip, he was encouraged by Robert to take a few days off and just relax with the family. That weekend they went to the nearby beach and laid out in the sun with plenty of sun lotion. David was having fun jumping around at the water's edge, especially when a small wave broke sending more water his way. Jerrie and he were talking about something when he glanced at David and he saw a terrified look on David's face as he began to cry and bending over touching his legs. He knew instantly what it was; a Bluebottle (aka Indo-Pacific Man o' War), with its thin strings of poisonous polyps, which were "stinging" David's legs. He ran to him, picked him up out of the water and made him stand, while he grabbed fistfuls of sand and began to rub up and down on his legs for about five minutes. David began to relax because he apparently had broken up the thin tentacles that had wrapped around his legs. Jerrie had brought some pink lotion that seemed to help even more. A crowd had gathered offering moral support because they had seen that happen before and that rubbing with sand was the acceptable way to handle the matter.

They finally sat down on the beach towels with David on Jerrie's diminishing lap. His legs had become swollen and red, with a little blood here and there. She then said, "My God, look at your hands." He hadn't noticed them, but his fingers had swollen to about twice their diameter. He got up and went to the Lifeguard station where a young, handsome chappie was sitting on duty, and he asked if there was anything he could do for these, and he showed him his swollen fingers and hands.

He said, "You must be the little boy's father. I don't know of anything, other than soaking them in hot water and taking some aspirin."

He said thanks and they went home to soak his hands. By the next morning they were back to normal, but ached.

The next day he looked at David's legs and aside from a few small, circular, reddish scars, he figured he would be OK but to be sure they decided to call their doctor next to Manly Hospital and asked him for advice. Jerrie said the doctor wanted to take a look at David's legs, so they took him down the hill a few blocks to the office building beside the Manly Hospital. The doctor, who was a young man with a heavy British accent, looked at the scars with a small magnifying scope and said that there were some embedded stinging cells still there, so he had his nurse cover his legs with a thick, orange lotion of some kind and then wrapped up both legs, with instructions not to remove the bandages for a few days. The doctor said, "That should knock out the remaining live cells still present and neutralize the toxins."

They thanked him for his quick response. He nodded and said, "This happens all the time, no big deal. He'll be fine" and then nodded goodbye and hurried off.

In the office a few days later, Robert called him into his office. He said, "I just received a call from a Professor at the University of Townsville. He said that he knew your Professor Jay Lehr and he has recommended that he invite you to give a series of lectures on hydrogeology to our students and staff, because they have no one there who knows much about hydrogeology."

Robert said, "That's quite a recommendation from your professor. Do you want to do that?"

He said, "Sure, that would be interesting. When does he want to do it?"

Robert said, "How about after you finish the Coral Sea project? Here is his telephone number. Conoco will pay for the trip."

He said, "That would be great. I will." He called the Professor and set up the trip.

The next week, Tom and he traveled by air to Cairns, which was a major tourist area. They were there to meet a Conoco contractor, who was to take them on a specially outfitted ship to the coordinates plotted on a map supplied by Robert, who had estimated that the most favorable site was over an area of the seafloor between the York Peninsula and Port Morseby, New Guinea that could contain accumulations of mats of phosphate minerals on the seafloor. The ship's accommodations were good, and the ship's cook was outstanding with seafood dishes. The ship also was equipped with a sophisticated sea-floor topography-mapping capability. It not only indicated the bathymetry but also some characteristics of the interval a few feet below the physical bottom. This suggested whether it was an area of loose sediment deposition or an area of upwelling with geochemical accumulation in phosphatic beds within dense sediment.



His function was to monitor the bottom geophysical data and to decide when it was time to send down the sampling device into the bottom sediment to recover sea-floor samples. Once the sample was obtained from the device and from the sample bag at the end of the device, the sample was geologically characterized in terms of the type of sediment, fragments size, shape, and angularity. Samples were then ground by mortar and pestle into a powder and then tested by the Shapiro method for the powder's phosphate content.

Once they arrived in the area of interest, Tom and he began the sampling. After a few days they had made about 150 sample runs with associated testing. One morning early, the weather began to change, and the sea was getting rough. At about this time, he began to get motion sickness; the horizon that was moving too much was upsetting his inner ear and balance creating dizziness and worse. This lasted for as long as the sea was angry i.e., for the next three days. Tom took over the sampling after consultation with him. The ship's Captain would visit him in his bunk to determine his condition by observing the color of his vomit in the bucket by his bunk. He later told him that the color had changed from clear to yellow, which was normal stomach contents, but any darker color meant that he had breached his spleen, which meant the condition was turning serious and would require hospitalization. He remembered preferring to vomit out the back of the ship into the churning water.



At one point, the Captain suggested they stop at an approaching island for a few hours in an attempt to allow him to recover some. They set anchor in the sheltered harbor of the island, and they saw a small boat heading for their position. There were six very dark fellows wearing brilliant red skirts and one very white guy in regular khaki shorts. They pulled alongside and greeted the crew. The Captain explained that they were just taking a break and the white guy invited them to come ashore for a visit and a meal.

So, the Captain, First Mate, Tom and he boarded the small boat and went ashore. They met about 10 fellows and 6 or 7 ladies, also with bright red skirts (and bare-breasted). They all spoke English quite well. The white fellow was the missionary in his 10th year on the island. They were the first visitors in five years, aside from supply boats that would drop off goods every week or so.

After having a fish sandwich, Tom and he decided to take a walk around the very small, clearly volcanic island. There was another barely visible island just above the waves adjacent to the island. On the far side of the island, the beach sands were a distinct color. The black sediment also had abundant clear zircons. The black sands consisted of mostly magnetite. The island, maybe a mile across, was clearly a volcanic cone, with no sign of heat at the top of the cone in the center of the little island. He found an interesting feature in the rocks that had been lava when a volcanic fist-size "bomb" had landed in horizontal liquid lava forming circular rings resulting from the impact.



Later on that day, they returned to surveying. At one point the next day, the ship's radio malfunctioned, and they had to return to shore, but they were closer to Port Moresby than Cairns, so they sailed on to Port Moresby. Along the way, the seas calmed somewhat and he recovered fully and was feeling good for a welcomed change. After they pulled into the Port Moresby docks, the professional crew and some of the ship's crew disembarked. He was walking on the pier with Tom and the Captain, when, all of a sudden, he was overcome with a bout of motion-sickness and began barfing again. After about 30 minutes, it was over and he felt fine again. The Captain told him that he had experienced a common reaction of achieving his land-legs after an extended period of sea-sickness.

They found the parts to fix the ship's radio and after lunch at an outdoor restaurant, they were back on the ship heading out to sea to resume the survey where they left off. The seas remained relatively calm

and he completed the planned survey without problems. They came to the end of the mapped survey line; there were no indications of accumulating phosphate on the sea floor in the area surveyed.

Two days later they arrived back in Cairns. He thanked the Captain for dealing with his issues and the Captain said that the sea was rather rough, although he knew he was just making excuses for him. They unloaded the sea-floor samples and arranged to get them shipped to Sydney. He thought about talking to the University of Sydney folks about doing a Master's degree on the samples, but then he thought about the logistics, taking leave, time involved, etc., and quickly forgot about the idea. He did remember that his lectures were coming up next month at the University of Townsville and decided to offer them the samples for possible further academic work. The Captain said he would store the bags weighing about 200 pounds at his shop until he decided what to do with them.

That evening, they stayed at one of the pleasant hotels in Cairns and had a great seafood dinner with Tom. He too was thinking that it was time for him to do a Master's degree but was holding out for an offer from one the universities he had applied to in California. The next day they flew from Cairns to Brisbane and then to Sydney. He arrived in Sydney in the late afternoon. He took the taxi home. When he arrived, Jerrie had a medium-sized Christmas tree up and ready for trimming. The holidays were just around the corner.

In the office, he had just finished writing up the report on the Daly River Basin reconnaissance and was about to start on the Coral Sea Survey report for Robert to send to New York. He also had to get started on the annual reports on the Queensland and Northern Territory drilling program results for the year.

The holiday season came and went and was one of the best ever. David was talking more and playing with him was great fun. Robert and Dottie had another of their holiday parties, but they hadn't yet arranged for someone to sit with David while they were just down the street and around the corner at Robert and Dottie's house. Jerrie said she had an idea and disappeared out the door. She returned a few minutes later and said that they have a new sitter for the #1 son, the lady across the cul-de-sac, and that she seemed to be sane and reliable.

The next evening, they were off to the party and the drive this time was short, as opposed to driving across the city from Beecroft. By the time they arrived, the party was well under way. Robert and Dottie greeted them with a handshake and a hug, respectively. Dottie took Jerrie off to meet someone, and Robert and he went to the bar to get something to drink. He wanted to talk about something, so they went out on the veranda, the one with a fantastic view of downtown Sydney.

Robert said, "I've been meaning to talk to you about your Coral Sea trip. I heard that you had a pretty rough time for a while there."

He said, "I don't know what to say, except that it's just a gene I have. The same thing used to happen when I was a young kid riding in the back seat of the family car during trips. But I must say that the Captain knew what to do, so I never had any real concerns. By the way, Tom did an excellent job taking lead for site selections for a day or so. It's too bad we didn't get any indications for phosphate accumulations."

Robert said, "I'm glad things worked out. Concerning the project's findings, that's the way it goes. It was a project one of the Conoco experts in New Yorks wanted us to look into, so it's OK, no one was on the hook."

He then said, "Looks like we are going into high gear to find a farm-out candidate. Jimmy Royds has had preliminary meetings in New York with two or three companies who have demonstrated a possible interest in buying the rights to the Queensland and Northern Territory phosphate tenements (leases). They want to inspect the properties, so I would like to have you and Rossi accommodate them in the field and show them around. I'll provide a show-and-tell presentation here in the office and then I'll send them your way. Could you help with the overheads? What do you think?"

He said, "Sounds interesting. Do you have dates for the first visit yet?"

Robert said, "It's up to us on the dates."

He said, "Here is an idea. Why don't we arrange for the first group to arrive two days after I finish the Townsville lectures? I could go to Mt. Isa after I finish in Townsville. Then we could save on trips."

Robert said, "I was thinking that too. Great."

About then Jerrie and Dottie came out on the veranda and joined them, saying, all you guys do is talk business, and why don't you join the party. They did only because they were finished with the business.

There was general talk about how Jeremy's company turned out in court with his boss going to jail for five years and barred for life from doing business in mining and stock market-related activities. But Jeremy C. was still nowhere to be seen in Australia, although there were rumors. It was great fun talking with Robert's group of geological friends and associates and their wives from the office and around town.

Jerrie made the signal that she was getting tired, so they began to find their way through the partygoers, now very happy, on the way to the front door. Robert and Dottie wished them happy holidays and they headed for home just down the street and around the corner. Mrs. Canter, the new sitter, was sitting in the living room reading when they arrived. She said David was sleeping well and that she had checked on him a couple of times.

After Mrs. Canter departed, they went back to David's room and watched him sleep for a while. Jerrie uncovered his legs and had a look. They were fine now. No sign of scarring from the Blue Bottle tentacles.

New Year's Eve was special this year because there was a Conoco corporate party at a downtown hotel to celebrate a good year. Jerrie was keen on going to a fancy dress affair and went with Dottie to buy dresses. The president, all the vice presidents, and even accountants hung around them, enthralled with



Jerrie. He thought the party was ho-hum, but Jerrie enjoyed it only drinking gingerale. Dottie was delightful (in the white dress). When the time came, everyone went up to the roof to watch the fireworks. They were outstanding fireworks put on next to the Harbor Bridge. Jerrie was in good shape and her baby bump was growing larger, but not obvious yet in the dress she bought for the occasion. There was a corporate photographer, hence three photos.

Robert on the right. Chief Accountant on the left. Dottie on the left in photo below.



As the new year began, he was busy finishing reports and preparing for three class days of hour-long lectures on hydrogeology. He had brought a lot of such material with him from Ohio, and he was making overheads with the company Xerox machine.

The time came to head off for Townsville. When he eventually arrived, Townsville was a pleasant surprise. It reminded him how most Australian towns looked 25 years ago with neat, well-painted old-style buildings with two stories. Same with the University. The Professor (whose name he couldn't remember) and he had a long talk in his office about how he had met Dr. Lehr at the University of Arizona when he was a graduate student and how they had remained in contact.



The lectures went very well. Almost all the students were present in their large lecture room, including undergraduates, graduate students, and what looked like all the geology professors. Many took copious notes and later asked for copies of his overheads, obviously so one or more of them could use the material to prepare their own lectures on the subject in the years ahead. That, at first, didn't sit too well with him, but he later decided it was OK, but added a small-font caveat to the page corners of all the overhead positives he sent

to them, "Material provided by M.D. Campbell and J.H. Lehr, 1968."

The Professor, who turned out to be the Dean, said he was pleased with the lectures and asked if he would like to do the same, with updates, every two years or so. He said he would think about it, and he departed with a nice honorarium for his efforts to cover the airline and lodging expenses, which he signed over to Conoco since they had paid for the trip.

He took a flight that last evening on a very small plane carrying maybe 10 passengers to Mt. Isa. The plane was flying in bumpy weather, and he was beginning to get woozy when he spotted the single, high smokestack of [Mt. Isa Mines Smelter](#) in the distance. They landed in time. Rossi met him at the baggage area outside the little terminal with a big smile. They went to the Barkly Hotel and settled in. Brian showed up at the bar and joined them. He was heading to Sydney to be with Robert for the Conoco presentations.

The next day, Rossi and he had to arrange for the charter plane and to plan what subjects they were going to cover and where they should land. They had been exploring large areas of the perfectly flat and barren lands so finding a landing field would not be a problem, especially in the Sherrin Creek area and in the Northern Territory. He had brought some of the maps he had prepared for Robert's presentation in Sydney to use in their presentations in the field.

The next morning, they met the flight from Brisbane. Two geologists from the Cleveland Cliffs group in Ohio were the first visitors they showed around the Conoco properties, e.g., hole sites, that site where the phosphate was present in outcrop, road access, etc. They boarded the small plane. Rossi sat with the pilot in the right seat, the two visitors in the middle two seats, and he in the back luggage area, the latter for a purpose. In the back position, he could lean over them and point out objects that Rossi and he would be discussing. There were other reasons for that position.

In the event of a bumpy ride, which was to be expected, he brought on board the plane with him a black garbage bag containing the following equipment: 1) a number of barf bags with sealable tops, 2) a moist towel, 3) a bottle of Coke with screw-on top, 4) an aerosol can of air freshener, and 5) a small tin of breath mints. The visitors' forward position would allow him to not be easily seen behind them. The challenge was to be as quiet as possible in the event barfing became necessary.

Rossi would place his arm on the seat and turn toward them so he could have eye contact when he was speaking to the visitors. When he no longer could see his head behind the visitors that was his signal to speak more loudly and dominate the discussion until he saw his head again behind the visitors. If anyone had concerns, he would say that he had allergies. When an episode was over, he used the towel to wipe his face, usually from sweating, and used Coke to rinse his mouth, followed by a couple mints. Having wrapped up the bags, he would give a couple of light puffs from the air freshener, which would always elicit a comment on what that smell was, to which he would reply, 'Oh, there are flies back here, it's just some fly spray' which always seemed to satisfy the questioner. Upon reaching the destination, either in the field or back at the Mt. Isa airport, he would leave the big bag fully tied up in the plane. And then, after the visitors were gone, he would retrieve the bag and prepare the contents for the next group of visitors.

Having the signals all set that first day, the flight was smooth with no events. They landed next to the field camp to confirm what the visitors had heard from Robert and Brian the previous day in terms of more detailed geological context than before. Having oriented the visitors, the first trip was to visit the outcrop of phosphatic rocks he had discovered a few years before. The visitors filled two small bags with samples. Rossi and he then drove to a few drill sites. He made a point of discussing the subsurface pressure differentials as measured by finger at the vents of the hole caps. They seemed to be especially interested in that phenomenon too.

They drove cross country along the eastern boundary with BHS and stopped to see if any trucks were present at their field camp. There were none, so everyone got out of the Landrover and walked to the shaft site. He described the lithology of the phosphate zone by saying, "Based on reliable information, we understand that" He then described the zone thickness, the grade variation of sub-zones, the geochemistry (REEs, etc.), and the fact that the zone at this location contained volcanic silica, which presented potential challenges to processing. They then returned to the field camp and had a cup of tea. He had learned earlier a few years before with Rossi that hot tea in the middle of day in hot weather oddly enough had a cooling effect on the body. The visitors learned that tidbit too that day.

It was time to see sites from the air, so off they went to view the D-Tree, Sherrin Creek, and the Northern Territory site of the recent discovery located east of the Alroy Homestead, just north of the Buchanan Dam (a watering site supplied by a windmill and drilled water well). As they were airborne, he noticed the flight was getting bumpy and so he readied his equipment. They flew in circles over Sherrin Creek. Some of the hole sites were visible as whitish circular areas, likely from the carbonate/ phosphate dust produced during drilling.

There was no need nor interest in landing there, so they turned toward the northwest and the Northern Territory. Once they encountered the Barkly Highway, which was a black line in otherwise brown terrain, they turned west-northwest to the subject properties. By this time, however, it was a bumpy flight and he had gone inside the big black bag and was barfing into the smaller barf bag as quietly as possible. He could hear Rossi talking rather loudly and telling some of his stories, like the one about his recent

encounter with a big brown snake, and how poisonous they are, and what the machete they all carry are actually for. The visitors were enthralled. He felt finished for the time-being as they were beginning to land at the Alroy #2 site.

They climbed out through the passenger door under the wing. He slipped out through the smaller baggage door in the rear of the plane. He joined the group and one of the visitors turned to him and said, "You are looking pale. Are you OK?" He replied, "I'm OK, just high-altitude allergies." That silenced the visitor, but that was also a sign that they had no clue what was actually going on just in back of them.

Once assembled at the hole, he gave a summary of the discovery, the zone thickness, the vuggy nature of the zone indicated by the loss of air circulation, and the grades of the individual foot samples. He emphasized that this was just one hole and could represent a small zone of phosphate accumulation, or it might represent a very large area of phosphate accumulation. They stopped drilling, he said, because Conoco New York wanted a farm-in partner to shoulder the risk and cost of the approaching very large drilling program that exploring this area would require.

He told them, "If you would like to confirm that you are standing on Cambrian sediments, just have a look around and you will soon find Olenellids and other trilobites of Cambrian age." Within five minutes, one of the fellows said, "Here is one." All told, they soon had collected maybe 10 trilobites' fragments to take home. They were happy.

They took off over the very flat Barkly Tablelands and flew back to Mt. Isa during which he spent the hour in the big bag again and the guys in the middle were apparently none the wiser. Rossi said they slept for most of the trip back. After they landed, they escorted them to the Barkly Hotel to get cleaned up for dinner and some entertainment, although Little Patty was not on the marquee.

The four of them had great discussions about the phosphate market, Moroccan phosphate, Florida phosphate and other geological items of the day. They expressed an interest in seeing the Mt. Isa Mines, but their schedules didn't have any leeway. They departed the next morning telling Rossi and him that the visit was one of their best in years. Later, Rossi and he agreed that their guests' comments were likely BS but agreed to the extent that it did seem to go well.

Over the next few days, they waited for the next group to appear, which in fact they did. Two more groups arrived in succession and received the same tour. When departing, they too went out of their way to thank them for a great tour. More BS, Rossi and he presumed.

With the last group departing that morning, Rossi and he went back to the Barkly Hotel and donned their swimming suits and took a dip in the pool and then took the sun, just this side of burning for the rest of day, with a nap thrown in. He made sure to retrieve the big black bag and prepared the contents for the next flight in the small plane.

The next day they spent storing the field camp contents, tents, bunks, kitchen equipment, etc. Jack said he would finish the clean up and take all of the equipment in the Barkly room also to storage, including storing the Conoco logging truck. Likely to be the last time, they shook hands and patted one another on the shoulder. Jack said, "See you around, Yank!" He never did.

That evening they had their last Barkly Hilton dinner. All three of them knew that one or all of them may never return. And this was the case. A week later after he had returned to Sydney, he learned from Robert that one of the companies had decided to acquire the project 100%, not just as a farm-in, but the deal

wasn't finalized yet. The subject company was partly owned by a large Japanese firm. Jimmy Royds told Robert that the senior executives wanted to discuss the geological aspects of the project with Robert and he as soon as possible in Tokyo. A couple days later, they were on their way to Tokyo. After a long flight and crazy landing and take-off in Hong Kong, they boarded the next flight the next morning for Tokyo. A car was waiting for them at the airport by a fellow with sign saying "Mr. Arrington," which they noticed while retrieving their luggage. They were taken to a very nice and very tall hotel. There was a note for Robert on the desk indicating someone would come for them at 9:00 AM the next morning.

They both took naps until early evening and then went down to the dining room for a great dinner. After a while, a Japanese lady appeared at each of their doors and asked if they wanted a massage. Robert did. He didn't.

The next morning, they were ushered to the top floor of the building they were already in, occupied by the executive suites of the company. They were taken to the entrance of a long meeting room with a conference table with 40 to 50 chairs, at least. The lady sitting at the little table at the door asked for their IDs, passports, and driver's licenses; he thought that was rather odd. Robert told him later they wanted to make sure they were who they claimed to be.

Three very handsome, dignified-looking Japanese men, followed by three Japanese women dressed in business attire, entered the room, and shook hands firmly, and bowed to each of them. They were then invited to sit at the end of the conference table. The Japanese gentlemen sat on the side opposite. The three ladies sat between Robert and him, smiling.

One of the men began to speak, and one of the ladies began to translate softly, but distinctly. At first it was difficult to hear Japanese and listen to English, albeit the translations were clear and without noticeable accent.

The gentlemen asked a question that went right to the most important feature of the Queensland phosphate, "How widespread is the volcanic silica in the Queensland phosphate?"

Robert, being the senior person, said that it must extend as far south as the Broken Hill South discovery because they understand that BHS is not moving forward yet in planning to produce phosphoric acid for fertilizer reformulation. Robert said that they presume that the Duchess phosphate also contains volcanic ash.

The gentleman asked the same question about the Northern Territory discovery, "Does it contain volcanic ash?" Robert turned to him and said quietly, "Why don't you have a go at that question."

He said, "We haven't had the time to have the lab characterize the samples yet, but I have looked at the samples under our microscope. The ash must be very fine grained. I did not see any large fragments of ash.

Second, we do know that there was Cambrian volcanism to the south of the subject areas and there is a chance that the Northern Territory phosphate was out of the range of ash deposition.

Third, I figure that even containing volcanic ash, as long as the phosphate is present in high concentrations, the issue is more related to metallurgical processing challenges rather than just the presence of volcanic ash.

And lastly, even with the volcanic silica, the phosphate could be produced, if sufficient reserves are present, for direct application use, since the phosphate is reasonably soluble under natural precipitation.”

The gentleman said he appreciated his responses and then asked another question,

“If a slurry pipeline is considered for moving the raw phosphate to a coastal port, in your opinions, is there sufficient groundwater available along the way to the Gulf of Carpentaria?”

Robert nodded to him to reply. He began by saying that they know the water table is deeper than 200 feet in the areas they drilled, but the large area of carbonate rocks in the area should provide adequate groundwater at depth. However, the groundwater quality will have to be examined regarding compatibility with the phosphate material being transported. Also, he would expect that the closer to the Gulf, the higher the likelihood of groundwater of different, and perhaps better, water quality in a sandy aquifer than from a carbonate aquifer inland, assuming such exist.

Another of the gentlemen asked whether they believed that since they made the first discovery of a significant phosphate zone in the Northern Territory, whether there are likely similar rocks of Cambrian age in the surrounding parts of Northern Territory.

He said, “I was hoping to find out by recommending further drilling in the Northern Territory, but Conoco management in New York wanted to pause the drilling and look for a partner to share the risks and the costs to pursue this project. The answer to your question is, yes, we would recommend further drilling and evaluate the geology in the whole eastern section of Northern Territory where Cambrian age rocks are likely to exist.”

The first gentleman rose and thanked them for their directness and clarity, and that they appreciated their views. The ladies rose and conducted them to the end of the table where a bottle with small glasses was sitting. The gentlemen joined them, The small glasses were filled by the ladies with saké and were offered to each of them. They all toasted one at a time with full friendly eye contact. After placing the little glasses back on the tray, they all shook hands and bowed. The ladies showed them the way back to the elevator. While waiting for the elevator, a younger man came out of the room they just left and said to Robert,

“Just to let you know now, they will be recommending acquisition and they wish them a safe journey back to Sydney.”

They shook hands and bowed. The elevator opened and down they went to their rooms.

He followed Robert into his room, and they sat down. Robert said, “What a meeting. Excellent work.” Then he said that Jimmy was going to be pleased and suggested that before they see about flights back to Sydney, let’s have lunch. They did.

They arrived about midnight in Sydney, and it was about 1:00 AM by the time he arrived home. He walked in the door after climbing the 32 steps. Jerrie was sitting in the kitchen, turned around, and said, “I am very glad you are home. I think I just started into labor.”

He said, “Well then , let’s get this show on the road. What do you want to pack?”

She rose slowly holding her side and they walked into the bedroom. She sat down on the bed and reached for the phone and called Mrs. Canter across the street to look after David.

They finished packing, walked into the kitchen as Mrs. Canter tapped lightly on the front door. He opened the door, and she came in. Jerrie and Mrs. Canter were talking about something when he heard a commotion. He hurried to the kitchen. Jerrie's water had just broken, and the floor was awash.

Mrs. Canter helped Jerrie get cleaned up and packed. They headed down the steps carefully and into the car for the 5-minute drive to the Manly Hospital. As he was helping her out of the car, an orderly appeared and sat her down carefully in a wheelchair and rolled her away. He followed as far as the desk and officially registered their presence. Jerrie had already pre-registered a few weeks before, so the health-insurance paperwork had been approved.

Now it was up to Jerrie to be a mother again. The last time, David arrived quickly, but this one required a slow process inch-by-inch arrival. Ten hours later, it was over, and a daughter decided to appear. When the doctor came to announce the delivery in the waiting room, he jokingly said to him that the baby was perfect and had even over-cooked a little because her head was like a bowling ball, which made the delivery a long one, but that she should be quite intelligent with that extra growth.

He said Jerrie was beat up a bit but was resting, but that he could see them in about 30 minutes. By the time he saw them, they both shined with the look of good health. The baby was a girl. They had decided earlier on the name Julianne Elizabeth. He supported the first name because one of his special high-school girlfriends was named Julianne. They both liked the name Elizabeth for no particular reason. The two names together sounded like a solid person. He called Maxine and Clarence and they were thrilled. He knew his mother had tears of joy in her eyes. They couldn't wait to see her. She wanted to know when they were planning to come home. He told her maybe in a year or so. She was disappointed but understood. They were both healthy and she was still working at the DCSC supporting the war. When he told her that they heard very little of the Vietnam war in the news there, she was shocked and dismayed, saying in the States there was growing widespread unrest among the younger people, especially students. He remembered her saying, "You must be far away." He agreed and they said goodbye.

Over the next few days, Jerrie began to recover. Mrs. Canter brought David to the hospital to meet his new little sister. He touched her face to make sure Julianne wasn't a doll baby. Mrs. Canter became an important part of the family as Jerrie began to take over motherhood. David and Mrs. Canter got along very well. He seemed to like her, and she was very gentle with him.



As things began to return to normal, Mrs. Canter gradually returned to her previous life of looking after her older husband and his father who lived with them. They tried to pay for her extra time, beyond babysitting functions, but she wouldn't have it, saying that she loved being useful to her friends. After a few days off with Jerrie, he returned to enjoying the ferry rides to his office. Robert and Dottie had sent flowers to Jerrie's room at the hospital as did two or three others from the office. They began to call asking for permission to visit her and the baby, which became a ritual in the afternoons for Jerrie for a few weeks, which she seemed to enjoy, he remembered.

In the office, Robert announced that the phosphate project acquisition project had been consummated and that they would be involved as advisors from time to time if the need arose. Robert indicated that the drilling of the Conoco well was to begin in Western Australia the next month and Gene Pendrey was coming from Corporate in New York to oversee the anticipated sampling of the potash interval while drilling that well. Robert asked him if he would like to assist Gene. He, of course, accepted the assignment

and began to gather all the available reports and other data on the geology of the area and of the site that Gene might not have yet.

As the weeks turned into months, Gene arrived. Robert had told him that he was a very enthusiastic fellow so they should get along well, which they did. Gene was about 20 years older than he and a graduate of Princeton with two degrees in geological engineering. He was very knowledgeable and well read on not only geological matters but on many other subjects as well. They traveled to Perth and spent a few days in the government geological and university libraries in Perth looking for all the subsurface information they could find on the Carnarvon Basin.

The prospective oil and gas interval turned out to be a bust but the early basin intervals were about to be encountered so Gene and he flew to the site and sat with the well-site geologist as the samples were collected out of the drilling fluid via the shale shaker that screened out the samples. Gene and he developed a production line in the shack looking at the cuttings with the microscopes that they brought with them in hopes of seeing potash-rich or evaporite sediments that had survived the trip up the hole. They were eventually rewarded with a rather thick interval. Gene called for side-cores over the next 20 feet or so. The core recovery was about 60%, which Gene thought was better than none. Those cores provided enough samples for subsequent investigations on the geochemistry and mineralogical content of the potash-rich sediment. Gene was thinking that this well could provide evidence that in-situ mining of potash might be feasible.

At about the 7,000 feet depth, the hole encountered deep marine sediments which meant the shallow evaporite sedimentary environment had ended at that location, so the drilling ceased. They tripped out of the hole which was then geophysically logged using a range of new down-hole tools Conoco had brought in from the States. Some were designed to characterize potash and other related potassium and magnesium-rich rocks. With the new logs and samples in hand, Gene and he flew back to Perth. That evening before the sun set, Gene and he took a walk on the beach. It was remarkable how similar the light and surroundings presented like Southern California, minus any sea cliffs around Perth anyway. They had a pleasant meal at the hotel and Gene spent a lot of time encouraging him to get back to graduate school as soon as he could. Conoco Corporate thinks highly of you and would even help you financially if you wanted to go to graduate school. Then, Gene said, "Don't tell anyone what I have just said. Just look for any opening that I suspect will come your way soon."

The next day they flew to Sydney. Gene and he worked on a report for New York, which included Gene's writings but with his edits and comments. A week later, they finished and Robert, Gene and he had a wrap up meeting, so Robert knew the status of Gene's potash project and his next steps. Gene was taking the samples back to the States and having a special lab (Colorado School of Mines, it turned out) take a look at the material. He said Robert and he would receive the reports from the lab to keep them in the loop. Gene left for New York that afternoon by way of Johannesburg, South Africa to look into another possible Conoco project before heading home to New York.



One day he had driven the VW into the office in Sydney because that morning there were heavy storms over the harbor, and he didn't like the idea of bobbing around in the water and likely getting woozy by taking the ferry, so he decided to drive instead. When he returned home after work, he drove up and into

the garage in first gear without a problem, although he hadn't done that very often. He got out and went up the steps and was about to press the garage door button but saw David running towards him. He swooped him up with a big hug, as usual, and David was all smiles. He then just happened to look down and saw the rear of their VW slowly rolling back out of the garage and then quickly gathering speed down the incline. He said, "Oh no !!!" and saw Mrs. Canter in her kitchen window wide-eyed, watching the car coming her way as it hit the *cul de sac* pavement and swerved right towards her house. There was a small stack of bricks in her yard. The VW smashed into the bricks and came to a stop just a few feet from Mrs. Canter's house just below her window. The noise had brought out the nearby neighbors by the time he reached the car carrying David, as he rushed to see the damage.

At some point, they were standing there looking at the car and its position when he looked at David. He was fascinated, it appeared. He looked at the car, the house, and looked back at the garage and then at him, with a look that could have been interpreted as saying, "What the hell, Dad?" He considered that as a potential private joke between them.

Jerrie came down carrying the baby, Julianne, after observing the incident from the deck above the garage. She explained, in front of the assembled crowd, "Guess you left the car in neutral and didn't pull on the hand brake" to which his only answer was "Guess so. Good that no one was hurt, and nothing was damaged much." Everyone mumbled in agreement. Then everyone surrounded Jerrie to admire the new baby. He apologized for being so careless and for frightening Mrs. Canter, as the car came her way. She said that they were all fortunate that day.

As the weeks went by becoming months, both David and Julianne were growing quickly. Pretty soon Julianne was walking and beginning to talk. She and David played well together. As the weather warmed up, they spent a lot of time at the beach, but not in the water. They met many people who lived in the area who wanted to say hi to their children, suggesting that their children should play together. One day on the beach, a young couple, Patty and Jorel, came by and sat down and talked and played with the children. Jerrie invited them to come for supper and they agreed. After that, Patty and Jorel would come by the house often. She lived with her parents, while he lived with his. After about a month, somehow and for some reason he couldn't remember, Patty and Jorel moved into their spare bedroom. Patty was going back to university in a few months and her folks were moving back to Ireland to look after their elderly parents. Jorel was a quiet young fellow, and it was obvious that he and Patty were deeply in love, but they were in no position to formalize the relationship. This reminded him of his earlier days.



They both helped to look after the children and were good at it. David and Julianne liked to play with both of them, which meant they now had built-in sitters, should Jerrie and he wanted to go into town to see a show, spend time with Robert and Dottie at their house, or respond to invitations to parties that surfaced from time to time, especially for the approaching holidays.

He was occupied with report preparations and with his new role as the Chairman of the NWWA's International Committee appointed by Dr. Jay Lehr, his former professor at Ohio State, who had been appointed the new Executive Director of the NWWA in Columbus. Jay had asked him to spread the word about the new scientific journal, *Ground Water*, and about the value of hydrogeology to many countries around the world. Robert supported his role as long as the letters he wrote bore the Conoco letterhead

to spread the NWWA brand recognition. It was also at about this time that he received the wooden boxes that Jack had promised to send him from Mt. Isa. They contained hundreds of good specimens of the lower Cambrian trilobites of olenellids and lower-middle Cambrian *Xstridura* sp. that was a key fossil of the main phosphate zone in Queensland. He planned to send the lot to Dr. Sweet, his former paleontology professor at Ohio State. He asked Robert and he said that would be fine.



A few years later after he had returned to the States and had the opportunity, he dropped in on Dr. Sweet to see how he liked the trilobites. Although he was focused on conodonts, he was gratified by what he did with the samples. After surprising him at his old office in the basement of Orton Hall, Dr. Sweet said that he was wondering how he was doing in Australia (One of his graduate students told him where he had gone). After he summarized the past few years or so, he got up and took him into his paleo lab. Student specimen drawers surrounded the classroom. He went to one and pulled out a drawer, which had numerous trays containing individual fossils, and said, "What do you think? Is that cool or what?" He looked around the tray and was immediately drawn to the one containing a card,

Xstridura templetonensis

Donated by M. D. Campbell, Conoco, Sydney, 1968

He said that is cool. Dr. Sweet then said, "You should know that you are rather famous around here, not for just the trilobites, but for never giving up on your studies as you progressed through the Geology Department. That comment choked him up a bit and Dr. Sweet said, "Let's go get a bite to eat at the faculty club next door." He had heard about the place but had never been there before. As they were seated by a waiter at a table with tablecloth and silverware and very pleasant surroundings, Dr. Sweet began to tell him about the happenings in the department and that Dr. LaRocque had died recently. Dr. Pettyjohn had moved on to Oklahoma State. A couple others of his professors came by to say hello and how are you. Dr. Sweet was very complimentary and asked if he was considering graduate school. He said that he was. Dr. Sweet said that he would be pleased to be a reference for his application to whatever university he chose.



The holidays arrived and they attended a few parties given by friends of Robert and Dottie as well as their own party. It was at the latter party, as in previous years, that Robert would divulge long-range plans to him. This year's update from Robert was especially interesting.

Robert announced to him that Jimmy Royds has asked Robert to come to corporate in New York and he would be leaving in May. He said that he was pleased that Robert was moving up. Robert then said that he was not the only one moving up; he was moving up as well. Royds said that as soon as he finishes his reporting responsibilities in Sydney, he has some ideas about your future.

Robert said, "His exact words to me were that he wanted he and his family to spend a week in Honolulu at a reasonable hotel to relax as thanks from him for a job well done while in Sydney. He then is to report

to Conoco's mining division in Denver for reassignment. He will notify those down the line on the date of his arrival."

Robert said, "Isn't that something? You have an Executive Vice President of all of Conoco looking after you. And I'll tell you why. Jimmy told me in confidence that Conoco received \$3 million for the phosphate buyout, and we only spent under \$1 million on it, including salaries and expenses. That has to be a record of some kind in the company."

He said, "We do make a good team, don't we?" He patted him on the back, and they rejoined what they both knew was their last holiday party in Australia. He took Jerrie aside and whispered the good, albeit secret, news to her. He had never seen her so happy.

As the year 1968 turned to 1969, Ohio State beat USC so that meant the coming year should be great, he chuckled to himself as he was heading to the office on the big green ferry later that week. When he arrived at his office, the receptionist caught his attention and indicated he had a visitor. It was a very tall fellow in U. S. Army uniform with all sorts of metals and ribbons on the lapels. He was a 2nd cousin to my Dad's brother who had heard from the family grapevine at home that he was in Sydney and worked for Conoco. This fellow had taken R&R in Sydney and thought he would drop in and say hello. He spent about an hour with him, and he talked about the war, while he talked about how little they heard of it there. He wished him the best and off he went to continue his R & R.

He told Jerrie about the meeting that night, and she said that she was glad he didn't invite him to stay with them. He said that it didn't cross his mind, but it did, of course. Speaking of invitations, the first was one of an uninvitation in that Patty and Joel were leaving and moving into her parent's house now that they had departed for Ireland and left the house to her for safekeeping.

The other was a real invitation, a consulting job. Rossi asked if he could get away for about week to conduct a reconnaissance of an area a few hundred miles north of Ceduna, on the west coast of Eyre Peninsula, South Australia. He asked Robert and he had no objection. It would be his first paid consulting job for one of Rossi's other clients.

He flew to Adelaide the next week. Rossi met him at the airport and took him to his office, which was very pleasant on the top floor of one of Adelaide's taller buildings. Rossi briefed him on what he knew of the area. He had made an arrangement with a friend of his who owned and operated a men's store in Ceduna. His son would accompany him into the field as his field assistant. Rossi provided a relatively new Landrover and camping gear and a new Geometrics Model 101a scintillometer and folding cash to get along. It was about a 5-hour drive, the first half of which was beautiful country of wine country, then deteriorating into a barren tableland of orange and brown rocks without apparent soil. A large mountain range (but no snow) was off to the north as he was going west.

He pulled into Ceduna about dark and checked into the only hotel in town, as planned. He drove by the men's shop, and it was closed, or so said the sign in the window. He decided that there was no rush, and he would make contact the next morning. He had a good night's sleep.

He began to move about 9:00 AM, thinking that would be when the men's shop would likely open. He pulled up in front and went inside the shop. Benny Johnson, Rossi's friend, met him in the shop, a yellow measuring tape over his shoulder. He introduced himself and they shook hands saying that Rossi had said that he would arrive soon, and here you were. He took him into the back office and sat down. He

automatically poured a cup of tea and asked, milk or sugar? He said, "Please." They talked mostly about Rossi and his family who migrated from Italy during the WW2. Benny and his family left Germany in 1935, "as soon as the Fascists started to make their intentions clear," he said.

Benny, Jr., called Junior, arrived after a while. They obviously were enjoying their conversation until Junior arrived, at which time it was back to business. Junior knew where they were headed, so off they went. He let him drive because he knew the turns. They drove west on the main highway that ended in Perth some 1,200 miles away. But after a short while, they turned north on a dirt road, and drove for a while. He looked at the speedometer and they were going about 60 mph. Off in the distance, he saw dark-skinned people walking in a file next to the road. Junior said, "Watch this!" as he approached the first person, who was a man. The side mirrors on Landrovers were vertical and stuck out from the side of the truck. All of sudden, wham! Junior clipped the guy with the mirror and sent him spinning and then falling down. Junior was amuck with laughter, thinking that was really funny. After he collected his thoughts of what had just happened, he yelled at Junior to stop the truck. When he did.

He asked Junior, "What in the hell did you just do?"

Junior said, "We do that all the time to these Abo's as they are on their walk-about's."

He said, "What? You can't do that. These are people."

Junior said, "These are just Abos."

He said, "Turn around. We are going to take a look at that fellow."

Junior turned the truck around and drove back to where the fellow was still sitting down holding his arm, with tears running down his cheeks, and ladies gathered around obviously trying to give him solace. He approached the fellow and got down on his knee and lifted up his shirt. His entire shoulder was red and black and blue. Looked like broken bones in there to him.

He said to Junior, "We are taking him to the hospital in Ceduna."

Junior said, "You can't do that."

He said to Junior, "We are taking him to Ceduna."

He asked if any of women spoke English. A young one raised her hand. He told her that he wanted her to go with them as a witness. She understood. He then helped the injured fellow into the truck and then instructed Junior to get in the back seat as well. He drove and the woman sat up front with him. When they arrived at the hospital, he walked the injured fellow to the first person who looked like a doctor. One appeared and he explained that Junior had struck this injured fellow and would pay for the hospital expenses. The doctor walked the fellow into a bay and had him sit on the edge of the bed and began to feel his upper left shoulder. After a while, he said, "The shoulder has been shattered and there are many bone fragments, we'll have to operate soon." He told him to do what needs to be done. He asked the woman if she would stay with him and she said she would; he was her father.

On the way out of the little hospital, he stopped at the desk and wrote out the name Benny Johnson at the men's shop and asked the receptionist to call Benny and tell him what happened. Tell him they are resuming the trip and will return in a few days so that he can deal with Junior as he sees fit.

They returned to the dirt road and passed the people who remained on their walk-about still moving up the road to somewhere. They encountered the trans-Australian railroad headed to Perth and continued north. The further north, the less well-traveled the road, eventually turning into a barely recognizable track. There was no conversation during the rest of the day, except for the instructions given by him to Junior.

It was getting dark, so they pulled up at a metal tank, otherwise known as a dam (aka a water well with windmill pumping water into a tank, with the overflow into a pond, some large, some small). The complex represents a watering hole for wild birds, dingoes, kangaroos, monitor lizards, snakes, and even small, light-yellow scorpions. They slept in the truck. He was on the back seat and Junior in the luggage area behind, on blankets.



The next morning, he told Junior to build a fire and boil some water for tea. They arrived at the designated area and traversed in some detail a large dry lake, Lake Tallacootra. On the south rim, he recorded increased radioactivity, so he had Junior begin to dig trenches in the dry lakebed while laying out samples for him to characterize and record in his field book. In one area in particular, the scintilometer went off scale on the reconnaissance range and was nearly off scale on the next range higher.

In the next similar dry lake, called Lake Pidinga, they dug a deeper trench and encountered the water table at about 3 feet below the surface. He figured the sediments were so fine grained that they were probably standing on the capillary fringe zone, but the hot temperatures during the day were evaporating and wicking water up and into vapor as it emerged from the near-surface sands. He took samples of the standing water in the trenches, but those sample bottles were damaged in transit to the lab in Adelaide and were lost.

The augering conducted revealed the presence of very high radioactivity readings, in places greater than 50,000 counts per minute, as well as carbonaceous zones including lignite in fine- to medium-quartz sand. The lake beds were obviously groundwater discharge zones. In one of the highly radioactive zones a small light green mineral fragment was discovered, which represented an unidentified radium mineral that would require additional study. One evening, as they sat around a fire to make tea, he happened to notice a small scorpion approaching Junior's shoe. He pointed it out to Junior (shown in photo), and he leaped up and off to the side into the dirt. He got up and dusted himself off, picked a large branch, and went looking for the little scorpion, but without success.

Areas nearby designated as Red Lake and Seven Mile Swamps were also found to contain anomalous radioactivity and similar Tertiary sediments. Recommendations were made in his field book for further investigations and augering.³⁰

³⁰ Report to MinOil Services, <http://www.i2mconsultants.com/downloads/mdcampbell/SouthAustraliaUEX.htm>

After the 4th day of reconnaissance sampling, and recording radioactivity with related results, he considered the preliminary field work accomplished. The next morning, he turned the truck toward the south and headed back down the track to Ceduna. There were no conversations. He dropped Junior off in front of his Dad's shop without comment and went to the hospital to enquire about the injured fellow. When he asked about him at the front desk, the doctor he spoke to a few days previously came out to meet him. He asked him about his conditions. The doctor said only a few bones had been broken. The biggest problem was the shoulder joint, which was displaced out of the socket, and they had to reconstruct the socket. He thought it would heal nicely.

He asked to see the fellow and was taken to his room. He hadn't noticed that he was a tall fellow. He held his good arm, squeezed lightly, and smiled and then patted his arm. He started to leave but his daughter caught up with him and wanted a hug and she said, "Thank you."

He left Ceduna for Adelaide in the mid-afternoon and arrived well after dark. He checked into a hotel downtown and called Rossi the next morning to advise that he had completed the fieldwork. He met Rossi for breakfast and briefed him on the findings and then on the incident. Rossi had heard from Benny earlier and said, after hearing what he had to say, "I would have done exactly what you did. I had no idea Junior had become such a jerk."

They then talked about the next phase and Rossi asked him to write up his results and make recommendations. And then he said that, based on what you have found, it sounds like there are good prospects out there. He nodded.

He flew back to Sydney that afternoon and it was too late to go into the office. When the taxi arrived in front of his house, he noticed Jerrie, David, and Julianne sitting on the steps talking with Mrs. Canter, who was looking distraught. He was told later that Mrs. Canter's husband's father had died the night before and she had just returned from the little funeral they held for him, but it was only the three of them since his friends had all died earlier.

Over the next weeks, Jerrie was preparing to leave for the States. Robert and Dottie had left for New York, but they came by and visited for a while the day before and played with David and Julianne. Jerrie was sad to see them leave, and maybe never see them again.

When he went into the office, he quickly noticed that Brian had moved into Robert's vacated office. He had brought all sorts of geological samples and maps from his office in Adelaide, which made his office look very inviting. Brian had arranged for Megan, one of the pool secretaries, to work for them. She was a very attractive young lady with long blonde hair and a beautiful smile.

Brian called me into his office and asked about his Ceduna field trip. Rossi had apparently filled him in. He was pleased about his findings and was looking forward to following up the with additional sampling and drilling. He said, "Feel free to finish the report for Rossi," which he did over the next few days.

One day, Brian came into his office and sat down, which he rarely did. He said, "Do you remember telling Rossi and him about the hole cap vents and how you thought the drilling dust was in part being captured and drawn into the formations? Well, it seems that the group who bought the Queensland and Northern Territory phosphate tenements decided to begin their drilling program to outline the deposits. But they decided to employ the new reverse circulation drilling rigs they imported so that all the dust could be captured by casing off the intervals as they drilled through the zones. Their chief geologist just called me

and said they received some interesting results. Seems that they twin drilled some of their holes with the new method and found that the P_2O_5 values were across the board increased by about 30% to 40% higher than the sample values obtained by standard drilling air drilling that they employed.

He said, "That's really interesting. That would increase their reserve calculations considerably." Brian said, "But listen to this They have also drilled some more on your Northern Territory area and the phosphate samples have shown far less volcanic ash than in the Queensland deposits, as you suggested might be the case to the Japanese when you and Robert were in Tokyo. They said that higher quality phosphate may be more widespread in the NT than in Queensland and closer to existing bulk transportation routes as you also suggested in Tokyo."

He said, "That great to hear."

Brian then said they needed to add the new data to their final reports to the governments of Queensland and Northern Territory as soon as possible. Brian and he figured that would require a few more weeks.

They had established a departure date for heading back to the States previously and had moved the family after vacating the Clontarf house into a hotel near his office in the IBM building downtown. When it became obvious that he wouldn't be able to leave as planned, they decided that Jerrie and the kids would fly on to Honolulu and he would follow as soon as possible. Jerrie arranged for a sitter through the hotel and they had a final meal downtown at The Summit, the best restaurant in Sydney and the only one that revolved. The views were fantastic.



That day came, and his family left in a taxi for the airport and Honolulu.

He still had to arrange to get the two trunks shipped back to the states, but the accounting people in the office knew how to manage that problem for him. They would ship the trunks to the Conoco office in Denver. That was how it was done.

The next day he came from his hotel to the office to find everyone clustered around a large television set. He hadn't heard that the Americans were about to land on the Moon today. He sat down next to Brian and Megan and watched. Out came the flag staking. It was the American flag. Someone in the group complained that he had understood that they were going to plant a United Nations flag. After it was done, someone also said "Well, the Americans did pay for it all, even for the big antenna complex in Australia, so it's understandable." After that, Earl Abbott, the Conoco VP, rose to announce that the office will hold another going away party for one of its own this afternoon beginning at 4:00 PM. They were all invited.

He had packed all his office books, reports, rock samples, and maps into one of the trunks and sealed it. He rolled it into the accounting office and advised the people the trunks were ready for shipment to Denver. He thanked them for their support.

He went back and joined Brian in his office. Megan and some of the other ladies were already in party mode. He also noticed that Brian and Megan had something going. He was happy for Brian. Brian took him aside to advise that the lab called that morning and said they have additional reports coming. Brian said he could finish the report in Denver. He thanked Brian and Brian actually patted him on the shoulder.

Party time arrived and everyone gathered in the main room. Earl asked that he come to the front and presented him with a beautiful leaded crystal decanter as a going away present from the staff. He was moved by such a nice gift. And then everyone began to drink. He had to remind himself that this would be his last day in Australia. About 9:00 PM, Brian and Megan, and some of the ladies decided to deliver him to his hotel.

He awoke early, packed, checked out of the hotel and took a taxi for the last time to the Sydney airport. In no time, he had boarded the Pan Am plane and was flying north as the Sydney Harbor Bridge and nearly completed Sydney Opera House disappeared in the clouds below.

And that was that for Australia ... but only for a few years. He would return often, i.e., 1975, 2009, 2011, 2012 and 2015, all for client investigations of projects involving potash, gold and other metals, and uranium.

His lasting memories of Australia were those of his time spent in the Outback of Queensland, Northern Territories, South Australia, and New South Wales. He heard many stories around the campfires told by Jack and the older drillers of the "Old Times" of the late 1800s and early 1900s in Australia. Like in the west of the U.S., the mostly white people who explored and traveled the Outback were rough men and women. There seemed to be potential danger everywhere, from the poisonous snakes and scorpions, poisonous plants, large and small lizards, flash floods, and the incessant heat during the day and bone-chilling coldness at night, and scarce water supplies in many areas. But the Native people were peaceful people and often rescued stranded white men lost or found hurt in the Outback, he was told.

The stories were memorialized in various versions of songs like [Waltzing Matilda](#), where lone men choosing to be free looked for comfort in the cold nights of the Outback. The accent and word definitions of the telling of this story might be somewhat difficult to follow ([here](#)). More recent versions have been produced for polite, public consumption.

If Australia ever separates from Great Britain, their national anthem will likely be an adaptation of [Waltzing Matilda](#).



Chapter Eight

1969, The Return to the States and Onward



Inherited from R. I. Rackley "San Juan Tailings" North Star Sultan Mill, SW Corner of Silverton, Mineral Creek, by J.A. Kennedy, 1976

As he settled in on his flight to Honolulu, he began to reflect on the past few years. He had traveled for projects throughout Australia and SE Asia for phosphate, potash, uranium, and associated minerals exploration programs. He had probably seen more of Australia than most Australians. Although he had not thought much about it living in Sydney, the Vietnam War raged on only a few thousand miles away. He also marveled how fortunate he was for not having to go to war, for being alive, and for being finally exposed to the world. What he had seen so far was pretty interesting, he thought.

Things were happening around him that were changing his life before he was even aware of it. The first Concorde test flight was conducted in France. The Boeing 747 jumbo jet made its debut. The first man landed on the moon as part of the Apollo 11 mission by the United States, and Neil Armstrong and Edwin 'Buzz' Aldrin became the first humans to set foot on the Moon and uttered the immortal words "That's one small step for man, one giant leap for mankind." The opposition to the war continued to increase with more, mostly young, people attending anti-war demonstrations and demanding that the U.S. withdraw from Vietnam. Members of a cult led by Charles Manson illustrated the power of brainwashing. Woodstock attracted more than 400,000 rock-n-roll fans, who attended to see *The Who*, *Jimi Hendrix*, *Crosby Stills Nash and Young* and others perform live and to just be "real." Even clothes fashions reflected the anti-war sentiment with anti-establishment symbols. But the Ohio State football program was looking up in 1969 until losing to Michigan.

As he examined the newspapers, he noticed there were serious issues raised by college students and others about the war in Vietnam. He also was to learn that Fascist ideology was developing, no doubt in response to the left-wing opposition to the Vietnam war supported by President Nixon, more or less. Groups such as the John Birch Society were gaining traction within the Republican Party and far Right-

Wing in the U.S.³¹ Not only was Jane Fonda against the war, but she was also against the development of nuclear power. The pot was beginning to boil in American politics, he felt, but he had trained for being a professional industrial geologist so he minded his business.

He was also looking forward to seeing Conoco's mining corporate center in Denver and to compiling and completing the final report to the state government on the Australian phosphate exploration project. He doubted if he would ever have a better boss and friend than Robert or a better mentor and senior advisor and friend than Rossi. Even stuffy Brian would be missed.

He landed in Honolulu, and to his surprise, there were Jerrie and his children, David and Julianne were there waiting in the crowd outside of the customs area. They all hugged and then off to the hotel they went. The hotel was very new and classy, far more than what he had expected. When Jerrie and he discussed that, she said that Conoco's Sydney office people sent her a package at the hotel in Sydney with their itinerary, which included the hotel reservations, dates of airline departures, and the hotel reservations in Honolulu and in Denver, the latter with an open departure date. Jerrie said, "Your Conoco people know how to manage things."

They did as Jimmy Royds had indicated, relax. So, they did, for the following week. Life was very good.



They finally arrived in Denver in the evening and took a taxi to the hotel across the street from the Conoco Building, the one with the very large Conoco red triangle on the top of the building that would signify to all that this was downtown Denver, Colorado. When they checked in at the hotel, there was an envelope. In it was a note with the message, 'You have a meeting with Dr. Ludwig Koch, 9th Floor, Suite 101, at 11:00 AM tomorrow.'

They settled in. They were hungry. He said, "You know what I have been wanting for a long time? A cheeseburger and French fries and cheesecake. What do you say?" Everyone went nuts, David was jumping around, Julianne had no idea what was going on, but she was happy too and began clapping, and even Jerrie was jumping around with David. Jerrie got on the hotel phone and ordered three large and one small of the above.



The next morning, he was off to meet the Chief. The Conoco building was large and took up a city block. He found the elevators and punched 9. He got off and soon realized that this was the executive floor. At the end of the hallway was a glass arch that had Suite 101 written in golden letters. He walked into a room with a very high ceiling and a small desk beside very tall doors. On the other side was a small couch. He approached the receptionist and identified himself. She said, "Oh yes, Mr. Campbell, Dr. Koch is expecting you. He'll be with you in a moment. He is on the phone."

³¹ <https://www.youtube.com/watch?v=pG6taS9R1KM>

He sat down on the couch and in less than a minute, the big doors opened with a creaking sound. She arose and motioned for him to follow her. As they were walking through the doorway, she said something to herself, 'I must remember to get the door hinges oiled' and they proceeded into Dr. Koch's office. He instantly saw that this office too had a very high ceiling, but even more interesting was that Dr. Koch's desk was sitting on an elevated part of the office; the desk was the largest he had ever seen. He stood there but couldn't see Dr. Koch, who was still talking on the telephone. He saw smoke rising from the source of the voice and the next thing he heard was Dr. Koch saying, "OK, good day," with a clear German accent. He heard the clunk of the phone and then saw Dr. Koch turn around in his high-back chair as he rolled into view.

Dr. Koch said, "Thank you, Judy," which meant Judy could leave, and as she passed the big door, he saw him reach toward a switch on his desk and the doors began to close, creaking all the way. He thought to himself, 'This is really weird,' but that was only the beginning.

Dr. Koch rose, turned, and walked down two steps and around to where he was standing and extended his hand. They shook hands for an uncomfortably long time, but no finger signals, he thought to himself at the time. He was a very short man and had a short cigar in the corner of his mouth that he kept moving around.

Dr. Koch said, "I assume you know that I am Dr. Koch, Director of Conoco's worldwide mineral exploration program."

He replied, "Yes sir, Jimmy Royds spoke highly of you," he lied knowing this guy had to be stroked with flattery.

Dr. Koch then turned and went back up to his desk and sat down. He motioned for him to sit. He did but he could only see the top of Dr. Koch's head. When he leaned forward, he could only then see his full face and cigar.

Then Dr. Koch said, "So you are Jimmy Royds' fair-haired boy. Jimmy gave me an ear-full of your accomplishments in Australia, especially your handling of the Japanese in Tokyo. Tell me about that meeting as if I were a fly on the wall."

He had had about enough of this guy and the gamesmanship and wondered instantly if Jimmy knew this Koch character came off as a real asshole. Dr. Koch then leaned back so he could no longer see his face only his forehead.

He then said, "Sure, I would be glad to highlight the meeting, but I'll need to see your face so could you lean up?"

Dr. Koch chuckled, and then rolled up even closer so he could see his face. He then spent the next five minutes or so going over the meeting and what Robert and he had said, but never differentiated who said what and when.

Dr. Koch asked about the volcanic ash and about the Northern Territory discovery. He started to respond, but Dr. Koch interrupted him and said, "So it seemed you enjoyed your tenure in Australia?"

He replied, "Yes, very much. But it really was the team that made it all come together the way it did. I was only a part of it. Robert was a very good manager and Rossi and Brian were extremely helpful to me over the years."

Dr. Koch then said, "Jimmy was right. You are a sharp cookie; I would be glad to have you on our team. Where would you like to go?"

He said, "Could you tell me about your projects?"

Dr. Koch said, "Sure," and then summarized the comprehensive list of projects. He mentioned uranium.

He said, "What uranium office has the biggest budget?"

Dr. Koch said, "That would be between Albuquerque and Casper."

He said, "Where do you need the most help?"

Dr. Koch said, "Casper."

He said, "Sounds fine to me."

Dr. Koch said, "You are aware that Casper has some pretty stiff winters?"

He said, "Doesn't matter."

Dr. Koch said, "Great" and then picked up the phone and asked Judy to have Bill come in. Bill was #2 in the office.

While they waited, Dr. Koch stepped down and walked over to his bookcase and motioned for him to come and see. He had written a number of books on mineral exploration and one on Israeli history.

Bill arrived and Dr. Koch introduced the two men. Bill, while shaking hands, said that they had heard he was going to join them. Most of them had heard about his activities in Australia and how he single handedly made two million dollars for the Conoco Mining group.

He laughed and said that it was a team effort and any geologist would have done the same.

Bill said, "And he is humble to boot."

Dr. Koch said that Bill manages the uranium offices and will help you and your family get settled in Casper.

He said, "I need to finish a report we were working on to include some new data just released by the lab in Adelaide."

Bill said he would find an office and secretary for him.

Dr. Koch shook his hand again and said that he was glad he decided to join the Denver group. Bill and he departed and went down to Bill's office. He was set up with an office and indicated that his two trunks had just arrived and would be shipped on when he was ready to head for Casper.

In about a week, he finished writing the rather large report and mailed it off to Brian for review and submission to the government. He assumed all the reports that he and Rossi and Brian prepared over those years would forever reside in the government files of the Queensland and Northern Territory libraries. They are still there, on-line.

When he finished the day, he walked across the street to the hotel. David and Julianne were looking at newspapers when he came through the doorway of their small suite. The kids jumped up and hugged his

legs. Jerrie had decided that she would always like to live in a hotel, but the realities of a new environment were about to descend upon them in Casper, Wyoming, both in terms of the weather and relationships.

They finally were ready to begin their new adventure and boarded a *Frontier* flight to Casper. The Rocky Mountains were beautiful as they reached altitude, but off to the north they could see dark clouds and harsh weather. As they descended in preparation to land, the wind was blowing and there was snow on the ground, a lot of snow. David and Julianne asked what was that white stuff on the ground. He and Jerrie told them about snow and promised it would be fun. The plane was about to touch down, but a big gust pushed the plane off course and the pilots had to push the engines to gain air speed to go around and try the landing again. The second time they landed and pulled up in front of the Casper airport.

As they climbed down the steps, it was bitterly cold. They walked across the tarmac to the terminal. It was warm in the building as they waited to receive their luggage. He turned to Jerrie and said, "I don't know about this..."

Jerrie responded, "It'll be fine. You'll see."

Conoco had them booked into a hotel in downtown Casper. They also had rented them a car at the airport to use until they bought their own car. Jerrie again complimented the Conoco people involved. They drove through crunchy snow-covered roads, but they were not slippery. They arrived at the porte-cochère of the hotel, got out, and he handed the car keys to the porter. He also retrieved their bags.

Once they were settled in their small suite, they took a walk around the big hotel. David and Julianne were all full of energy after being cooped up on the plane and riding in taxis and cars. Jerrie and he not so much. There was a large room near the front desk with a big wood-burning fireplace. It was raging with a full load of firewood, with a pile of wood nearby ready to burn. They sat in front of the fireplace and warmed whatever part of them was still chilled.

They had heard that winter had arrived early in Wyoming. They looked up the ads for available rental houses in the newspaper to get an idea of the costs, but they wanted to see what the Conoco people could do first. The weather remained wintry the rest of the weekend, so they stayed in at the hotel and Jerrie and the children inspected almost every shop and public room and even the kitchen at least once.

Monday came and he reported to the Conoco uranium office in one of the larger buildings in Casper, 5th floor, he vaguely recalled. He met the receptionist, and she took him in to meet the Office Manager, the geologist who was to lead his new team. Oliver J. was a tall, good-looking fellow with light hair. He was quite pleasant and said that he had heard a lot about him. He then described the projects they were working on and that he would be responsible for drilling in the Red Desert more than 170 miles from Casper, out in the middle of nowhere. He then went on to say that they haven't figured out the trends or source of the uranium, "Maybe you could help with that problem."

He said, "It sounds interesting. I'll read up on Wyoming uranium as soon as I can."

Oliver said, "I have prepared your office for you and included all the reports and other references we have for the Red Desert."

He said, "That's great. Thank you. I'll get right on it. When does the drilling season begin?"

Oliver said, "Whenever the weather allows."

He said, "Really? Even in the winter?"

Oliver said, "Sure, unless it gets too cold or there is too much snow."

He asked about the staffing and Oliver said that he had 10 geologists, two well logging technicians, and three field assistants.

He said he'll need a field truck. Oliver said that there was one waiting for him.

He spent the following three weeks in the office reading up on the Wyoming uranium deposits. The weather finally warmed up enough to allow field work, which meant a temperature of 50°F or so. The group of geologists who were working on the Red Desert project briefed him on what they had found to date. The oxidation/reduction boundary had not been identified yet. It seemed to be very subtle and different from other areas in Wyoming. Someone suggested that there may be many overlapping plumes of perhaps different ages or different surge periods. He listened carefully to his new team.

They had been drilling in grids but had not found any contiguous trends to date or any mineralized zones. Almost 150 holes had been drilled to date, which seemed to him to have been excessive, he recalled. He asked how many stratigraphic holes had been drilled and the answer was zero. The depth limitation of 300 feet had been set by Oliver. He also asked the group whether anyone had established the basin geometry with a view toward finding the source rocks, which would have helped to identify one or more oxidation/reduction boundaries in each prospective sand unit(s).

Who has been responsible for integrating all drilling data into map form? They answered, "No one."

The holidays approached and Jerrie didn't think much of winters, but David and Julianne loved to play in the front of their house making snowmen. They found a large Christmas tree that reached up to their ceiling and decorated it with colored light strings. Bruce, one of the guys in his team who appeared to be the sharpest, and his wife, Rachel, were invited for Christmas dinner. Rachel brought their kosher meal side dishes, as planned. They had turkey and mashed potatoes, and lima beans.

As the new year began, he decided that there should be no more drilling until all the data had been plotted on one map. He asked all of his team to find copies of the topographic maps and tack them to his wall and each of them were to plot the locations of each of the holes they drilled and then add the reduced geophysical logs attached to each hole location. Once they were plotted, he then assigned teams to construct separate cross-sections aligned with possible source rocks for particular roll fronts in one of a number of sand units that were also aquifers in the region, and used for watering cattle and sheep.

He discussed the new plan that the Red Desert group were pursuing with Oliver, but he wasn't happy because his philosophy was to drill grid patterns and from that the pattern of any mineralized zones should become evident, which could then be followed up by in-fill drilling to locate the mineralized roll-fronts. Oliver expressed his concern that doing all the "extra geology," as he called it, was a waste of time.

He politely countered that view by saying that the drilling budget would be going out of sight with all the blind grid-pattern drilling. Over the ensuing weeks, the tension began to build between he and the Office Manager and became even worse the more he learned about Oliver.

In a likely effort to smooth the relationship, Oliver invited him and Jerrie to dinner one Saturday evening. They were up for it because he wanted to know more about his new supervisor. They arrived that evening at Oliver's house. It was in the same general neighborhood as his house, a one-story ranch-style house.

Oliver introduced him and Jerrie to his wife. She was a pleasant-looking Native American lady who spoke impeccable English. She had graduated from college. As they had drinks and continued with normal talk about children, it became clear very soon that Oliver and his wife wanted to know as much as possible about he and Jerrie.

Oliver was maybe 10 years older than him. He apparently had assumed that he had the responsibility, or was instructed by Bill or Ludwig, to develop a dossier on the new fellow from Australia who had friends in high places within the Conoco management. Question after question was served up by Oliver. Robert, Rossi and even Brian would have been appalled by the interrogation. Even his wife would insert a question aimed at Jerrie, some of which were too personal for a new relationship. A question was posed to Jerrie about her parents, to which she responded, "Quite frankly, I don't think that is any of that is your business" and she looked at him and he said, "Actually, I agree, you guys are giving us the third degree, so lighten up."

At this point, Oliver's wife broke the tension by saying, "Let's say we have dinner." They rose and were conducted to the small dining room in the adjacent room cluttered with Native American art on the wall and on knick-knack shelves and in a glass case in the corner. The meal was great. Fried Chicken. As they were settling into the dining table, Oliver and his wife disappeared into the kitchen, and they could hear rather heated whispering. Jerrie leaned over to him and said, "What the hell is going on with these people? They are clearly afraid of you for some reason and are looking for faults." He responded, "I agree, Oliver is looking for ways to discredit me. Let's go on the offensive." Jerrie said, "Good idea," just as Oliver and his wife came through the kitchen door with bowls and dishes of the meal.

Once everything was in place, Oliver asked his wife to say Grace. That was the longest dinner prayer he had ever witnessed. Everyone said "Amen," and they began to enjoy the meal. After a few minutes, Oliver looked up and made eye contact with him, and he could tell Oliver had framed an important question in his mind, but hesitated, just long enough for him to interrupt with his first question.

He said, "Oliver, how long have you been with Conoco?"

Oliver looked confused and then said, "Oh, a few years."

He said, "Who did you work for before Conoco?"

Oliver said, "Another uranium company."

He said, "Didn't you work for Conoco before that company?"

Oliver said, "Yes, that's right."

He said, "I heard from the guys at the office that you went to work for Kerr McGee, an established uranium exploration company, and worked for them for only a few months and then came back to Conoco loaded with confidential company information to help benefit Conoco exploration activities in Wyoming. Is that true or just rumor?"

Oliver said, "I heard the stories too, but none of them are true." Oliver glanced over at his wife, who had a horrified look on her face. Jerrie glanced at him with a smile in her eyes.

He then said, "Well, I told the guys I didn't believe their story and that they shouldn't be spreading such rumors around because it casts a bad light on our Conoco uranium group. If it had been true, I told them, you would have been in serious trouble professionally."

Oliver leaned forward in his chair and said, changing the subject, "How did you meet Jimmy Royds?"

There it was ...the subject that Oliver and the rest of Denver management had been wanting to know about.

He responded by saying, "In Sydney. He came for meetings on our projects because our group was under his leadership and we did quite well, but you probably already heard about that."

Oliver started to ask another question, but he beat him to it by asking Oliver how long had he known Bill and Ludwig.

Oliver, again confused, said, "For some time," but he offered no details.

He followed up by returning to an earlier topic, "The guys said that your application to the Wyoming Geological Association had been black-balled. Do you know anything about that?"

Oliver said, "That's part of the rumors all right. But it's all just sour grapes put out by Kerr-McGee. They just didn't want the competition."

He then changed the subject, fashioned after some of Oliver's earlier direct questioning, "Where did you go to college?"

Oliver said, "University of Oklahoma, BA in Geology, MA in French," and added some comments about missing a deadline for another degree but didn't specify.

The table talk then become less pointed and more friendly in tone like how do they like Wyoming, skiing on Casper Mountain, and similar subjects. When they finished after dinner coffee, Jerrie indicated that they needed to get back to the children because this was the first sitter they had hired in Casper. There was no dessert served and they departed without being offered goodbye handshakes, which he noted as they left.

On the way home, Jerrie summed up the dinner by saying, "He is no friend of yours."

He said, "I am aware of that."

Jerrie replied, "You did an excellent job roasting him about the rumors. Are they true?"

He said, "I intend to find out. Did you noticed that he practically admitted they were true?"

The next week there just happened to be a meeting of the Wyoming Geological Association in Casper, and he was planning to attend it and apply for membership. He was also going to carefully inquire about the rumors.

The next Monday, as he came into the offices, he encountered an impromptu meeting of a group of his Red Desert team. As he walked in, they were having a heated conversation. He asked what was going on. Bob, one of more senior geologists on the team, said that he was fed up with Oliver's bungling management style and lack of leadership. He was saying that they were finally getting some good guidance from Campbell here, and Oliver is going out of his way to enforce grid drilling, ignoring Campbell's ideas.

He told them to cut out the complaining and just do their jobs. He said that he can only do so much because he is still the new guy on the block, figuratively speaking. Oliver walked into the office just as he had finished. He suspected Oliver was listening from the hallway.

Oliver said, as the guys were leaving, ignoring his presence, "OK boys, what's going on?"

He said, "It's nothing. I have set them straight." Oliver then said, "I heard."

The Wyoming Geological Association (WGA) meeting time arrived and he attended his first professional meeting in Casper. He saw a few of his team circulating, who would come over and introduce a friend of theirs, usually another geologist. After meeting a few people, an older, distinguished looking fellow came up to him and stuck out his hand and said, "Hi. I'm Ruffin I. Rackley." He returned the introductions.

One of things he had learned in Sydney was that some people go to meetings to gather information, while others go just for the camaraderie, but generally for both reasons. Mr. R. asked many leading questions without providing much information about himself, at first. After about five minutes, Mr. R. said that he wanted him to meet some his associates, Phil Shockley, and his assistant Murray Dahill, Bruce Rubin, Art Renfro, all working for Mr. R. at Teton Exploration, Division of United Nuclear Corporation. Mr. R. told him. A little later, he was introduced to Mr. R.'s peers and other U.S. Geological Survey people, who were working on uranium in one way or another in Wyoming or in other areas in the U.S.

He stayed with Mr. R. throughout the meeting mixer, and they sat at a nearby table for the presentations. Mr. R. began to tell him about his career to date and about him joining Teton. He then said something that was rather shocking at the time.

Mr. R. said, "You are working for Oliver, I presume. I would be careful not to stay too long with him."

He said, "Why is that?"

Mr. R. said, "You certainly have heard the rumors."

He said, "The ones about Kerr McGee and the WGA?"

Mr. R. said, "Yes, indeed!"

He said, "There is unrest in my office, and I'm sort of at the center of it." He went on and told him that he was being considered a spy sent by upper management of Conoco in New York, which was certainly not the case. And the other factor was that Oliver just wasn't a manager, with only one degree in geology and the other in French.

Mr. R. said, "Tell you what, if and when you get fed up with the Conoco bunch, consider it here and now that you have a job with me. And I am quite serious!" with that he extended his hand, and they shook.

On the way home that evening, he was pleased that he ran into Mr. R. and that he had met many of his associates. They reminded him of his Sydney Conoco team.

A couple of weeks went by, and grid drilling continued without much success. He was slowly putting the pieces together of the geology-based approach that should be ready for interpretation and implementation in a few weeks. He hadn't spoken to Oliver or had he sought conversation with him for more than a week. Then one morning he arrived in the office and the receptionist said that there was a

meeting at 10:00 AM that morning in the main conference room. He went around to his teammates' offices to inquire if they knew anything about the meeting. They didn't.

The meeting time came and all 15 or so members of the professional staff gathered in the conference room. Bill appeared, Oliver's boss from Denver that he had met when he had first arrived in the Denver office, followed by Oliver, and a couple of fellows in suits he didn't recognize. He sent one of his assistants down to ask the receptionist if she knew who the suits were.

The meeting was called to order by Oliver. He introduced Bill. Bill began by saying how important teamwork was for a group of geologists, whether exploring for oil & gas or for minerals, like uranium. He understood that there is confusion in the office as to who is running the program here. He said that management wanted to be fair and give everyone ample ways to correct the problem.

Bill then said, "To address this issue, I would like to hear from some of you on how you think this office is functioning," then said, "Let's hear from our newest member, Mr. Campbell."

Just as he was about to speak the assistant came back and whispered, 'HR' in his ear. He thanked him aloud, and turned to the group sitting around the big conference table. He said,

"As all of you know, I came from outside the Conoco uranium group and spent years as Staff Geologist managing programs in Australia. I reported to the Vice President, Mining Group in Sydney, who reported to Jimmy Royds, Executive Vice President in Corporate New York, who, by the way, is the highest position a geologist has ever achieved in Conoco management. My projects were in Queensland, Northern Territory, South Australia and even in the Palau Islands and the Coral Sea in the South Pacific. And no, it was not a cover for spying while the war was going on in Vietnam. We weren't even aware the war was going on while there or even in Sydney until a cousin of mine appeared in my Sydney office in full dress marine uniform. The local news media were barely mentioning it.

My team was able to drill up, investigate, and then farm out a project that Conoco spent about \$1 million on, but received about \$3 million for the 100% acquisition by a Japanese-American group. We identified two new districts for phosphate exploration. Jimmy Royds came to Sydney for at least two meetings. My VP and I had a final meeting with the Japanese in Tokyo.

Mr. Royds was happy with the outcome. He promoted my VP to a corporate position in New York and asked me if I would be interested in joining the Denver mining group. I accepted his offer. When I arrived in Denver, Ludwig offered me Albuquerque or Casper. I asked which office had the largest budget. He said Casper, so here I am. I expected a Conoco team of professionals as I experienced in Sydney, and at the Lab in Ponca City, but what I have experienced the past months have been suspicions that I was a corporate spy of Jimmy Royds that probably originated with Ludwig down through you Bill to Oliver. But I also encountered a manager who is not fit to manage this large exploration program and a manager above him who has not acknowledged his shortcomings or is being coerced as fall-out from the incident with Kerr-McGee.

I expected a fully trained senior mineral exploration geologist, not a cast-off from the Conoco oil & gas division with a degree in French. I am laying all this out for the Denver management and for the staff here. I have never expressed these concerns with them, although I have heard many

complaints over the months from them; I still carried the management perspectives as Oliver knows full well.

As I see that HR representatives are present, this is good because by way of this presentation, I have chosen not to accept any overtures involving "one more chance to straighten up" you no doubt were about to unveil, I have chosen to resign this very minute, by saying that this is not the Conoco office I was expecting, and I hope this will prompt upper management to do something about the real problems. Gentlemen, I wish you well."

....and with that he gathered up his note pad and began to walk out of the room. Everyone stood up and some even shook his hand as he left the conference room.

Accepting Mr. R. at his word, he then went to the supply room and cleared off the papers that were stacked on a three-tiered silver four-wheel cart and wheeled it into his office. He emptied his desk drawers into a cardboard box and stacked his personal books on the cart. He was careful not to take any Conoco reports or other material that might be considered confidential. While he was packing, a few of the fellows showed up in his office and he told them that they should not let Denver management see them in his office. They indicated that as soon as I left the meeting, Oliver, Bill, and the HR guys all hurried into Oliver's office and closed the door. One of the secretaries who came by said, "FYI, there were a lot of raised voices going on in Oliver's office."

Once the cart was loaded with his belongings, he told the fellows that he might need them in the future so they should keep their resumes fresh and their heads down for now. Off he went to the elevator. Once on the main floor, the receptionist said, "Wait a minute Mr. Campbell, we have people to do that." He then told her that he had just quit, and he remembered that she put her three fingers to her lips and said, "Oh dear !"

He rolled out through one of the big doors of the Conoco building onto the Casper street, which was rather busy with well-dressed men in suits and women in short skirts, he remembered. He came to the first intersection and realized that he had a logistical problem. He stepped down onto the street with the end of cart and held it horizontal as he rolled the cart off the curb and down with a metal bump sound and then three or four books fell off the cart. The streetlight was still showing red as he hurriedly reloaded the cart and quickly pushed the cart across, losing only one book, which was retrieved by a passing person who caught up and placed it on his cart.

The streetlight changed just as the cart bumped into the far side. This time other passers-by saw the cart approaching and diagnosed what was needed. They helped him pick up the cart into a horizontal position and put it down on the sidewalk. He said, "Thanks." One person said, "Good luck," and knew what he meant by that.

He had one intersection to go that was much like the first, but with different helpers. He finally arrived in front of the Teton Exploration office. Someone held the door open and he rolled his cart up to the receptionist's desk. She said, "May I help you?" He replied, "I have an appointment with Ruffin," to suggest that he was expecting him. He started to roll the cart down the corridor looking in each office. The receptionist wanted him to stop, but he pressed on. At the third doorway, he stopped. It was Mr. R's office, but someone was sitting in a meeting with Mr. R. He saw him, stood up, looked down at his cart of his books and belongings, and said, "Oh, yes, good, third office down on the left. Make yourself at home. I'll be down in a few minutes."

He rolled the cart into the said office and put all of the books on the bookshelf and a few on the credenza behind the desk. And he sat down in a chair that he soon realized was much more comfortable than his old Conoco chair. A few minutes later, Mr. R. came in and sat down in the visitor chair and propped his feet on the corner of the desk and said, "So, glad to see you. I thought you would be here sooner but that means you gave my offer serious thought. I like that. Now, how much am I paying you?"

He said, "What's your scale?"

Mr. R. said, "How much were you making at Conoco?"

He told him the exact amount in case he asked for a pay stub, "\$6,000.00."

Mr. R. said, "I'll approve \$7,000.00 including normal benefits."

He said, after figuring that was about a 20% increase, "Sounds fine."

Mr. R. said, "I'll send one of girls to do the paperwork, tax forms, etc., and get your credit cards in the works, and the rest of that stuff. Let's talk tomorrow about projects and your function if you don't mind. I have a meeting I have to attend with the President, whom you'll soon meet. By the way, did you formally resign at Conoco?"

He briefly told him what had transpired, and Mr. R. got a huge kick out of it. "Way to go, Mr. Campbell," smiling as he left his new employee in his new, bonafide office.

He sat back down and relaxed. This is a day to remember, he thought to himself. He thought he might as well earn his new salary, so he pulled out one of the reports on Wyoming uranium and began to read. After about 10 minutes, he looked up and a new fellow was standing in between the visitors' chairs. He said, "You read rather quickly, I see," and smiled and said, "I'm Bruce Rubin, we met at the WGA meeting."

They shook hands and sat down and began to get to know one another. There was no interrogation, just two geologists talking shop. Bruce was Jewish and had a bachelor's degree in geology from Rutgers.

Bruce said, "I am the third member of what has come to be known as Rackley's frontier boys, responsible for locating new districts and deposits for development by our parent company, United Nuclear Corporation. Teton is currently developing a very shallow underground mine of roll fronts at the Morton Ranch site. He said Rack will want you to become familiar with that type of uranium mineralization as he and Art Renfro did, whom you will meet soon, no doubt. We are using that deposit as an analogue to characterize the processes involved for applying to exploration in other regions."

He said, "Does everyone call Ruffin, Rack?"

Bruce said, "Ask him, he has an interesting story about that."

After Bruce went back to his office, he called Jerrie to let her know what had happened. She was pleased and glad that he got away from that rat's nest, as she called it. She asked if he were going to call Robert and he said maybe, but that he was going to call Jimmy Royds. She said that was a good idea. She asked when he was coming home; he said soon.

He then called Jimmy Royds. His secretary, Edith, with whom he had spoken many times while in Sydney, answered and he identified himself and asked to speak to Mr. Royds. She said, "One moment please."

Mr. Royds said, "Mr. Campbell, I just got an earful from your buddy Ludwig Koch. I can read between the lines, but could you brief me on what happened?"

He said, "News travels fast. First of all, if I brief you, and if they find out, that will confirm in their minds that I was placed in the group in the first place to report back to you. Second, where do you want me to start?"

Mr. Royds laughed and said, "Let's start with Dr. Koch shall we? Give me your impressions."

He said, "Have you ever been to Koch's office? If not, you have to see it. Next, in my opinion, anyone who says when first meeting someone, 'So you're Jimmy Royds fair-haired boy' makes Koch a first-class idiot. It demeaned you and it immediately branded me as someone's favorite, and not because I earned the respect. He is as arrogant a person as I have ever seen to date. He also plays games with his cigar that stinks up an otherwise great office. If you get a chance to visit him, be sure to sit in one of the visitors' chairs and see what happens.

Next, I don't know much about Bill H. except he appears to be Koch's errand boy, but he may have other capabilities. I wasn't exposed to him that long.

Oliver is way over his head technically. Have you heard what happened with Kerr McGee?"

Mr. Royds said, "No. Please continue."

He said, "As far as I have been able to determine, and a number of senior geologists have confirmed it, Oliver was an employee of Conoco some years ago and was sent by someone in Conoco to get a job at Kerr McGee and then, after a few months, quit and brought as much information with him as possible on their uranium exploration techniques, leads, and associated data to help the Conoco uranium group get up to speed in Wyoming and maybe elsewhere. This was more or less confirmed when Oliver applied to the Wyoming Geological Association for membership; he was black-balled for life. I suspect he and Bill were both involved, but I don't know that for sure, but it might explain why Oliver is in a job for which he is not qualified. Finally, it seems everyone in Casper has heard about this and it's part of the reason I resigned today."

Mr. Royds, "Michael, I can't thank you enough for this briefing. I will look into the matters on my next trip to Denver, believe me. I can't wait to visit Dr. Koch's office, unannounced, as well. I would ask that you keep this conversation confidential, OK?"

He said, "Of course. I'll keep these events in mind for my memoirs when I reach 80."

Mr. Royds chuckled and said, "It has been a real pleasure working with you in Australia and in the States, although the latter did not go as you might have hoped, but I look forward to the day when we have a chance to work together again. I will fill Robert in on what's been going on. He has asked about you. By the way, do you know what you are going to do now?"

He said, "Well, United Nuclear Corporation's Exploration group, Teton Exploration, here in Casper is making some overtures; I plan to look into that."

Mr. Royds said, "A top company, I'm not surprised at all. Please feel to use me as a reference. My very best."

He said, "It has been a pleasure to work for you and Robert as well," and with that they finished the call. He was thinking 'What a class act, Royds is,' as he was driving home that afternoon with a new job ready to roll out. As life rolled on, years later he would meet back up with Robert and also with Jimmy Royds.

The next morning, he began his new job. He met the staff of Rack's inner group consisting of Bruce, Art, and others who had some connections to the Albuquerque office, but he never knew much about their activities. Rack would hold "Skull Sessions," he would call them, with the three of them to discuss new papers or publications that might have applicability to their individual assignments. Rack was working on a paper describing the uranium geochemical cell with Phil Shockley, but Rack had said Phil didn't think they should expose their exploration model yet. Rack thought it would raise Teton's credibility, and that of United Nuclear Corporation's mining operations in New Mexico, around the U.S., and even in Australia, where Teton had a few tenements, although he wasn't aware of that at the time.

Bruce was focusing on the Morten Ranch Mine. He invited him to go with him to have a look underground, which he did a few days later. While underground, he remembered seeing cylindrical six-inch pillars of bentonite clay surrounding old boreholes and the dark brown to black mineralized zone of uraninite in the adit wall curving around a lighter colored sandstone. Bruce was working on a paper for publication as was Rack, both of which would become classics in the uranium industry years later.

A few weeks later, he would collect ground-water samples in other parts of the mineralized zone that came from locations in the shallow aquifer in front of and from behind the mineralized roll front and he published that information in a chapter of a book he was to produce a few years later.

Rack assigned him to look into the possible exploration targets in North and South Dakota. He conducted literature searches at both states' geological survey offices and libraries, located a few sites to examine by drilling, and sent Teton's landmen into the areas to secure preliminary drilling on private and public lands. That lasted for a few months, and he discovered some telltale mineralization in up-dip remnants in a few holes and recommended further land access and additional drilling farther down the hydraulic gradient in one of the deeper aquifers of South Dakota near the Wyoming border.

Soon, Rack wanted to begin to look at the eastern U.S., so he promoted him to District Geologist for the Eastern U.S. He began to attend the national uranium conferences that were springing up and soon got wind of a discovery by Duke Energy geologists in a PreCambrian window in southern Virginia. He also was investigating some reported minor radioactive zones in eastern Pennsylvania and in eastern Ohio that were associated with the lower grades of coal in both areas. This allowed him to drop in on Lancaster once in a while to see Maxine and Clarence and any of his guys from high school who were around. His brother Steve was a popular radio announcer for a Columbus station and had purchased an Austin-Healey along the way. His sister, Carolyn Sue, was still in college studying to be a nurse.

He was traveling on a regular basis, but Jerrie and he were developing personal relationships in Casper with Rack and his wife Barbara and Bruce and his wife Rachel. Rack was always amusing with fascinating stories of his earlier life in the Navy and in Tennessee in his college days. His parents, who were very religious people, had had a major impact on Rack's life. Jerrie especially enjoyed having dinners with Bruce and Rachel because they were very well read and intelligent people, although Bruce had a decidedly right-wing inclination and was a member of the YAF (Young Americans for Freedom), about which he knew nothing but would soon learn more.

The tempo of his life was beginning to increase. He made a comment to Jerrie that the Earth's rotation must be increasing, but she rolled her eyes, not realizing that his comment was meant to be figurative, not literal. It was almost Christmas again. His folks had decided to spend Christmas with them that year because they hadn't seen the children for many years. They had a big Christmas dinner that included Bruce and Rachel. Maxine had many questions about the Jewish religion, and they didn't seem to mind talking about it. He remembered thinking that Maxine may have never known a Jewish person before. They all learned a lot during that Christmas dinner.

With such discussions, Jerrie and his politics, instinctively, were left of center, concluding that Capitalism by its very nature ignored the needs of the middle and lower working classes. This was based on an earlier interest in Marxism, which was a criticism of Capitalism and how afraid the Ohio State administration was of it to allow such exposure. But Bruce was a full-blown Capitalist, believing that individuals can raise their social status by working with greater dedication than others. It was competition that drove the American system, he had concluded. Their discussions, however, were always affable, and only extended to eye-rolling disapproval on occasions.

A month or so later, he attended another WGA meeting that had speakers on subjects relating to litigation and other legal matters that could impact mining projects. One such speaker was a nice-looking man who was an especially effective public speaker. He ran into him at the bar after the main program and he asked him a few questions about land access in Wyoming. They sat at the bar talking about many subjects and they soon learned that they had many interests and views in common. John Q. was a defense attorney who was born in Wyoming. As they talked, he disclosed that he was also the attorney for the American Civil Liberties Union (ACLU) in Wyoming. He showed an interest in what they were doing, and John explained in some detail about the organization of attorneys whose goal was to protect the civil liberties of all citizens and others. They had defended a range of clientele from Left-Wing ideologues to Right-Wing fascists, and anarchists. John invited him to attend an approaching meeting. A few weeks later, both he and Jerrie attended and met new folks of similar politics. A few months later, John asked him if he minded if John nominated him as Chairman of the ACLU Wyoming Chapter, and he said OK, although he was under the impression that he was to be a strawman, not intended to be elected. It turned out that wasn't the case.

The night of the election came. There must have been 100 people in the large room at the hotel downtown. They always arrived with John for previous meetings and John would always introduce he and Jerrie around. That night, people were coming up to them and introducing themselves apparently having recognized them. The voting box was filled and when all had voted, the box was taken away to undertake the count. The crowd continued to buzz and laugh, and they met new people. Jerrie and he later agreed that it was enjoyable to see the people interact so energetically.

John came to the podium a few minutes later and said, "We have a count; Michael D. Campbell is our new Chairman." Everyone applauded for some time.

John then said, "Mr. Chairman, come on up. The gavel is yours."

He came through the crowd with Jerrie in hand and appeared on the little elevated stage with the podium. He shook hands with John, who then handed him the wooden gavel and the agenda for the evening. He turned to the audience and said, "I appreciate your support and will do what is required of me with John's guidance. Let's begin with the agenda."

He soon found that evening that the ACLU had serious business to undertake. There were many reports to hear from members of the committee, almost all attorneys. The first was a report about apparent mistreatment in the Casper jail. A number of motorcycle gangs came through town each year, and one rider was arrested for reportedly unspecified reasons and taken to jail. The cyclist was not a hulking gang member, but a rather slight fellow, the reporter stated. The cyclist was found dead in a jail cell from an apparent drug overdose. Then, a few weeks later, another cyclist was arrested and was also later found dead, but this time there were indications that he had been beaten severely. The coroner's report indicated death by asphyxiation by inmates unknown.

The conclusion of this report was that the backgrounds of the seven policemen who worked in the Casper jail facility should be investigated. \$10,000.00 was allocated to fund the nationwide effort. He asked for a vote and the recommendations were accepted without opposition. John was to put into motion the background checks on the individual men. Other, less onerous, matters were reported and discussed, some new matters were assigned to certain attorneys to pursue, while some were recommended to be dropped.

John's job was to provide him with guidance on how to manage the agenda and discussion on matters presented and, if contentious, how to keep order, usually with the gavel. It became second nature as the monthly meetings came and went. John received no complaints. Although John received payment for his work with the ACLU it was far less than he had imagined. John had said that his motives in working with the ACLU were two-fold: first, it was good exposure for him, and second, the job needed to be done by someone, so he would step up.

The holiday season arrived. He had just returned from visits to central Pennsylvania, where he had spent a few days in the geological libraries of Penn State and at the Pennsylvania State Geological Survey running down reports of radioactive occurrences in samples from eastern Pennsylvania Triassic sediments. Jerrie and the children were excited about another Christmas in the snow. Jerrie was pleased with how well David had adapted to school and liked his teacher. She had told Jerrie during a PTA meeting that David was a very bright boy, but it may be difficult to maintain his interest, so she planned to give him extra work to challenge him. She asked Jerrie to monitor his attitude and she could adjust his load accordingly.

Bruce and Rachel had gone back to New Jersey for the holidays and Bruce was going take vacation time to extend the time. He had said he was going to look into possibly applying for graduate school and a few schools in the area.

John invited him and Jerrie for dinner at the main restaurant downtown and they met his wife, Jane. John was clearly an extrovert, but not too loud, and loved to tell stories, which were quite interesting. Jane didn't contribute much and appeared to be borderline bored. They had a little girl about four. John showed them photos from his wallet. Jerrie and he agreed that John was very entertaining, even though Jane wasn't, but they decided to invite John and Jane for Christmas dinner. John accepted.

For the dinner, they set a card-table for David, Julianne, and John's little girl. David did not like having to sit with the girls, he said, but he explained to David that they needed to do this just once and that they would try not to do it again. And that didn't happen again. It was a pleasant dinner and was great to spend time with John. Not so much with Jane. Jerrie had concluded that something was going on between John and Jane and it wasn't good.

As the new year began, they were looking forward to the coming year. John and Jane were skiers and they invited Jerrie and him to go skiing with them on Casper Mountain. John said, "It's easy to learn. I'll show you." They were game and accepted. They had the high-school girl from next door sit with David and Julianne for a few hours while they went up to the Casper Mountains Ski Lodge. John and Jane picked them up in his fairly new station wagon and headed up the mountain outside of Casper. It was snowing when they departed and after about 30 minutes, they arrived at the lodge. The parking lot was jammed with cars and, upon entering the lodge, they noticed that the place was surprisingly large with a high ceiling and a large fireplace with a big fire. He could feel the heat on his face as he walked into the room. The lodge was full of people all decked out in colorful sweaters and ski pants, which reminded him of a movie set. He fully expected someone to break out in a song and dance number. He heard someone yell, "Hey, John!" It was one of John's attorney friends he recognized from the ACLU meetings. Everyone hugged. He and Jerrie were in full observation mode, and she whispered to him, "Have you ever seen so many happy people?" He said, "Maybe they are on the sauce." She said, "It's more than that."

John grabbed his arm and said, "Let's go get you guys outfitted." They followed him into another section of the lodge where a few people were being fitted with skis. They spent the next 30 minutes with people helping them select rental boots, skis, and poles, even ski jackets, big gloves, and stocking caps. This reminded him for a moment of going bowling and shoe selection. Soon they were deemed ready for instruction. They followed the instructors out the back of the lodge to an area where kids and grown-ups alike were practicing V-skiing, swiveling, and learned how to fall over with skis attached. They were doing the same in no time.

After a while, Jerrie learned to do a swivel stop. He did too, but he always fell over in the process. After about an hour of practicing, they decided they were ready to go out on the easiest trail available. John and Jane showed up from inside the lodge and began to put on their skis. They were up and ready and off he and Jerrie followed. At about 100 yards, they arrived at a trail entrance, and John and Jane, who were noticeably skilled at maneuvering around on skis, said, "Follow us," and they disappeared down the trail into the lightly falling snow. They followed to the edge and stopped with their poles. They looked down what appeared to them to be a very steep incline and they could see them skiing down the trail. He looked at Jerrie and said, "Are they kidding? No bloody way." Jerrie laughed and said, "That looks like suicide. Are they nuts?" And with that, they turned and coasted back to the lodge, took off the skis and equipment and went back into the lodge, found a couch and sat in front of the fireplace, and ordered Pina Coladas, for some reason.

After about an hour, John and Jane arrived back from their run, and found them in the lodge. John said, "Guess you didn't like that. OK, I have another idea. I'll go get a snowmobile for you. You'll like that, I know." They followed him, only because they didn't want to disappoint him, to the front overhang of the lodge, while John hurried around the side of the lodge. Pretty soon they heard the sound of a snowmobile gunning up and down and soon saw John moving very fast, bouncing hither and yon, and having a lot of fun doing it. He headed toward the lodge and encountered bigger bumps, the last one was a doozy. This one threw John against the steering mechanisms and then up into the air at least five feet as it plowed into a large snowbank and came to an abrupt stop. Meanwhile, John came down headfirst into another bank with only his boots sticking out. They all ran laughing up to his boots and began to pull him out of the snowbank.

Once out, John was still laughing, until they heard him say, "O shit." The snow around where his head was stuck was all red. When he sat up, blood was dripping from under his chin. He quickly got a fistful of snow

and held it under John's chin; the snow quickly turned red, which meant John was bleeding and it wasn't from a simple cut. Fortunately, the first aid fellows arrived with medical gear. They all backed away to give them space to work. John was still trying to make light of the situation, but one of the medical guys told John to quit moving his jaw, it was making it worse. A lodge truck appeared, and they loaded John into it, along with Jane, and off they went. They soon learned that John was on the way to the Casper hospital in town.

After the truck had left, he and Jerrie went back into the lodge. The loft was filled with onlookers who were asking one another what had happened as they passed through the crowd on their way to the couch to finish their melted Pina Coladas. They then decided to go to the hospital and departed the lodge. Jane had given him the keys to their wagon. They drove carefully down the mountain, not only because the road was slippery, but also because he had had a few drinks.

After they arrived at the emergency section of the hospital, they saw John sitting on a bed with his whole neck bandaged snugly. Jane was standing nearby motionless. She didn't greet them, but John was full of apologies saying that he wanted them to have a fun time and that he sort of overdid it. They all laughed. He told John that they really appreciated his intentions. In a week or so, the bandage decreased in size and was soon gone. A few months later, he asked John to see his scar, and he was surprised to see how long the scar actually was. John had torn open a large area in his neck below his chin. No wonder they were in a big hurry to get him to the hospital.

As the weeks passed, the ACLU National office had completed the background checks of the police officers. John came to his office at Teton to discuss the report, only because his office was just around the corner. After John was conducted to his office by the receptionist, he sat down and looked around and said, "You have a great office. This is the first time I have seen it." Then we got down to business.

John said, clearing his voice, "It appears, Mr. Chairman, that of the seven police officers in the Casper police force, four of them have felony convictions in various states."

He said, "What? Give me the details."

John went through the records for all four policemen, including prison terms, and then explained that their applications to the city years ago had been reviewed, were found to be filled with misrepresentations and outright falsehoods.

He said, "Could the City of Casper be held responsible for not checking their applications in greater detail?"

John said, "Maybe, but I doubt it because there had been no reason to check further. They presented themselves as righteous citizens."

He said, "This is going to cause a big to-do around town, you know."

John said, "I'll start drafting a news release, but first I think you and I should let the Mayor know."

The next day, they went to see the Mayor. John and he went into the Mayor's office and were greeted warmly. John had been part of his election team a few years earlier so there were no concerns about a contentious meeting. The Mayor, a Democrat in a Republican State, was a tall man with a big smile, and was dressed in what appeared to be a cowboy outfit.

John summarized their findings. The Mayor was appalled. He asked about the veracity of the reports and John reassured him. The Mayor asked how John was planning to manage it press-wise.

He said, "I'm preparing a draft for a press release from Mr. Campbell, the ACLU Wyoming Chairman, on the findings and our recommendations for handling by the City. Mayor, you should come up with your reactions and we'll factor that in as well. The Republicans can't blame you because they were all hired years ago by the Chief, who is a Republican and served under Republican mayors before you."

The Mayor said, "Well, it's clear that the Chief will have to go. He was thinking about retiring in any event, so that works well. We could just fire all of them but that would leave the department with a recruiting problem, and do we have any recourse against them individually?"

John said, "Well, Mayor, I have spoken to my federal friends in Denver, on a hypothetical basis. They said they could provide U.S. Marshals to fill in until recruiting and rehiring was completed. With respect to the culpability of the subject officers, you'll need to bring in your city legal department on that matter."

The Mayor said, "Thank you, John. I look forward to your draft. Good to meet you, Mr. Campbell."

A week or so later, he went to John's office to review the draft. They discussed it. The mayor's people had gone over it and John was happy with it, and so was he.

The next late afternoon John called to say that the news release had been sent to the Casper newspaper.

John said, "You better put on your helmet," meaning some people would not like this.

The next morning, he arrived at his office and found a little triangular note perched on his desk next to his telephone. It read, "A Teton Staff luncheon meeting is to be held at noon today at the Best Western."

This hotel was just across the street from his office so that was convenient, but the meeting announcement struck him as ominous. He went into Bruce's office and asked him if he knew anything about the meeting. Bruce said that he had heard that Rack and Phil were recently having major disagreements, but couldn't believe that would cause a staff meeting to be called. He asked Bruce who called the meeting.

Bruce said, "Dick Lisco, the President of Teton. Have you met him yet?"

He said, "Yes, I met him briefly soon after I was hired. Maybe it's a team-building exercise."

Bruce said, "Dick doesn't believe in that kind of BS."

The meeting time arrived and they filed across the street to the hotel. He counted a total of 15 people, including technicians, but no secretaries. It was actually a rather pleasant place with a red, Spanish decor throughout. Teton had reserved a separate glass-encased room with a long table. As they wandered into the room, someone said that there were name tags. He began to read the tags, when Bruce spoke up from the far end of the table. Sure enough, he was at the far end. That made him even more concerned.

Everyone eventually settled into their prescribed seating and in walked Dick Lisco and the corporate attorney. It looked like he was holding Dick's arm. Dick swayed a little as he sat down. The attorney was looking grim. Dick grabbed his spoon and literally banged on the water glass in front of him to quiet the staff. He was surprised the glass didn't shatter.

He figured that Dick had been hitting the sauce already, so this ought to be interesting, he thought.

Dick said, "I have gathered you here today because one of you has besmirched and tainted the good name of Teton Exploration and that of the United Nuclear Corporation and I thought you would like to hear about it."

Dick pulled out a newspaper and said, "I have here the morning edition of the Casper newspaper and I quote,

'Michael D. Campbell, Chairman of the American Civil Liberties Union (the ACLU), and District Geologist, Teton Exploration, Inc., Division of United Nuclear Corporation, a top 500 company, announced today' and then a lot of reporting alleging corrupt policemen on the Casper force. You can read the rest on your own time.'"

Dick continued, "I want to know, and I'll wager you all would like to know also why our Mr. Campbell would drag our good name into association with the communist-inspired and corrupt ACLU to which Mr. Campbell has become Chairman. I suspect they are training him to be a Communist Candidate for President of the U.S.A., or for some function in the foreseeable future. So, let's hear what Mr. Campbell has to say..."

All eyes turned simultaneously in his direction. That had never happened to him before and it was downright disconcerting, but he rose and moved around and took hold of the wooden spikes of the back of his chair, and looking at each face he saw Bruce raising his eyebrows in anticipation of what he was going to say. He noticed Dick leaning over talking to the attorney. This was his entrance,

"Dick...if you wish to know what I have to say, you'll have to give me your attention. (Dick snapped to attention with fire in his eyes). It is true that I am Chairman of the Wyoming Chapter of the ACLU. I have seen some of you at the meetings from time to time. Months ago, we began an investigation of certain police incidents and have just completed our investigations. A draft press release was prepared that I reviewed and approved, but and this a big but, and the reason for Dick's slanderous, unfounded accusations, the press release neither had references to Teton, nor to UNC, nor even to my title as District Geologist, it only listed Chairman, ACLU, as my affiliation.

Therefore, I did not, nor would I mix professional with political matters, even if they were local in scope, such as the matter before us. The listing Dick is upset about must have been garnered by the reporter who included the reference to Teton and UNC. I will have words with her soon.

So, I stand here accused of something I had no part in or control of. Dick, I resent a man in your position to be this careless in your accusations, and I am sure the attorney next to you has been trying to shut you up on this matter. You or your attorney could have come to me first and inquired about the matter then together we could have descended on the newspaper and the reporter, and I would have supported that. But you, in your Right-Wing zealot's rage, falsely accused me, and you have attempted to embarrass me in front of my associates. Rest assured; your response here today will be reviewed by the National ACLU for the purpose of advising me of my options."

He sat down. After speaking with his attorney, Dick then said, "OK, men, what do you think?"

The silence was deafening, not even crickets, ... no one spoke, for at least 15 seconds. Then Bruce spoke.

Bruce said, "I don't know about the rest of you, but Mr. Campbell has adequately explained the situation and quite frankly I think you are out of line on this matter, Dick."

Then Art quickly said, "I agree," and then there was muttering from the rest of the staff supporting the views of Bruce and Art.

Dick then said begrudgingly, "Well, OK , if that's the way you feel. Have a nice lunch on Teton but be back at work by 1:00 PM." And he rose quickly and he left with his attorney through the glass doors.

After Dick was out of the building, the waiters came in to get their lunch orders. He heard someone say that as far as they were concerned the lunch hour starts now. They all agreed and didn't leave until 2:00 PM. After they went back to the office, Bruce came into his office and shut the door behind him. He sat down, and he asked, "What's up, Bruce?"

Bruce said, "I guess I should have told you before about Dick. He was a co-founder of the John Birch Society in 1958 and is an arch conservative. The Young Americans for Freedom (the YAF) is affiliated with the JBS and is the younger wing. I am a member of the YAF, more to keep my eye on the developments than believe in their far-right so-called conservatism. I want to say that you defended yourself well, but there will be repercussions in some way, knowing Dick. I can tell you that Dick has some kind of sway with Phil, and I think it has to do with he and Rack's disagreements. This will throw more fuel on the fire. So be prepared. I am glad Rack wasn't present because he would have exploded at Dick for being such an AH."

Then a few weeks later, Rack was gone, reportedly with a sizable severance compensation package. A few weeks after that, half of the Rack's staff was gone, and Bruce was the lone survivor. About that time, Phil decided for unknown reasons to fly his private single engine plane into a major thunderstorm, the wreckage was not found for weeks after his departure. Some say Dick had something to do with that, while others indicated Phil had some medical issues. His family didn't know what to believe, he later heard from Rack.

When he did hear from Rack months later, he privately apologized for not giving him a heads-up on Phil and his policy disagreements; but a non-disclosure agreement (NDA) he had signed when he first went to work for Teton prohibited him from speaking to staff in the event of his leaving Teton under any circumstances. Rack said that there was too much money that Dick was holding to risk it with any of his staff.

Sure enough, the next day, he received his "staff reduction" notice. He subsequently received a reasonable severance compensation in lump-sum form. It was sufficient to last 6 months at their burn rate. They pulled up stakes, rented a small moving truck, and headed for Denver, the best place to find a job as a geologist in mining or mineral exploration.



A few weeks earlier, Dr. Jay Lehr had called Maxine and asked her how to get in touch with him. They had just rented a small house in Denver, and he was about ready to start making appearances at the Denver geological society meetings. Jerrie had gotten a part-time secretarial job at a local business to make sure they had revenue coming in. One night he called Maxine to let her know what was going on and she said Jay Lehr wanted to speak to him.

A number of years later, Maxine and Jay Lehr had developed an odd relationship. She was in the Lancaster Hospital undergoing follow-up radiation therapy and had been admitted, staying a few nights, so they could monitor her blood work.

She told the story that one night she heard muffled moaning in the room next to hers. She got up and looked around to see if she could help, which had always been her nature. She had even worked for the Red Cross until she found out it was a profit-making group and paid the executives huge salaries and middle and lower staff next to nothing. She walked into the room where the moaning originated, and there was Jay Lehr, one his professors from Ohio State. She had met him before, at the Ohioana awards ceremony.

She approached him and said, "Dr. Lehr, is there something I can help you with?"

Dr. Lehr said, "Oh, Hi Maxine, I'm having a hell of a time, I had my knees operated on this morning and the pain now is just terrible. I'm having a tough time handling it."

She said, "Why don't I get the nurse to give you more morphine."

Dr. Lehr said, "I want to stay away from pain killers. They are bad for building muscles. If you'll let me hold your hand that would be enough until I get to sleep." Two or three hours later, Dr. Lehr drifted off to sleep and she went back to bed.

A few days later they both were released from the hospital, and they saw each other as they were being wheeled out together. Jay's lady friend/wife, Maxine didn't know which, picked up Dr. Lehr. Dad was there to retrieve Maxine. For decades later in almost any conversation with him, Dr. Lehr would often ask about Maxine, saying what a great mother you have.

And off to Columbus, Ohio they went.

He eventually made contact with Dr. Lehr, who had joined the NWWA earlier. He was calling to offer him a position to form a research facility for the NWWA and to work on contracts he was about to receive from EPA. He said on the phone the projects would be perfect for him to manage. They discussed salary and benefits and moving expenses, and in 20 minutes he had a new job, but they would have to move back to Ohio. Jerrie and he both had mixed feelings about that but agreed that it would be a good move. He mentioned to Jerrie that she could finish her degree work where she left off, which raised some enthusiasm from her for the move.

They all headed eastward this time towards Ohio in mid-summer. They took their time and visited what sights could be seen along the way. They decided they wanted to live in the northern part of Columbus in the newer neighborhoods, so they landed in a hotel nearby. The NWWA office was downtown in one of the tall buildings, but he talked Dr. Lehr into allowing him to set up an office at home. Dr. Lehr said fine, but he would need to attend staff meetings once a week, which were useful to maintain cooperation between membership-relations people and the research he was working on and to have "skull sessions" with Jay. That made sense.

They purchased an older black VW Beetle for Jerrie to drive to campus and a white 1969 Ford Thunderbird four-door black landau for him to drive downtown and around as needed. The tempo of their lives began to increase with more traveling within Columbus and around the U.S. for meetings.

He began to travel with Jay to D.C., mostly carrying his reports and files, but contributing whenever it was appropriate or when Jay encouraged it. Jay was a very good mentor. He was present for many of Jay's presentations at conferences and at other public events and helped in the preparations and crafting of his materials. Although Jay exhibited many narcissistic characteristics, he considered the devil-may-care and full-speed-ahead attitudes as positive features, not negative. But Jay was clearly a showman and

women flocked to get his attention. He was an incredible speaker and was a very good communicator. On one trip, he met his family in Washington, D.C.

The NWWA Research Facility was formed and the contracts arrived from EPA. Jay was becoming a major source of information for EPA to expand industrial environmental regulations, focusing on water, particularly groundwater. As part of the new Research Facility, he began to prepare papers, conference presentations, and continued producing abstracts of papers on groundwater and associated papers on geochemistry, hydrochemistry and on water well technology as the Abstract Editor of the journal of *Ground Water*, first appointed in 1964 while he was Dr. Lehr's Research Assistant at Ohio State in the Geology Department before he graduated with his bachelor's degree.

The scope of one contract from the Office of Water Resources Research, a pre-EPA office, was designed by the NWWA Research Facility, which was led by Jay Lehr and him to evaluate the status of water well construction technology to determine whether research developments in the oil & gas industry and in the mining industry could aid in the development of water well technology in domestic and rural water systems and in high-capacity municipal water well systems, from drilling to deep aquifers to down-hole geophysical logging to hydrochemical monitoring of aquifers.

In conducting the research for the contract, and upon the advice of Dr. George R. Gray, Chief Scientist for the Baroid Company (and Rice University graduate), he traveled to Houston to visit drilling-fluid companies and major universities with significant industrial libraries, such as Rice University, University of Tulsa, Colorado School of Mines, University of Minnesota, Penn State University, Indiana State University, and Ohio State University, of course, all of which covered both oil and gas drilling technology, geophysical down-hole logging, and mining drilling technology and geophysical down-hole logging.

Jay and he had also formed a Research Committee to provide oversight and guidance to the NWWA Research Facility by prominent groundwater professionals and water well contractors. As the research was wrapping up on this contract, he and Jay held a critical Skull Session to consider an idea he had developed. The concept was not just writing an EPA guidance document but to convert the research developed into a textbook to be produced by a major publisher. The first publisher he contacted was McGraw Hill in New York. After some negotiations, McGraw Hill agreed to publish the text and to distribute it around the world.

He began to draft the book based on his research to date. While he was drafting the book, he and his family moved to a large, historical home in central Bexley, which was to be demolished in a few years to construct a large high-end apartment complex. The place was beautiful, but showing its age, with big front gates and a broad yard of large 100-year-old Sycamore trees, many approaching 10 feet in diameter. There was a horse barn, and servants' quarters, and large columns stood at the front of the house. From the street, through the high hedges, it looked like an old southern plantation house. It was also to be used that year as the NWWA Research Facility and for NWWA Board Meeting and Water Well Journal Board Meetings because it offered a large dining room that could easily double as a conference room.

As the draft expanded, he hired a typist. Jerrie was busy working on her degree at Ohio State, while also balancing classes with managing David's and Julianne's schooling. Fortunately, the schools were nearby. The new secretary was a cute, little blonde, Suzie. She tested at almost 100 wpm with very few errors, and she was catching up with the draft production. Jerrie was also helping to edit the draft and re-writes. It was hectic during the drafting stage and Jerrie was showing signs of stress. Their relationship was deteriorating quickly. He was working hard on the research for the draft. Arguments were becoming loud

and often and, after a few months, David asked him if Jerrie and he were going to get a divorce. He responded that he didn't know and told him that he was sorry that he wasn't making Jerrie happy anymore.

Then one evening in the kitchen, in the middle of a major argument, Jerrie grabbed a knife and approached him, but he grabbed the knife out of her hand and threw it across the kitchen. It stuck in the wall high above the refrigerator. He told her, "That does it, we are done!" He moved out the next day and moved the NWWA Research Facility, with Jay's support, to a large apartment complex with three offices and bedrooms in the eastern part of Columbus, many miles from Bexley.

He was devastated about leaving David and Julianne and attempted to get Jerrie to drop them off for the weekends. She refused at first but then relented. It was difficult to tell how much damage was done to their emotional states, but he made an effort to see them often and to provide as much financial support as he could over the ensuing years.

Suzie completed the draft and drifted away from his operations, although she would return for visits on occasion. Wishing to have a memento of her accomplishments in supporting his book project, she borrowed his OSU graduation ring and it was never seen again. He then decided that he needed a research associate to help with the new contracts and technical membership needs of the NWWA. After interviewing a number of qualified applicants, he selected Lesley P. She was well educated, spoke well, made a good appearance, and was a good person. Coming from a Methodist family (her father was a Methodist minister in Columbus that Maxine knew), he hoped that she would be a skilled professional companion, which she was. A few years earlier, during the John Kennedy election, Maxine experienced weekly blasts from the Methodist pulpit about how the congregation should not trust JFK, being a Catholic who would get his instructions from the Pope. She and others on the church board would have none those kinds of attacks which led to the firing (or retiring) of the Methodist minister. She considered hiring Lesley's father in Columbus, but that never happened.



As the contracts grew in number and scope, the NWWA Research Facility grew in employees. They added a young man to help with the abstracting functions of the Facility, who grew fond of Lesley to no avail. It was at this location and during this time that he discovered that Bob Miller lived in an adjacent apartment. This was the same Bob Miller who was the pitcher for the St. Mary's High School in Lancaster with whom he had had a slight run-in. Bob was apparently marketing clothing for young people.

This was a period of renewed dating and new lady friends, having severed the relationship with Jerrie completely by this time. She had taken up with an Indian physics professor. To have some social life, he met Jason T. at a local club-bar, where he and his brothers constituted a musical trio that performed at the club. He didn't remember how it happened, but Jason adopted him and became his social director claiming that he needed to get out more. He would select young ladies, some divorcees, and would introduce them to him for possible dating, or not.

There was a need to add staff to NWWARF. One day, the General, aka Bill Hunt, called from California. He was the fellow at Ohio State who they used make fun of as a chief ROTC guy and sousaphone player in OSU Marching Band who once dotted the "i" in script Ohio. He said that his mining company had just laid off many of their geologists and that he was looking for a job. He told him he may have something for

him. He had spoken to Jay about adding another hydrogeologist to the NWWARF. Bill was hired, and he moved back to Columbus to become an integral part of the NWWARF.

A few months later, he also added another person to his Facility staff, Marion K. She was Jewish, about 45, was always very well dressed and had a degree in sociology. He soon thought of her as a possible replacement for him one day. During the interview, she presented her resume that indicated she had a bachelor's degree, but he instantly sensed she had more education than just a bachelor's degree. He pressed her and she reached into her pouch and pulled out another resume that showed a bachelor's in sociology, but a master's degree in chemistry. He decided to press her more and sure enough she produced a resume showing she had a Ph.D. in chemistry from Case Western Reserve. That he would believe. He confirmed her degrees later. He asked her why she did that and she said that she really wanted the job but didn't want to oversell herself. This was not the last time he would hear about the downsides of having a Ph.D. He was right, she would have been a good replacement.

Later in the interview, she mentioned that she had had a stepson who had attended Ohio State. When she mentioned his first name and the fact that he was gay and had problems dealing with it, it became clear that he was the same fellow that he and Geoff Grant and associates tried to turn straight with Sheila's help during his undergraduate days at Ohio State. He never told her about the connection.

After a few weeks on the job, she would always arrive early and come into his bedroom to rouse him for the day. She clearly had ideas, but he declined politely. When Lesley became his personal and well as his professional companion, she quit arriving early.

But a few weeks after that transition, Lesley noticed that Marion would leave for lunch in her Mercedes Coupe and drive around the *cul de sac* and park in front of an apartment in the same complex. Lesley noticed that Marion and two young men would occasionally emerge out onto the balcony, smoking. When Marion would return to the office, she often looked ruffled. Lesley, having an odd streak about her, would occasionally ask Marion if she had a rough lunch and point to her hair. Marion would hurry to the bathroom to fix her hair again. He never knew whether Lesley was envious of Marion or just held her in disdain.



Jason showed up one day driving a dark green XK-E-type Jaguar coupe. He went downstairs



to see it. Jason asked, "You want to trade?" He said that because he said he just loved his Thunderbird Landau with the forward-opening opera back doors. After inspecting the Jag, he said, "Sure." They exchanged titles after he had a car-repair shop have a look at it for any major problems. It was A-OK. He had not just acquired a new car but a XK-E-type Jaguar that was only a few years old and in very good condition with reasonable miles on the engine. Lesley liked it too. Jerrie didn't. David and Julianne loved to ride in it.

Lesley was warming up to David and Julianne, who were clearly very intelligent, worldly, and of free spirits and sharp language. David C. remembers Lesley threatening to wash his mouth out with soap. Lesley would have made a great mother to them, but that never happened.

He had just spent months giving presentations, preparing papers, book chapters, and signing autographs at conferences for the recently published text.

Water Well Technology³²
Field Principles of Exploration Drilling and Development
of
Ground Water and Other Selected Minerals
Published by McGraw-Hill, New York

It was published in mid-1973, contained 681 pages, a preface by Russell Schweickart, Apollo 9 Astronaut, and was fully referenced with an extensive annotated bibliography, appendices of miscellaneous tables, charts, formulae, and technical guides, a glossary of inter-industry technology, and a subject index. The book jacket was designed by Shayiah Fletcher and edited by Jerrie Campbell. After 12 printings, McGraw-Hill indicated it had sold more than 40,000 copies worldwide. It was favorably reviewed by professionals and a few years later he and Jay were presented with the 1975 *Ohioana Book Award in Science*.³³ Both books are still being sold on Amazon.com.³⁴



Another book he and Jay prepared during the period was in support of a major effort to reinforce the need for well-designed rural water systems,

Rural Water Systems³⁵
Planning and Engineering Guide
Published by The Commission on Rural Water

It was published in early 1973 and contained 150 pages, seven chapters on water system planning, well construction, well pump systems, water treatment facilities, pumping, storage, distribution systems, cost analysis and cost comparisons, and water system maintenance, followed by the references and selected bibliography of water systems development and a comprehensive subject index. It was well received by the rural water communities throughout the U.S. and by those in state and federal governments involved in rural water development and protection.

He received many invitations to visit universities, state geological surveys, and water-well contractor meetings and to provide lectures on groundwater and water well technology. He would generally respond by using commercial airlines, but to respond to areas that were within range of smaller aircraft he would ask Doug L. to fly him, if only because they could get to the destination and back faster than using commercial airlines. Doug L. became known as the formal NWWA Pilot and Photographer. He would upon a few occasions fly Jay Lehr to meetings as well and take photos of the event for use in the *Water Well Journal*, etc. Although this did build his confidence in Doug's abilities, they were seriously tested on one trip that confirmed such confidence. He had a lecture in Roanoke, Virginia and he and Doug decided that it made sense for Doug to fly him to the meeting and to take photos.

They flew down that afternoon and the lecture was well received by all accounts and Doug took a few photos. They discussed whether to layover and return in the morning or go ahead and night fly back to

³² For additional information, <https://i2m02yadzttt-ytjia02Ykwater-well-technology/>

³³ <https://i2m02yadzttt-ytjia.com/downloads/02NkOhioana75.pdf>

³⁴ https://www.amazon.com/Michael-D-Campbell/e/B001KCVO3Y/ref=aufs_dp_fta_dsk

³⁵ For additional information, <https://i2m02yadzttt-ytjia.com/rural-water-systems-planning-and-engineering-guide/>

Columbus. They decided on the latter after Doug checked the forecasted weather along the flight path. They were off the ground by dark in Doug's Myers 200 low-wing, single-engine plane and were heading toward Columbus about 300 miles ahead. About halfway, Doug was communicating with Indianapolis Control Center, who was telling Doug that a cold front had picked up speed, temperatures were dropping faster than previously projected, and that frost on the ground and icing conditions would be encountered along their flight path at their cruising altitude, but not at higher altitudes. The plane was neither pressurized nor had de-icing capabilities, so they could go maybe 8,000 feet but any higher and they would need oxygen, which they didn't have.

Doug discussed turning around and flying back to Roanoke, but the weather below 10,000 feet there also included icing, so he decided to make Beckley, West Virginia, and they climbed to 7,000 feet because he said they might need the altitude later, but he didn't know what that meant at the time. After a while, Doug handed him a flashlight and asked him to look at the leading edge of the wing out his window. He reported what looked like a white crust all along the leading edge. Doug said that sounded like rime icing and that was not good. About that time, the engine sputtered a bit. Doug said that the fuel in the carburetor was beginning to freeze-up. And then the tail stabilizer stuck until Doug hit the steering wheel hard with his palm and it came free again. Doug tried to climb higher. Doug had turned on the defroster to the front windshield, but it was freezing over as well, except for a small arch near where the heat entered the windshield.

After a few more minutes, Doug then said, "Look for landing lights; Beckley should be right in front of us by now." He leaned up and peeked through the clear arch and all of a sudden he saw a row of lights, but they were red, which meant a radio tower. He looked again as he saw the tower pass beneath the plane. He looked again and then saw off in the distance the two lines of white lights beyond off to the starboard. Doug asked what direction and he said 20 degrees to starboard. Doug turned 20 degrees and was approaching the line of lights of the runway now. They had been losing altitude for the past 15 minutes because the plane was building up ice. That's why they needed altitude. Doug was fighting the plane to keep it in the air long enough to make it to the runway, banging on the steering, adjusting the carburetor feed. Doug said, "This is going to be close, so brace yourself. All of a sudden he saw the landing lights below him and then he heard the engine quit and watched Doug keeping the plane aligned with the runway as it practically fell some 10 feet onto the runway. The plane bounced two times but the undercarriage withstood the shock and they rolled only a few feet to a stop. He said, "Good Job, Doug," who said in his normal cocky style, "Not bad for a stall landing," meaning the forward airspeed was at the point where the plane was no longer flying but would drop like a rock, which is what happened. The airport runway just happened to be below.

They sat there in silence for a bit and then Doug tried to open the plane's door, but it was frozen shut. In a minute or so, someone rolled up with a tractor, attached it to the plane, and pulled the plane and them to the small terminal area. Someone stepped onto the wing and began to knock off the ice. Doug finally was able to open his door. Someone also knocked the ice from around his door as well. As he walked around the front of engine he was amazed at all the ice that covered almost the entire plane. Doug was surrounded by people patting him on the back saying, "Great job of flying, boy" and exclaiming about the nature of his flight. They had been following his conversation with Indianapolis Center radio all the way down and pilots living near the airport were glad they made it because many were thinking they might have to go find a plane-crash site that nasty winter night in West Virginia.

They were taken to a nearby motel and bar where they spent the rest of the night celebrating their success. He was wishing they were home and was wondering how much of this he was going to tell his wife, Jerrie or Lesley. The next morning, they were taken back to the airport where the mechanics had gone over and cleaned-up the plane making sure the carburetor, fuel lines, undercarriage, tires, propeller, and important sensors were all in order, all at no charge to Doug. They flew back to Columbus without incident, and he never told Jerrie or Lesley

And that was that to mid-1973.



Chapter Nine

1973, Rice University and Forward



Rice University Campus, 1976

During this period, inflation had a significant impact on peoples' lives around the world with the UK inflation rate running at 8.4% and the U.S. running at 6.16%, built into the price of gas, food and bills in general, which in turn caused higher wages, much of which was caused by the Arab states restricting the flow of oil to countries supporting Israel as part of the Yom Kippur War. Arab members of the Organization of Petroleum Exporting Countries (OPEC) increased the price of oil by 200%. The start of a Recession in Europe caused increased unemployment and a 3-day work week in the UK. Meanwhile in the U.S., two important cases dominated the news with *Roe v. Wade* making abortion a U.S. constitutional right, and the start of the Watergate hearings in the U.S. Senate. Due to the price increase of gasoline, the Japanese car manufacturers with their smaller, more efficient engines had a significant impact on the U.S. car industry. Troubles were developing for President Nixon and his Vice-President Agnew.

NASA's Mariner 10 spacecraft was launched, with the mission becoming the first probe to study the planet of Mercury. The Mariner 10 probe also became the first spacecraft to visit two planets during a single mission, as it passed Venus on its way to Mercury. The craft sent over 12,000 images of the two planets back to Earth. The mission was considered successful and ended in 1975 as it began its orbit around the Sun that was to last many decades.

At long last, the United States ended its involvement in the Vietnam War after the signing of the Paris Peace Accords. Also, the Ohio State football program was in high gear, winning almost all its games (although tied with Michigan). Ohio State went on to beat USC soundly in the Rose Bowl.

Under the uncertain national and international conditions, and after he had completed the McGraw-Hill textbook and other publications, it was at this stage of his career that he decided it was time to go back to graduate school. He applied to four graduate schools: Penn State, Johns Hopkins, Cornell University,

and Rice University. Three were back east with bad winters, and one was in the Deep South, with hot summers. Jay Lehr offered to provide a reference letter, although he never saw it or asked to see it, because it went directly to the respective schools. He forgot to ask Dr. Sweet, Ralph Matthews and others who had offered.

Two weeks later, he received a phone call from Professor John J. W. Rogers, then Chairman of the Geology Department, Rice University in Houston. He said that after reviewing his material and after receiving Dr. Lehr's letter of reference, he wanted him to come to Houston to discuss graduate school. He wasn't aware that this was how it was done, but Dr. Rogers said he would make the airline and hotel arrangements. He flew down to meet Dr. Rogers and his associated professors. He was given a tour of the department and its facilities. It was a beautiful campus and he soon realized that Dr. Rogers was another person like Robert A., Rossi G., Jimmy R., and Jay Lehr, all of whom were special people who he had respected for their treatment of him over the past years.

During the tour of the Department, he noticed that the eastern part of the third floor of the geology building was empty. He immediately had the idea of moving the NWWA Research Facility to Rice University. He mentioned the idea to Dr. Rogers and he too saw the merit in the idea. He knew that Jay would like the idea; he could bring EPA contracts with him, perhaps hiring graduate students, and the facility could focus an early environmental emphasis for the Geology Department and would improve the stature of the NWWA Research Facility. Dr. Rogers took him to meet the Dean and they discussed the idea. The Dean also saw the merit and suggested to Dr. Rogers that he should recommend the *Eleanor and Mills Bennett Fellowship* for him. This fellowship included a handsome monthly stipend for three years.

While walking back to the Geology Department, they passed by the statue of William Marsh Rice himself, the founder and first major benefactor of the University and then went into the large Fondren Library building he had visited before while conducting research for the textbook (WWT). Dr. George Gray of Baroid, a major drilling fluids company based in Houston and member of his NWWARF board, had indicated that Rice had one of best libraries in the country on such technical matters. Dr. Rogers showed him the extensive card catalog and outlined more about the library that he did not know. They walked through the Student Center, which looked comfortable and was remarkably similar in layout to the student center in California at the SBVC. They then walked by the famous graduate student hangout, *Valhalla*, a little dungeon-like facility for talk and beer.

Approaching the three-story geology building, Dr. Rogers said, "What do you think?"

He said, "Count me in," and with that commitment he began on a new course in his career.

He was conducted into Dr. Rogers' office and met the Department secretary, Martha Lou, a trained geologist, whose function was much more than the title would suggest, as he would soon learn. She was the power and the keeper of all department history and stood as the gatekeeper to Exxon, Shell, and other multinational oil & gas companies for those graduate students who wanted to find employment in the search for oil and gas after their research had been completed.

In his office, Dr. Rogers indicated that one of his plans for the department was to bring technical diversity to his Geology Department. Because he had just spent 10 years in industry working on mineral exploration and environmental projects, Dr. Rogers had decided that his presence in directing early EPA projects on groundwater development and other projects involving mineral exploration would expose the graduate

students and staff to a perspective beyond pure academic geological research. Rice was well known for world-wide applications of basic geological and applied geological research in the search for oil and gas but not so much for that needed in the developing area of geological research for environmental and mining projects for other needed mineral commodities.

Dr. Rogers told him that when he read in his McGraw-Hill textbook that he had also identified the lack of transition from academic research to applied industrial needs, he knew that he was the person to begin that transition in the department. While they were talking, another professor appeared in the doorway. Dr. Rogers introduced him to John A. S. Adams and they shook hands. He could have been related genetically and in culture and in manner to Ludwig Koch of Conoco, plus he too had a stinky, little cigar stuck in the corner of his mouth. Dr. Rogers told Dr. Adams about his uranium career in the U.S. and Australia and said that maybe the two of them should talk about projects. They agreed and Dr. Adams asked Dr. Rogers to send him his CV. He agreed and Dr. Adams departed. Dr. Rogers's comment about uranium, he said, was because he and Adams had published major works on the geochemistry of thorium and uranium earlier. He wanted to work on a uranium project, but he also knew that he shouldn't lock him into one specialty.

In referring to his earlier research, he told Dr. Rogers that he also had realized that the geosciences and engineering fields had compartmentalized over the years and that a specialization within one sub-field did not communicate much with the other. This was the general subject that Dr. Rogers also had in mind when he encouraged him on the phone to come to Rice. They both agreed at the time that geoscience research for masters and Ph.D. programs is seldom published with the end-user in mind (for professional geoscientists employed by industry or government), but only for use by their fellow compatriots in the sub-fields. The major exception was that a few universities, like Rice University, had funding from the major oil and gas companies and provided a pipeline to employees and geological research for oil and gas exploration around the world. This often, but not always, translates into contributions to the literature of industrial geoscience, such as that appearing in the AAPG journal, the AIPG publications, and similar professional societies and associations. Other fields in the geosciences have little such support by industry. Dr. Rogers agreed.

They set a date when his group would arrive at the department and where specifically they would set up the NWWA Research Facility. Dr. Rogers said that he would let Martha Lou know when and where and indicated that he should ask her when they arrived if they needed anything to get settled. With that said, they shook hands and he flew back to Columbus.

Lesley met him at the Columbus airport and he told her what had transpired about setting up the NWWA Research Facility in the Geology Department of Rice University. She was surprised, happy, but concerned. All these thoughts were reflected in her face. He then asked her if she would like to go to Houston. She said she would have to think about that. That evening they sat on their waterbed talking about the logistics of the move. He suggested that she could take her little Morris Minor car to give her full latitude should she want to bail and return to Columbus or go elsewhere. They also agreed to take their relationship slowly and let it develop naturally and that they had to be careful about the hugging and kissing. On that she agreed.

They packed up the rental truck with his library and files, and three desks and chairs, and other office materials. Bill H. would be driving the truck towing Lesley's little car behind. Lesley would ride with him in the Jaguar to Houston, although he decided that she should be with Bill for a day or so to keep him company. One morning all was ready, so off they went on their new adventure with his crew, but this time without Jerrie and his children, David and Julianne. They would go in tandem to make sure no one broke down along the way. In the meantime, Marian was reassigned to the downtown office with Jay and the NWWA staff. David T., the fellow fond of Lesley, found other work.

NWWA Research Facility Staff (in Front, L to R: David T., Lesley P., He, and Bill H.), with NWWA Research Committee (Rear, L to R: Truman Bennett, well-known hydrogeological consultant in Columbus area, Professor James C. Warman, Auburn University, and Robert B. Heater, Master Water Well Driller



As they passed through Kentucky, Arkansas and Northern Texas, the evening meals with the three of them were great fun. They arrived at Rice after fighting through the Houston traffic one afternoon without mishap. Before they moved in, however, he had Bill H. get a local firm to install carpet in their three offices.

Dr. Rogers and he agreed that he would bear two simultaneous responsibilities. One as a senior graduate student. The second was as the Director of Research for the NWWA Research Facility. The business of hydrogeology was on the eastern side of the corridor (aka NWWA Research Facility) and academics was on the western side of the corridor (aka Graduate Student Offices of Eric Nelson and him). He would reinforce the distinct roles he was undertaking by hanging two hats, one on the corridor wall of the east side and another on west side to remind those who entered. He soon emphasized the purpose of the NWWARF in an editorial in the journal *Ground Water*.³⁶

The carpet was installed and the next day they installed the NWWA Research Library, desks, and chairs. When finished, it was a working office. Three phones were installed the next day. Bill had an interior office, next to the center lab, Lesley had an interior office, and he occupied the big office, with desk and table and two visitors' chairs, plus floor-to-ceiling shelves of his library, with five file cabinets under shelves on one side of the office.

Classes didn't begin for a few weeks, so they were able to establish the office rhythms before they began. Professors and graduate students arrived for the fall semester and one by one they would pay a visit to the groundwater group up on the third floor with the shingle hanging out in the breezeway stating "NWWA Research Facility" in bold white letters with dark-blue background. He parked his Jaguar in the faculty parking next to the Geology building. Some said that he was the only Rice graduate student who ever drove an XKE Jaguar to Rice.

He was managing three EPA contracts through NWWA while at the NWWA Research Facility at Rice. One of his responsibilities was to encourage the new EPA to develop groundwater research centers to focus on important topics. He was working with Jay Lehr and his contacts in the EPA Research Center in Ada, Oklahoma and Washington, D.C. to get the Geology Department at Rice University appointed as one such center of competence.

³⁶ <https://www.i2mconsultants.com/downloads/ela-iet/GWEd1273.pdf>

Another project involved the development of water-well standards. They formed four regional Committees consisting of hydrogeologists and water-well contractors to develop water-well standards within a managerial system for contracting functions. The four committees came together to form national standards. He was responsible for managing the NWWA Research Facility staff in writing the standards and the final report to EPA.³⁷ He also wrote Technical Notes for the [Rural Water News](#).

He also expanded the staff beyond Bill and Lesley by doubling and then tripling the office space. He hired a young, bright, but prickish sort of fellow, Lorin, who was thinking about changing majors, to work on abstracting articles in building the literature base of the NWWA library through funding from one of the EPA offices in Washington, DC. Lesley also interviewed a number of young women with skills and hired an attractive young lady, Mary, a graduate of the University of New Orleans, who was attending courses at Rice in English Literature and who also had an interest in archaeology. Emily and Stephanie were also hired by Lesley to assist Mary, along with a few graduate students from time to time when the need arose during their writing of the EPA National Water Well Standards. He provided oversight for Lesley and Mary, who did an outstanding job of coordinating the functions of the NWWA Research Facility at Rice. He was also performing his duties as graduate student by attending classes and drafting papers in his other office on the other side of the corridor. He presented seminars on hydrogeology and economic geology under the guidance of Dr. H.C. Clark, Associate Professor of Geophysics.

Steven G. was a Director of the Commission of Rural Water and the National Demonstration Water Project and would come from Washington, D.C. to meet with him on the rural water projects. They collaborated on a number of papers and book chapters. They enjoyed each other's company and often went to the nearby movie theater when he came to town.

Rudy S., a Rice Adjunct Professor, was a hefty fellow, who specialized in hard-rock geology. They had become friends and even had co-authored a paper on geological data needs for an EPA conference in Dallas in 1975. One day, Brother Steve C. visited them from Ohio with his new Aero Commander airplane that Steve had always wanted. It was a high-wing plane that allowed magnificent views of the ground passing below. Steve wanted to take them for a ride so they made plans to take a trip that weekend to South Texas. Rudy and his new wife were invited. The day came and they departed from Hobby airport. The destination was an abandoned U.S. Air Force landing strip, Steve located it on a map next to a bay to the Gulf of Mexico. They landed without issue and had a good afternoon at the isolated beach nearby. As the sun began to fade, it was time to head back to Houston. The five of them, with coolers and umbrellas, boarded Steve's plane. They began the roll down the runway gaining speed. Just as Steve rotated to lift off, he was at the very end of the runway where Steve hadn't noticed a mound of weeds, which the wheels of his plane plowed through with a bump, but Steve powered through the take off and they were safely airborne. Steve turned to him and said, "We were heavier than I thought. That was close." Everyone looked at each other with raised eyebrows, but then settled in for a comfortable flight home.

A few weeks later, the Geology Department held the annual Halloween party. One function was apple-bobbing. Rudy got the idea to suspend him over the barrel of water to bob for an apple, giving him a bearhug and then holding him over the barrel. In the process of twisting, everyone heard a noticeable crack. That was the sound of two of his ribs cracking. Rudy put him back on the ground and he was in considerable pain. X-rays later showed two cracked ribs. The injury took three weeks to heal with the help of a heating pad he wore around the office. During that period, when he would need to go to some other office in the building, he would first need to find an electrical outlet before the meeting could commence.

³⁷ <https://www.ela-iet.com/MWWCP75.pdf>

Rudy apologized profusely, but this was not the last time Rudy would cause him irritation.

The next year, Dr. Rogers decided to leave Rice for the University of North Carolina at Chapel Hill where more funding was available for his geological research. Dr. Rogers invited him and Lesley for dinner one Sunday to announce his departure. Dr. Rogers apologized for deserting him, but he made it clear to Dr. Rogers that he supported his move as he felt it was necessary and that he would be fine. He developed relationships with Dr. Baker to perhaps the work in isotopes and with Dr. Clark to work on Houston faulting or other research items.

Dr. James Lee Wilson then assumed the department chairmanship. He knew of him as a world-class paleontologist, stratigrapher, and sedimentologist specializing in carbonate geology. He had little interest in carbonates, however, primarily because groundwater in carbonates generally occurred in solution channels, and fostered the general view held by many people that groundwater occurred in underground rivers. Porous-media flow had little role to play in most carbonate rocks, except in the pressure-distribution systems that functioned in a general way like those in porous media. Underground rivers stuck in many minds, especially the water-well diviner's, whose "magic" is still applied in some quarters.

In a social encounter once with Dr. Wilson, he shared those views and Dr. Wilson said that he should broaden his view of the subject by taking his class in carbonate geology. Later that year, he decided to take the carbonate course, but that simple decision was to change the course of his career. Before the semester began, he had been invited to give a paper on groundwater-development procedures at a conference in Sydney, Australia, which included paid airfare and lodging. But the problem was that it was scheduled during the semester he was about to take Dr. Wilson's carbonate class, which included a class field trip to northern Mexico to be held at about the same time.

He spoke to Dr. Wilson about the conflict, and he said that he could find something for make-up work after he returned. They agreed. During the semester, he and Bill H. prepared two presentations for the Sydney conference and off he went. This was the trip mentioned earlier in these memoirs of taking a random taxi to the hotel in Sydney and discovering the taxi driver to be none other than his friend, Jeremy's boss, John, who had just been released from prison for some kind of stock market fraud.

The conference went very well, and he returned to Houston as soon as possible to resume his class work and director duties. The carbonate class had just returned a day before from their field trip to the northern Mexico carbonate mountains west of Monterey. He sought out Dr. Wilson for his make-up assignment. The first was to prepare a comprehensive bibliography of trace fossils in carbonate rocks, but he then laid the bomb on him. Dr. Wilson said that he had missed an important section of samples during their field trip to Mexico that Dr. Wilson needed for one of his papers he was working on. He asked if he would go to Mexico during Christmas break, alone, to measure and describe the subject section and retrieve the carbonate samples Dr. Wilson missed. At the time, he was only mildly irritated, but later concluded that it was an outrageous request. But he agreed to make the trip because Dr. Wilson had asked him.

As he finished finals, the trip was being arranged by getting a Rice field vehicle prepared for the trip. Jerrie called to let him know that she and the children would be in Monterrey over Christmas and were planning



to come by Houston after the holiday. He got the idea to visit them in Monterrey for Christmas after he performed his task in the mountains nearby. She thought that was a great idea and so they planned the trip. He first wanted to make sure he knew where to go so he took a map to Dr. Wilson and asked him to show him the route to the specific section he wanted measured and sampled. He soon realized Dr. Wilson wasn't all that keen on showing him and he couldn't figure out whether he was being obstinate or just didn't know how to help with the map. Dr. Wilson had been there many times and didn't need a map.

He had received instructions from Jerrie where they would be in Monterrey so off he went to see the carbonate mountains and then his children for Christmas. He arrived at the border of Mexico and was being processed by the Mexican authorities. He moved along the queue and, at the appropriate time, he presented his passport to the official across a high counter. The officer looked at it and flipped through some pages and then looked at him and said in broken, but understandable English,

"You'll need to get your hair cut before we let you enter Mexico. My brother is just down the street, he is a barber." Having said that, the official opened a counter drawer, deposited his passport, shut the drawer and walked away into another room.

He was stunned at what he had just heard. He loudly replied, "Are you kidding me?" just as the official disappeared around the corner. He did have long hair under his field hat in a ponytail down his back. He quickly assumed this was a set-up of some kind. He noticed a very large Mexican policemen at the doorway he had just passed through from the U.S.A. He decided on a plan, the only one that seemed plausible at the time. He hunched up on the counter with his chest and reached over and down to the counter containing his passport; he pulled open the drawer, took the one on top and looked at it. It was his. He then slid back with feet down on the floor, turned and began walking back toward the big Mexican cop.

The police fellow held out his arm and said, "Stop! You cannot go back through here."

He said very loudly, "Get the hell out of my way," and brushed past the cop. For some reason, he allowed him to slide by and continue toward the gate on the American side of the border. As he arrived, an American policeman appeared in his way.

The U.S. border guard said, "What's going on? What's all the yelling about?"

He explained what had just happened, as a couple more American border guards showed up to help with the apparent disturbance. When he finished recounting what happened, one of them said, "You are kidding? They told you to get your hair cut?"

He said, "I am not kidding." All the guards looked at one another in disbelief.

One of the U.S. Customs Agents appeared and asked him to follow him. He said, "Give me the keys to your truck. One of them over there is trying to keep the vehicle." He gave him the keys and he saw him walk in the direction of Mexico. After a few minutes, he saw the truck come through the gate back into the U.S.A. The Customs Agent got out and joined them where he was sitting.

The Agent said, "Something weird is going on over there. They are very pissed off about you refusing to comply and forcing your way by the Federale. I would forget about going to Mexico," and then pitched him the keys to the truck.

He said, "I already have."

The Agent then said, "Let's have some fun with those bozos. Follow me." He took him to the line where they inspect passports of people coming from Mexico into the U.S. and showed me a place to sit and watch.

The next distinguished-looking Mexican person who came down the line was halted and taken aside and was given some sort of objection that was getting the gentlemen very irritated. He took his passport and came over to him and said, "Take this passport and pretend you are inspecting it," which he did. Then, he added to the script by asking him to shake his head in a "no response" and the Agent then handed the passport back to the gentlemen and was told that he had been denied access to the U.S.A. The gentlemen was spitting mad. His friend, the Agent, and he watched as the gentlemen went back to the Mexican side. A few of his policemen had gathered and talked with him, as he pointed in their direction.

After a few minutes, one of the Federales came to the gate and motioned to the Agent that he wanted to speak to him. He did and after few minutes came back and reported with a big smile, "They said they wanted me to give you an apology from them for giving you a tough time, and that you would be more than welcome to visit Mexico."

He said, "Tell them their apology is not accepted and that he will never spend another dime in Mexico again."

The Agent returned with his message and all the Federales raised their arms with a middle-finger salute that he quickly returned.

The Agent said, "I'll give them more shit later. Maybe this incident will stop the BS like this in the future."

He apologized for causing the trouble, but the Agent said that the incident interrupted an otherwise boring day, which was a good thing.

They shook hands and he went to the truck and turned it around and drove to the nearest restaurant in Laredo to ponder his next move. After having a burger and fries, he checked into a pleasant hotel nearby and called Jerrie in Monterrey. She answered and he explained the incident. She was disappointed because they had made some special arrangements for him, but she understood that the Federales could be difficult at times.

They decided they would meet him at his hotel, and they would have Christmas with him in Laredo. They arrived a few hours later and David and Julianne seemed to be having fun. He had thought about asking Jerrie to go back to Mexico and, with his hammer, camera, and sample bags, at least get the samples that Dr. Wilson really wanted, but that was too much to ask Jerrie to do. That would have satisfied Dr. Wilson, however, he thought.

They spent a couple of days together, and then he left for Houston and they left for California. Jerrie had said that she was thinking about taking the children on a world trip to Europe, Middle East and maybe to India and Sri Lanka, which he opposed, but Jerrie and the children seemed to be excited about it. He reminded her that he could only afford around \$300 a month for supporting the children during those times.

He returned to Rice and immediately found Dr. Wilson to explain what happened. He was sympathetic but he could tell that he was annoyed. He made a point to attend the remaining carbonate classes and

participated in the class as much as he could, but he remained convinced that carbonate classifications by Folk and others in the field embodied confusing and contradictory premises, although he didn't let on.

As the Fall semester grades were distributed by Martha Lou just after New Year's, he checked down the list of his classes, all "As," and then boom, there it was at the bottom, a B-. Such a grade that no graduate student was supposed to get. He immediately sought Dr. Wilson out and, although it was known by many that he was as a very nice, gentle person, this was an insult that he could not overlook. He came into his office and Dr. Wilson looked up and said, "Hi Michael, how's it going?"

He said, "I'm fine, until I received the grades...all As, but your carbonate class."

Dr. Wilson said, "What about it?"

He said, "a B- and no credit for helping with your carbonate book and attending and contributing during your class."

Dr. Wilson, "a B- ?" he reached for a notebook and began to look for something and said, "Rudy used my notes and paper grades and did the final grading. I see that he made a note that you didn't attend the field trip. I thought I had a conversation with Rudy about that, but I guess not."

He said, "So are you going let that stand?"

Dr. Wilson said, "Well, Rudy did the grading."

He said, "But you are my professor, not that nimrod hardrock Adjunct Rudy fellow, and you knew the details, my tasks of the carbonate book glossary and my participation in class." He could tell that Dr. Wilson couldn't have cared less and was apparently oblivious to the matter.

He turned and left the office and closed the door solidly. Martha Lou was coming down the corridor as he came busting out the door. He said briskly to her pointing toward his door, "That guy is out to lunch," and hurried on. He rushed to see Dr. Baker and asked him if he would take him on as his Advisor, to replace Wilson. Dr. Baker said, "Of course." He said that he wished that he had asked him earlier to begin to work on his next project on siderite isotopes in his lab after his master's work was finished. He had definitely made a mistake allowing Dr. Rogers's designation of Dr. Wilson as his advisor to stand, even though he was the new Chairman.

Over the ensuing months, he picked up some attitude from Martha Lou now that Dr. Rogers was gone. He had heard from the GSGV (aka the Graduate Student Grapevine) that she was fully committed to the oil & gas students and promoted women in general, but not so much for the rest of the males, as was the case in part with Dr. Wilson, albeit world-class, according to Ken M., the unofficial Chairman of the GSGV. There were also rumors usually spread at the primary office of the GSGV located at *Valhalla*, where loose lips and big mouths emitted more recent rumors that Lorin had a thing for Mary, and that Bill was very fond of Lesley.

Even Mohammed G., a Libyan graduate student, was fond of Lesley. One day, he came into his NWWRF office to visit him, and Lesley no doubt, but this time he wanted to talk to him about uranium geology. He had heard from Kevin B. that he had substantial uranium industry experience as a senior geologist in a major uranium company. Mohamed indicated that one of his close relatives was the Chief Geologist for the Libyan Geological Survey and asked if he would be interested in a consulting assignment by going with him to Libya to investigate the uranium potential of an area along the border with Niger. His reaction was

positive and they discussed his fee. Mohammed subsequently began to arrange the visa and flight arrangements for the next month. A few weeks later, he received a telephone call from a woman purporting to be from the U.S. State Department. He challenged her authenticity, thinking it was a sham of some type, and asked for her number so that he could call her back. She did and he did and reached the main switchboard of the U.S. State Department. Having confirmed her authenticity, he apologized and then asked her for the reason for her call.

She said, "We understand from your visa application that you are planning a trip to Libya with a graduate student, Mohammed G., there at Rice University."

He said, "Yes, that is correct."

She said, "We know of your substantial experience in uranium exploration, and we suggest that you not go on the trip."

He said, "Why not?"

She said, "As you likely know, Niger has developed substantial uranium reserves in the northern part of that country. The mountains in southern Libya might have been the source rocks for those deposits and there may be undiscovered uranium deposits in the sediments along Libyan side of the Niger border. Your expertise could play a role in Libya developing its own source of uranium, which could be enriched to make nuclear devices. As you know, we have had our differences with Mr. Muammar Gaddafi."

He said, "I see your point."

She said, "And further, we don't want to deny your trip because that could draw attention to the subject and to the area, so we ask that you find personal reasons to decline Mr. Mohammed G.'s invitation, without tipping him off that you have been warned not to go."

He said, "Consider it done."

She said, "Thank you for serving your country in this unusual way."

He said, "I'm glad that you folks are on the ball. I wouldn't have thought about the ramifications of such a trip until after the fact."

She said, "Thanks again and have a good year."

He later explained to Mohammed G. that his classwork was piling up so he couldn't go out of town, maybe next year. Mohammed said he understood and nothing more was said on the subject.

But there was yet another incident with another professor at Rice that he wasn't soon to forget. The class was Lunar Geology appropriately taught by Dr. John A. S. Adams. As indicated earlier, Dr. Adams reminded him of Dr. Ludwig Koch. The rumor went that Dr. Adams would introduce himself in social events by saying, "I'm John A. S. Adams, Ph.D. Chicago, 1951," which caused many people to label him as a raging egocentric elitist. But he found that Dr. Adams was an exceptional lecturer and was even pleasant with graduate students, including himself. The issue arose, however, concerning the report the class members were assigned to prepare. He decided to conduct a review of potassium-uranium systematics and their geologic implications of Moon-Earth meteorite origins, which involved gathering all of the available geochemical data from the Moon, from both U.S. and Russian missions. He submitted and presented the report to the class and needed to discuss his findings further with Dr. Adams. After a few days, he went to Dr. Adams'

office where he had his large map of plotted values and report spread out on his desk, with other papers, of course. He sat down and Dr. Adams said that his report was very good, and it had discussed some important matters. He then said something that astounded him.

Dr. Adams said, "I am going to whip your report into shape for publication and you can be 3rd author."

He said, "Who's the 2nd author?"

Dr. Adams said, "That's a friend of mine in NASA."

He said, "Well, because you have recognized that the paper would be based on my ideas, shouldn't I be first author or at least 2nd author?"

Dr. Adams said, "It doesn't matter, authorship is based on seniority in the field, not on whose ideas they were."

He said, once again, "Are you kidding me?" and quickly pulled the plotted map and the green three-ring report binder out from under other papers, and assembled them, then stood up and said, "I don't think so," and departed. In discussing this matter with the other graduate students to make sure that he wasn't being short-sighted, the reaction was that this wasn't the first time Dr. Adams attempted similar activities. One of his recent graduate students found him doing the same thing with his dissertation and stopped him. But when the grades came out after that semester, Dr. Adams gave him an A-, which was a sign of only slight disapproval.

The Graduate Student Grapevine allowed that a few years after he had left Rice, Dr. Adams went on a trip to Moscow to attend a professional conference and came home with Dr. Tatiana Streltsova, a woman of about 45, who had studied under M.S. Hantush, a well-known hydrologist. Dr. Adams and Dr. Streltsova married after only a few months, and she went to work at Exxon in Houston. As part of his role as a member of the Editorial Board of the journal *Ground Water*, he spent memorable lunches with Tatiana discussing hydrogeological matters and found her to be brilliant and friendly, albeit somewhat stiff, as might be expected. Dr. Adams and Dr. Streltsova had much in common, but were from separate worlds, he remembered.

During mid-1975, he was becoming incredibly busy, he recalled. Project after project came his way. A report encountered in one of the articles abstracted for the NWWRF database suggested that anomalous uranium was present in the groundwater in the western high plains of Texas. He had just made contact with a fellow in Midland, Texas, who had an interest in frontier uranium exploration. He had come across some oil & gas drilling geophysical logs showing some anomalies in the gamma traces in the Strawberry Trends at some depth. He flew to Midland and visited with the fellow and spent time in the Midland well-log library. He concluded that the Tucumcari and Clovis quadrangles had uranium potential in the Tertiary and in the deeper sediments of Permian age. The fellow in Midland provided the funds to conduct an area-wide sampling of the groundwater from the area's numerous water wells. He engaged two reliable Rice graduate students (David T. and Chuck W.) to do the sampling and to keep a log of the physical conditions at each of the wells sampled, outside faucet, presence of water softener, etc. They subsequently did an excellent job and the hydrochemical data that were produced showed a couple of areas with greater than 5 ppb uranium in the groundwater. These findings led him to develop the concept that a widespread program was needed to evaluate the whole of the U.S. for uranium in the groundwater via water-well sampling. Such a program could be expanded to include other elements as well, which

would constitute a database of hydrochemistry that would be useful in environmental studies as background-sample data. This would allow the question “a single elemental concentration in groundwater compared to what?” in terms of a hydrochemical background to be addressed.

He prepared a formal Rice University proposal addressed to the personnel he knew in the U.S. ERDA (predecessor to DOE) in Grand Junction, Colorado, using the two Texas counties (i.e., Tucumcari and Clovis) as examples to develop the groundwater sampling protocols to apply to all the selected USGS Quadrangles in the U.S.-wide program. Mary helped to prepare the detailed proposal and she personally delivered the proposal to the Grand Junction Office after taking airline flights in the winter from Houston to Denver and then to Grand Junction paid for by Rice and the NWWA Research Facility.

Months passed and there was no response. In early 1975, they saw in the general geological news that a new government-sponsored effort was to be introduced called the NURE Program (or the National Uranium Resources Evaluation program) that involved sampling of water wells in selected USGS quadrangles throughout the U. S. It also involved sampling streams, stream sediments, and soils. Those in government service in Grand Junction at the time should have had a guilty conscience for at least not acknowledging their proposal and their contributions to the initial idea. The NURE program database remains as one the most useful government science-related programs ever implemented supporting both uranium exploration and environmental investigations in the U.S.

As the year came to an end, the graduate students decided to have a New Year’s eve party starting at *Valhalla* and then moving on to a nearby bar. He was noticing that Lesley didn’t seem to be all that happy. He was thinking only in passing that maybe one of the rumors were true, but he realized that he really didn’t mind. Lesley was very sweet and a good kisser, but his interest was fading fast and maybe he was pushing that or maybe she was just feeling the same way.

He found himself spending more time with the other ladies at the party than with Lesley, especially since he saw Bill and Lesley talking intensely in the corner. He found that David T’s wife, Sandee, was a real barnburner and came to think a lot of her over the next few months, but she was married. He also found himself talking with Mary more than usual and wondered why Lorin was no longer hanging around.

The next day, everyone gathered at his apartment at noon to watch the Rose Bowl, probably because he had the largest color television set. But Ohio State lost to Southern California, David T.’s alma mater, 18 to 17, which set the stage for the rest of his years at Rice for New Year’s Day football and for decades after. He had become a one-team, one-sport fan of the Ohio State Buckeyes.

A few weeks later, Lesley decided to go home after she stated her position, “You apparently still do not have long-term plans for us and I’m not sure I could deal with your previous family, so I’m going back to Ohio. I also have a standing job offer from one of the members of the Research Committee in Alabama that I may look into at some point.”

He said, “I’m sorry to hear that,” and then gave her a hug and left their apartment and headed back to campus. That was the last time he saw sweet Lesley. Years later, Doug L., one his brother’s friends, told him that about that time his brother, John L, was also fond of Lesley. He remembered saying to Doug that he didn’t know they even knew each other. John L. was an aerobatic stunt pilot and was rather well-known around the country. Whether the former was true or not was another matter. Doug would lie to his Priest, so who knows.

He spent the next few weeks editing and re-writing reports and working on new papers before the next semester began. He and Mary had begun to spend a lot of time talking about all manner of subjects. He found her to be exceptionally intelligent and encouraged her to continue in the graduate program there at Rice. It was obvious that she would have been well accepted by all the professors. She not only had the brains, but she was a strikingly beautiful woman. She dressed well, but not flashy, and only wore a sweater once in a while, he remembered. As he began to think of her more often and realized what it was about her that caught his attention. She reminded him of Mighty Mouse's girlfriend, Pearl, as odd as that may seem to some. She was the first representation of a desirable girl that stirred in him, even before Sue, the Sheriff's daughter, for that was a doctor-nurse relationship, while Pearl was entirely something else even more personal.

He and Mary discovered they had a lot in common. Like him, Mary had begun wearing glasses and taking music lessons in the 3rd grade. They both had had a stage fright incident during a recital, he while singing a solo and she while playing the piano. Their families were longtime members of the Methodist Church and the Democratic Party. They both were the parents of children of similar ages and they both loved cats. Mary also had moved to Houston in the summer of 1973 with her husband, Lee, who had been accepted to Rice University graduate school in Physics with a full fellowship. For a while, things had gone well. Rice campus was a beautiful and exciting new world. She decided to apply to graduate school too, in English, and was accepted with a tuition waiver. She told him how the rigors of graduate school had taken their toll and that she and Lee had recently decided to separate. She had withdrawn from graduate school, realizing that a future as an English professor was not what she wanted. It was a difficult period and she needed a friend.

They spent hours talking about family separations, a subject that he knew something about. They began to spend time together in Valhalla, and at a favorite sandwich shop in the shopping center adjacent to campus. Mary confided in him that she had had a complicated on-again, off-again history with Lee, which had involved a teenage pregnancy and adopting out a baby son due to pressure from their parents, who had insisted that they were too young to raise a child. Later, they had gotten back together, married, and had another son, David H, who was now a handsome little boy of 5 years.

One day, on the way back to the office after spending hours talking at Valhalla, they entered the elevator in the geology building as friends but emerged as more than that. On the way up and alone in the elevator, they looked at each other and they knew instantly where their relationship was headed, like two magnets merging. Although being of admittedly opposite polarities in personalities, she being introverted, he being slightly extroverted, but when they became close, that's when they merged into a hug and a long kiss and thus began a loving, though occasionally bumpy, relationship that persisted for decades. No wonder, he recalled, because they were opposite personality types, according to Myers-Briggs, he being an ESTJ and she an INFP.³⁸

³⁸ https://en.wikipedia.org/wiki/Myers%E2%80%93Briggs_Type_Indicator#/media/File:MyersBriggsTypes.png

He lived in a two-story apartment on Wake Forest a few miles from campus. It was used as a base primarily for a venture by his brother's friend, Doug L., called American TransAir (ATA), that leased diverse types of planes for short-term private and commercial purposes. Mary served as Office Manager for the day-to-day operations of salesmen going and coming. It was here that he invited Mary to come for dinner that he cooked especially for her. A steak from the barbeque, the best ever, she claimed. A few weeks later, he took her and son (David H.) with him on one of his trips to Washington, D.C. to meet his parents and family who happened to be visiting DC for an outing.



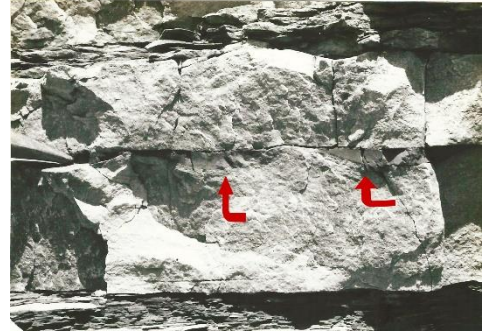
Later, he convinced one of his graduate school friends who had finished his Master's degree earlier to look for possible ATA clients in the oil & gas industry. Butch W. accompanied him to Columbus to meet the owner of ATA and even to meet his parents in Lancaster. He sold one contract, but he wondered whether Doug L. ever paid the fee to Butch. After about six months, they pulled the plug on ATA. It was too early for such an idea.

About this time, the Houston press was making all sorts of wild claims about the land-subsidence problems the Houston area was experiencing with the growth in population and increasing pumping of groundwater for Houston's water supply. He thought he should speak up on this issue, so as Director of Research of the NWWA Research Facility at the Geology Department of Rice University, he called a press conference to be held at the Shamrock Hotel near the Rice campus. A fairly substantial number of the press media showed up. Dr. H. C. Clark attended the conference with him and he made a presentation on the need to spread out the locations of the city's new high-capacity water wells to minimize subsidence. The press-core present exaggerated what he had just announced in their questioning and made his announcement sound like Houston would be losing its groundwater supplies soon, but that was not what he had just indicated. In any event, he also provided his message in a press-release handout so the press would get the word more accurately that groundwater was important but overuse might require the use of surface water from the dams north of Houston to decrease subsidence clearly caused by overpumping of groundwater. Dr. Clark also made a few comments to the press and provided great support, he remembered. A number of years later, he returned to the subsidence problem in Houston and surrounding areas. With the assistance of H.C. Clark and others, he, his son, David C., and Henry W., prepared a major report on the subsidence issues and then later published a paper on the subject.³⁹

It was time for him to select his research topic in graduate school and the field area he was to investigate. He wanted to work on a classic geologic problem, which evolved into an investigation into the genesis of sedimentary siderite and the paleoenvironmental and diagenetic implications of selected siderite zones and associated sediments in the Upper Atoka Formation, Arkoma Basin, spanning the Oklahoma-Arkansas border near Fort Smith, Arkansas to Pocola, Oklahoma. He had to map the distribution of the siderite occurrences and obtain rock samples from the outcrops in those areas for later study in the laboratory in his lab at Rice. He asked Mary if she would like to go into the field with him as his assistant, she said, "Of course." Her son, David H., would be safe with his father.

³⁹ <https://www.i2mconsultants.com/downloads/corp/JGG-1-015.pdf>

Off they went in his Jaguar, not thinking until days later that he could have taken a Rice field vehicle, with gas paid by Rice. But they enjoyed the smooth ride nonetheless and the oil-guzzling engine power of the XKE made it there and back without a problem. He inspected numerous outcrops and eventually found the siderite zones mentioned in passing in a few papers. No wonder no one had investigated these sedimentary siderite zones before. They were not obvious in the outcrop unless one looked very closely. He did and described in detail 4 zones and their distinguishing characteristics. Many samples and photos



were taken, but he overlooked taking a photo of Mary in short-shorts and halter-top sitting on a rock holding one knee as scale in a wide-angle photo. She probably wouldn't have liked that in any event. Instead, he did take an outcrop photo using the front of his Jaguar as scale. The trip was clearly productive, plus he learned a lot more about Mary. She was a delight to be with. She was self-confident and well read, and he loved the way she carried herself. She was probably smarter than he but that made her an asset as well, which she certainly was over the decades ahead.

Months after they returned, one of the graduate students said when looking at his slides of the outcrops and siderite mineralization and noticing the nose of his car in one the photos, that he was probably the only graduate student in the history of Rice University that used an E-Type Jaguar as scale in a photo for his (her) thesis. The group agreed that was the prerogative of an older graduate student who had more resources than the rest of them. Forty-two years later, he published an update to his thesis.⁴⁰

Later that semester, a field trip was required for another class, this time he had to go without Mary. It was to the Ouachita Fold and Thrust Belt in Arkansas, and this was to be very interesting in any event. Most of the hard-rock graduate students making the trip were focusing their research on various features of igneous and/metamorphic rocks. He wanted to know more about such rocks as well and learned a lot about the area from them. On the way back to Houston, after two days doing field work in the heat by describing exposures and taking samples from many outcrops for subsequent thin-section microscopy investigations in his lab, there were three students in the front and four in the back seat of the large Rice field vehicle. The spacing in the back was possible only because Elizabeth was a rather small woman, although very good looking with obvious Nordic features to her. He was to encounter her, her husband, and their child at a beer joint in Eureka, NV a few years later. He was sitting at the bar, and she poked him in the ribs to say hi. He turned and was pleased to see her and her family. She said that after she finished her Ph.D. at Rice, she went to Stanford University to teach and conduct research. She took her family into the field some but not all the time.

At some point on the road back, someone broke out Mary Jane (aka marijuana) and they began to pass the smoking "joint" around. He had never partaken much before but had no objections to the use thereof. When it was passed to him, he took a hit and passed it on. By the next round, he was feeling a might weird. He was on the outside next to the door. After a while, he was watching a long stand of trees pass by when all of a sudden, he saw what appeared to be a large monster charging toward them out of the woods. He let out a fretful sound of terror and had the intense urge to escape the truck. Just as he reached for the door handle someone grabbed him and said, "Nothing is there!" which was loud enough

⁴⁰ <https://i2mconsultants.com/downloads/corp/ijeg-1000103.pdf>

to bring him out of the spell or whatever that was. He explained to the truckful of well-lit graduate students what he had just seen, and they all began to laugh, some of them were even holding their sides for some time with tears in their eyes.

After they had settled back into their personal comfort zones, one of them said, "Let's keep the MJ away from the senior guy, he's way too stiff to handle it." Everyone seemed to know what he meant, except him. He hadn't had MJ since. Mary had told him that she and Lee used to smoke from time to time in college, but that only meant to him that she was loose and he was too stiff. The rest of the drive back to Houston was uneventful.

At some point about this time, the Rice Geology Department had just received a new Microprobe, costing the benefactors tens of thousands of dollars. To commemorate this, Martha Lou organized a party to celebrate this major step forward in the department's geoscientific research capabilities. Martha Lou made special labels for champagne bottles and prepared 7 boxes of champagne for the approaching party. One day, Martha Lou entered his graduate student office across the corridor from his NWWARF office and he heard her ask Eric Nelson, his office mate, if he had seen him.

He heard Eric say in a rather loud voice, "Mr. Campbell, Martha Lou would like to speak with you." Eric used to get a special kick out of introducing him that way when he knew he was just across the corridor. He got up and hurried out of his office to his other office about 30 feet away. He greeted Martha Lou.

She said, "Mr. Campbell, as the senior graduate student around here, do you know the whereabouts of 4 boxes of champagne I had stored for the party next week?"

He said, "I do not." She looked at him trying to discern a lie. He said again, "I promise, I know nothing about it." She relaxed her Gestapo look and said, "If you do, would you please tell them to put them back?"

He said, "I will," and she departed. Eric came around the desk and said, "You don't?"

He said, "No, I do not."

The actual truth was that he really didn't have a clue. She found out at a party 30 years later who did it. He had squirreled away one bottle of that champagne from the limited supply passed out at the Microprobe party and held it in a special place among his what-knots for those same 30 years. A party that celebrated the \$30 million modernization of what was then called the Earth Sciences building had in attendance the fellow (now living in California) who had taken the champagne some 30 years ago. He presented himself to Martha Lou and to those in attendance, and announced that he, Ken McMillion, had done the dirty deed by himself and without fellow culprits.

She instantly said, "Oh, McMillion, I figured you did it all along."

Ken said, "Sure you did," with a big smile. She smiled back. All was well with them again.

Over the years, Martha Lou has dedicated herself to aiding students to further their careers in geology (later converted to earth sciences, etc.) at Rice University. He has returned her assistance by supporting her mentoring program she manages for the AAPG every year possible, until the Pandemic arrived.

The new third floor had a big geological map and a number of glass displays. He presented the last existing bottle of that historical labeled champagne to the new Chairman of the department at the time for the

purpose of including some history of the department in one of the showcases, instead of just pretty rocks. The Chairman received the bottle and promised to find a special place for it.

In the fall of 1975, he continued with classes at Rice University and was working on an EPA guidance document on injection well technology with Professor Don Warner at the University of Missouri as a part of an NWWA Research Facility contract with EPA. He also travelled to Columbus to an Ohioana Conference where he and Jay Lehr were awarded the *Martha Kinney Cooper Ohioana Library Award in Science* for his book published by McGraw Hill in 1973.⁴¹ Over the years, some 40,000 copies were sold worldwide, and it was the first such award presented to a native of Fairfield County, Ohio. Over the next 10 years, his skills became very marketable because he was a bonafide hydrogeologist even before entering graduate school at Rice. This plus a graduate degree from Rice, was to be the basis for him receiving three substantial signing bonuses from the three environmental engineering companies he worked for over a three-year period in the decade ahead.

He met Dr. Foss at a meeting of the Houston Geological Society. Dr. Foss was looking for reliable consultants to add to the GCO staff to manage drilling and logging of prospective lignite lands in Arkansas, Northern Louisiana, Mississippi, and Alabama. A few days later, Ted called him at his Rice office and asked if he would be interested in a summer job. He accepted. For the rest of that summer, and beyond, he was for all practical purposes a member of the General Crude Oil (GCO) mining group located at One Allen Center downtown Houston. He spent two-week periods overseeing the drilling in Arkansas and then in Alabama. He and Ted became friends and Ted encouraged his input on his project at Red Dog silver-lead-zinc deposits. He was one of the prime negotiators with the native groups on the Seward Peninsula and for a GCO project in Australia that involved rare earths.

Dr. Foss had also received his Ph. D. at Rice University and had become one of the instructors of the original NASA astronauts who taught them basic geological skills by taking them on tours of impact craters (the big one in Arizona, where photos of Dr. Foss and the astronauts were framed on the wall of the tourist shop located at the edge of the crater), and to the volcanoes of Mt. Hood and Mt. St. Helens, as well as on the big island of Hawaii.

Two incidents stood out in his memory. GCO had been acquired by International Paper Corporation in 1974 for \$489 million, he remembered. General Crude had mining prospects in various parts of the world and had hired the Director of the Science Directorate in NASA (Dr. Foss) to lead the mining department. Although GCO had not been successful in locating major oil or gas deposits on IP's land, they were successful in locating lignite over many areas of the IP land, but only a few areas represented possible mining sites because of inferior lignite quality or limited bed thickness and continuity, which would be expected in such deposits. But some areas had real economic potential.

The first incident was when they began the drilling program in Alabama. While some of Ted's projects were at critical stages, he would waste a large amount of time just getting to the remote Alabama site and getting back. During a meeting, he remembered, with Ted, his Vice President, Mark, and he when the subject came up about the lost time, Mark said he would make the arrangements for the GCO Learjet 25 to take him to the closest landing strip in Alabama and then return him in the early afternoon to make the meeting with Ted on his projects. He said, "I will have a driver available to pick you up in the morning at home and deliver you to the plane, and then upon your return bring you back to the office in the

⁴¹ <https://www.i2mconsultants.com/downloads/ela-iet/Ohioana75.pdf>

afternoon. When you are finished at the office, we'll return you home." Ted liked the idea, but he objected because he thought it was a waste of money to just haul him to and from Alabama, and around in Houston traffic, but Mark insisted, saying,

"The plane is there to be used and they haven't used it for quite a while, so consider that you are taking a racehorse out for his exercise run, same with the Learjet, it needs to run as well, besides Ted needs your help."

Ted smiled and said after Mark had left the room, "How's that for a corporate benefit?" They both laughed and got back to the discussions of Ted's projects. For the next two weeks, he would take off as the sun was rising, fly at an altitude of some 45,000 feet at a ground speed of about 525 mph, depending on the winds, and land at an abandoned grass strip the GCO pilot had located near the drilling area. One of the GCO well-site geologists would meet him at the site and he would begin the inspections of the samples from drilling the previous day, plus the morning's results, and provide advice on hole locations and numbers of holes to drill and log. There were three rigs drilling along the trend of about 20 miles that he had to manage. During these trips he noted that the curvature of the Earth could be clearly observed from an altitude of 45,000 feet.

The other memorable incident occurred during a meeting that he joined after just arriving back from Alabama one afternoon. Ted was standing in front of the room discussing the drilling results from the Seaward Peninsula project. Ted provided the drilling depths and the thickness of the mineralized zones along with the azimuths of two of the five holes he described. Mark's representative when he was away was Bill B., a petroleum engineer whose wife had family ties to the upper management of GCO. He served as manager of the group, but acted more like an accountant than a manager.

Bill asked Ted, "What are the azimuths of the three other holes?"

Ted said, "They have none."

Bill demanded to know what the azimuths of those three holes were; he was apparently thinking Ted was withholding information from the manager.

Ted said, "Bill, I said they have none."

Bill was getting red-faced with irritation and was about to say something, when Ted interrupted Bill and said very calmly,

"Bill, you know of course, that vertical holes do not have azimuths or zero degrees azimuth, in other words."

Bill got a very sheepish look on his face as he glared at Ted and then gathered up his paperwork and literally stormed out of the meeting room, while Ted turned to him and the others in the meeting room and rolled his eyes, signifying what a FUBR. They all got a big laugh during that episode, and he would wager to Ted later that Bill would never forget that meeting. Ted agreed.

Shell Oil had acquired some lignite property in Arkansas too, but that did not last long, primarily because there were no coal-burning power plants in the vicinity or being planned, the last he had heard. Texas and Louisiana were different; power plants were being planned along the Texas and Louisiana lignite trends, which would operate for decades. As GCO wound down their lignite drilling operations and Ted's projects were maturing into mining projects, Ted resigned GCO to join Watts, Griffis and McQuat Limited to

manage their new Houston office. WGM was based in Canada and was one of the oldest and most highly respected independent mining consulting companies in the world. Ted and he would join forces again in a few years.

In May of 1976, he had a meeting in the Galleria district of Houston and was driving back to campus in Mary's 1966 yellow Ford Mustang. Then, just as he was approaching the intersection of the 610 overpass with the 59 freeway below, he noticed some white smoke coming up from the lower-level freeway. As the cars disappeared one by one in front of him into the smoke, he was soon surrounded by this white smoke, which he instantly recognized as ammonia gas and held his breath. In the white mist, he could see blurry red taillights and he knew he could not take a breath and had only one chance to survive. He jammed the accelerator to the floor and picked up speed; he dodged car after car, some doors flying open as people fell out onto the cement road. In seconds, he was out of the cloud and began rolling the window down to ventilate the gas inside and surrounding him. He kept his foot on the gas pedal for a long time speeding down the 610 Freeway still holding his breath. He looked in the rear-view mirror for any cars behind him. There were none, so he stopped the car and got out in the middle of the freeway and finally took a breath. He looked back up the freeway and could only see the white cloud billowing upward and drifting to the east. There were no cars exiting the cloud. He was the only one who made it through the ammonia cloud unharmed. He continued to watch for cars to emerge, but none did. They must have panicked and jammed on their brakes.

Only then did he notice that his face and bare arms were beginning to burn, and he wiped them with the inside of his sport coat. He decided to leave the still empty freeway and return to campus because there was nothing he could do to help. He created a stir when he walked into his office at Rice. Mary noticed the blotches on his face and hands, and she ran to get wet towels after he explained what had happened. They soon learned that 4 people had died and about 100 were treated for lung damage from ammonia inhalation, and many of those were taken to hospitals around Houston ([news account](#)).

Later that evening, he remembered pondering his fate and how that incident was another instance of him just barely eluding death, saved this time not by being missed by less than an inch by the shrapnel from the explosion in high school, but saved from serious lung damage or death only by the extra seconds that he could hold his breath. He wondered whether humans had just so many of these misses allotted to each or were these misses solely related to keeping one's wits about them, to not panicking, and to focusing on what needs to be done for survival. He wondered if he would have stopped to avoid hitting someone standing in front of his car while in the cloud or would he have ploughed ahead knowing that he only had seconds to spare. He found solace in the fact that he did not have to deal with that issue, which could have been damaging to his psyche.

A few weeks later, he was finishing his thesis. Mary typed it. His thesis defense went well by all accounts of those graduate students who attended. His thesis committee consisted of Dr. Wilson, Dr. Adams, and Rudy, the Adjunct hardrock guy. But he didn't think they had even read his thesis because they asked irrelevant and inappropriate questions. He answered them all to their apparent satisfaction. After a few days, he was still waiting for their response of some kind in moving forward on to his next phase, but none came. He had discussed the second phase of his siderite project with Dr. Baker to do isotope studies. He understood that the procedure was that the committee would formally meet with him privately a few days after the defense to discuss the results of his defense and to either invite him to continue for his Ph.D. or to decline. He heard nothing from the committee and he interpreted their silence to mean only one thing, no offer to continue.

During that period of waiting for a response, an older gentlemen came to the NWWA Research Facility looking for the Director of Research. It was Henry Keplinger, Founder, President and CEO of Keplinger & Associates, Inc. (K&A), a prominent consulting company that he later found out was based in Bartlesville, Oklahoma. They sat down in his office, and Mr. Keplinger said right off that he had heard a lot about him. Aside from the flattery, he instantly took a liking to the man. He quickly recognized him as one of those special people in the world. As they talked about his environmental projects and his mining experience, Mr. Keplinger indicated he was having his son, Kep, (of about his age) head-up a new office in Houston and that the senior Keplinger had decided that he wanted him to manage the non-oil & gas activities of the environmental and mining department for the projects that were going to come K&A's way in the near future. He indicated they could build a staff and for a while he would report to Mr. K. in Bartlesville. They discussed salary, and it was very good. He advised Mr. Keplinger that he was waiting for word about whether he would be encouraged to pursue the Ph.D. Then Mr. K. said something rather surprising that became very significant to him.

Mr. K. said, "You know, Michael, having a Ph.D. in geology would limit your options in your career down the road. It has been my experience that employers don't want Ph.D.'s because they tend to be difficult to deal with in teamwork."

By the time they finished discussing his future with K&A, he told Henry that he would get back to him soon. They shook hands and it was done. He then picked up the phone and called some of his contacts about this Henry Keplinger. The reactions he received about Henry were astonishing to him.⁴² Apparently, Henry was one the leading and most highly respected independent oil & gas consultants in the U.S., having appeared before congressional committees and written widely on the need for the U.S. to become energy independent and traveled throughout the world to assess the need to diversify the energy resources to include uranium (and nuclear power), lignite and coal, and geothermal energy from both high-temperature and high-pressure resources, all within the U.S. No wonder he felt instant kinship with Henry because they were on the same page.

He discussed the possibilities with Mary that night and he thought she was beginning to see the merit to their association. As the call never came from the Committee, even after Martha Lou advised him to be patient until after graduation, he had had enough and called Henry to advise of his acceptance and of his availability soon after graduation with his Master's degree in hand, which was in fact made of actual sheepskin, a Rice tradition since 1918.

Having his bonafides in his second professional degree in geology now, he reflected on Robert Frost's alternative roads in what might have happened in his later life if,

- 1) he had not been invited to the conference in Sydney, which was responsible for his B- in carbonate geology class (and gaining Dr. Wilson's apparent disdain)?
- 2) he had been admitted to Mexico to complete Dr. Wilson's assignment (and he would not have received Dr. Wilson's disdain and Rudy would not have had a basis to score his absence)?

⁴² <https://engineering.utulsa.edu/charles-henry-keplinger/>

- 3) he had not objected more vehemently to Rudy's interference in matters that should not have been any of his business (and his desire to outdo a senior graduate student's successes and visibility in the department by inflating Rudy's own importance in the hopes of shedding his lowly adjunct position and being taking into the Rice staff as Assistant Professor, which never happened)?
- 4) he had not raised the issue with Dr. Adams about using his ideas and the A- (and gaining Dr. Adam's possible disdain)?
- 5) he had been more patient and waited longer to hear from the Committee, or had presumed to carry on, he could have completed the planned isotope work with Dr. Baker?, and
- 6) he had not met Mary, or Lesley had not hired Mary, how would his life have been affected?

The answers to the first five issues became problematic after his decision to leave was made. But the last item was easy. The clear answer was that he would not have had the two daughters that were just a few years away. Mary would have likely stayed in school and received her Ph.D. His life? There would have been multiple roads to take but likely far less interesting.

It was also about this time that they received a letter from Jerrie saying that she, her friend, Dan, and the children were out of money in Cairo (Egypt) and asked if he would send next month's allowance as soon as possible. He did. They traveled on through Iran and then to India and eventually to Sri Lanka. One close look at the photo of David and Julianne in Cairo suggested that their world tour was no fun, and maybe scary for them. This meant to him that his decision to leave Rice and go to work, based on the financial pressure then and, in the years to come, to cover college expenses for his 5 children, was confirmed and the right choice had been made. He also wondered whether he should have refused to provide the funding for Jerrie's world tours.



Chapter Ten

1976, A Settled Life Begins with Travel & Gold Mines



A Tourist Bureau Photo of the Beach During the Summer at Nice, Italy

As the Watergate scandal finally forced President Richard Nixon to become the first U.S. president to resign, with the assistance of testimony by John Dean and Alexander Butterfield, he was succeeded by President Gerald Ford (who pardoned Nixon), and who then lost in the 1976 national election to peanut farmer, Naval Academy graduate, and highly religious Jimmy Carter. Technological developments were accelerating, and industries were dealing with the new environmental regulations that were coming down the line from Washington, D.C. Also, Inkjet printers appeared on the scene.

The average inflation (at 5.75%) continued to be a problem around the world. The year-end U.S. Federal Reserve rate was at 6.25%. The cost of a gallon of gas was \$0.59. Concorde entered service and cut transatlantic flying time to 3.5 hours. Microsoft was formed and Apple was formed by Steve Jobs and Steve Wozniak shortly thereafter. In South Africa, riots in Soweto marked the beginning of the end of apartheid.

The Ohio State Football program had sagged a bit, losing to Missouri, tied with UCLA, but worst of all, losing to Michigan. Then Legionnaires Disease was detected and affected 4,000 delegates in Pennsylvania.

A few months after graduation from Rice University, and according to his agreement with Henry Keplinger, he began to form the new group at K&A. He was responsible for managing all non-oil & gas projects in areas such as alternate energy (coal/lignite, geothermal energy, uranium), minerals (precious and base metals and industrial commodities-phosphate, potash, sand & gravel) and related environmental projects involving property transfer assessments (pre-CERCLA activities) for joint-venture negotiations, financial and litigation preparations, hazardous waste investigations (expanding federal RCRA Part A and Part B Permitting), geotechnical projects (dewatering), and ground-water-resource investigations. To address

the coming projects, he built up a staff of seven geologists, engineers, and a group of specialty consultants within K&A and from around the country.

In transitioning from Rice to K&A, he, with considerable help from Mary and the clerical staff at K&A, was in production of the text sponsored by the Houston Geological Society that was begun while he was still at Rice. He consciously continued to implement his attempts to integrate academic and industrial geologists in his selection of contributors as chapter authors for the book, *Geology of Alternate Energy Resources*.⁴³ He designed the book with five chapters each on uranium, lignite/coal, and geothermal energy for a total of 15 chapters, plus a Subject Index. He selected Kevin B., who was finishing his Ph.D. at Rice, and who was destined to spend a career with Exxon reaching Vice President, Africa, to join him in producing the first chapter dealing with uranium frontier areas and exploration techniques (Chapter 1).

For the second chapter dealing with known uranium trend areas, he selected Ken D. and Joseph D., U.S. Geological Survey geologists in Denver (Chapter 2). For the third chapter on the new uranium in-situ mining technology, he selected Geoffry H., a well-known consulting engineer in Littleton, Colorado (Chapter 3). For the fourth chapter on the environmental aspects of uranium mining in south Texas, he selected Malcolm K., the Chief of Region VI of the U.S. Environmental Protection Agency in Houston (Chapter 4). For the fifth chapter, he prepared a comprehensive uranium bibliography of the relevant publications available at the time (Chapter 5).

A similar pattern of author selection was applied for the lignite and for geothermal energy chapters. Briefly, he selected Charles W. to lead Chapter 6 on frontier areas and exploration techniques with three members from his previous GCO lignite exploration group. Charles was also completing his Ph.D. from Rice and also was destined to spend a career with Exxon as the company lead in Southeast Asia and elsewhere. For the known lignite trend areas of Chapter 7, he selected two geologists, Donald S. and David W., from the Consolidation Coal Company and the Mississippi State Geological Survey, respectively. For lignite utilization, Chapter 8, he selected Thomas E. and William K., an engineer and a geologist, respectively, from the University of Texas at Austin, and for the chapter on the environmental considerations involved in lignite mining (Chapter 9), he selected Alfred H., a well-known environmental consultant then with M^cCormick & Associates in Berwyn, Pennsylvania. For Chapter 10, he prepared a comprehensive lignite bibliography of the relevant publications available at the time.

For the geothermal series of chapters, he selected Paul J., from the Department of Geology at the Louisiana State University at Baton Rouge with the support from U.S. ERDA (a predecessor to DOE), to prepare the chapter on geothermal frontier areas and associated exploration techniques (Chapter 11). For Chapter 12 on known geothermal trend areas and associated exploration techniques, he selected Don B. of the Bureau of Economic Geology of the University of Texas at Austin. For Chapter 13 on geothermal resource development and utilization, he selected David L., Chief of the Advanced Systems Branch, Division of the Geothermal Energy of the U.S. ERDA (a predecessor to DOE). For Chapter 14 on the environmental considerations involved in geothermal energy development, he selected Thomas G. and Charles K. of the Bureau of Economic Geology of the University of Texas at Austin. And finally, he produced a comprehensive bibliography for geothermal energy as Chapter 15.

Over the years, he always considered that the text was one of his best contributions to his field because 1) such an integration of expert views on the three non-oil and gas energy resources had never been

⁴³ <https://www.i2mconsultants.com/downloads/corp/HGSGAER77.pdf>

accomplished before; 2) the timely integration of such resource development with environmental considerations in the form of state and federal regulations was only beginning to take hold; 3) the organization of the text into the five principal parts of resource evaluations provided the student or professional geologist with new tools for cross-training from one field to another.

By the way, for those readers who wish to know more about the chapter authors in the above text, he also included short biographies and a subject index. When the text was published in 1977, the first printing was sold out within the first year, but further printing was not possible. For reasons still unknown, the printing plates of the text were lost and presumed destroyed. Rumors were prevalent that some members within the HGS management at the time were against all forms of federal regulatory involvement mentioned in the text's Introduction, in Chapter 4, Chapter 9, and Chapter 16, and someone instructed the publisher to destroy the book plates. But he was doubtful of the rumors. Then again, why would a publisher, without direct instructions, lose or destroy plates to a well-known, popular book? Not likely. Maybe, like Ken McMillion, or someone will step forward and confess in the future ...?

Henry Keplinger nonetheless sent copies of the text to the U.S. Senators he knew and respected at the time. Senator John Tower from Texas sent him a complimentary letter on the value of the book. He thought about framing the letter, but it now resides somewhere in his files, he said. About this time, Henry set up a meeting in Chicago with a client to discuss a uranium project.

He flew in that morning for a meeting scheduled for 1:00 PM downtown in one of the tall buildings. He was walking along a street crowded with businesspeople. He stopped at a corner for a streetlight and just happened to look to his right when he noticed instantly that the person next to him was none other than the Deacon. He said, "Deacon?" The Deacon said, "OMG. What are you doing here?" He responded, "What are you doing here?" and they both laughed with a quick hug. They both were in town for only a day on business so they parted in different directions with waves of so long and with their briefcases in tow. That was an odd intersection in time, he thought later. He hadn't been able to get back to Lancaster, O. for many years now to see his high-school friends, but they had moved on with their lives just fine without his help. A photo surfaced showing what a bunch of happy campers they were in the late 1980s.^{43A} (Front row from left: Steve B., Tom H., and Jon N. Back row, left to right: Phil H., Deacon S., Joe C., Dick E. and Dave L.)

^{43A} <https://www.i2mconsultants.com/downloads/corp/LHSGuys-Late1980s.pdf>

Later that year, he presented seminars in New York City and elsewhere around the country on behalf of K&A on a range of subjects involving environmental, hydrogeological, energy, and water-supply issues. He continued for a few years to serve on the UN team of experts assembled by Professor Ingemar Larsson, of the Royal Institute of Stockholm for the Swedish International Development Authority's (SIDA) project on ground water in hard rocks (aka igneous and metamorphic rocks) funded by UNESCO in Paris, and later on the experts' committee of the United Nations' ground water exploration and development program based at the UN in New York City from 1975 to 1983, which would take him to Stockholm, Sardinia, Italy, India, and to Tanzania, then under control of the East German (aka Russian) Army.





He had a competent staff to manage projects while he was out of the office, and he used the UNESCO honorarium to offset the costs. In the photo is Dr. Larsson (light suit) in Paris at UNESCO, other UN fellows, and He in back row.

Mary and Clarence, his Dad, who had never been out of Ohio in his life, accompanied him on a trip to Stockholm to meet the rest of the team of experts in 1976. They visited London first and stayed for a day or so. They coaxed Dad into posing for a photo in an empty guard hut at Buckingham Palace, which became a family classic. Dad brought and wore his favorite lime-green suit with funky tie for dining out. He was certainly not an ugly American.

They then flew to Stockholm where they stayed at the Birger Jarl hotel, but while there, he handed a maid a bag of his soiled clothes to be laundered and dry-cleaned, but later found out the hard way that such a service was very expensive in energy-conscious Sweden. Mary and Dad went on city tours. As they toured the Stockholm museum, a Swedish woman followed Dad from exhibit to exhibit speaking to him in Swedish but just babbling to him in his thinking. He stopped and turned to her and said in a frustrated, but not hostile tone, "Lady, why don't you speak American?" He was perfectly serious, and then he and Mary continued on around the museum, but the lady didn't follow.

One of the evenings in Stockholm, the team gathered for a social, including Mary and his father. Mary was clearly comfortable and had many new admirers. Even Professor Larsson paid a lot of attention to Mary. Who wouldn't? Dad observed the crowd carefully, hoping that no one would babble in Swedish, and interacted with everyone and tried to understand the accents while smiling. Mrs. Larsson, a very classy lady in her own right, was always nearby and attempted to talk with Dad, who just smiled and agreed with her.

The next stop was Paris for meetings with UNESCO regarding the SIDA project. He also had to get special permission from the U.S. State Department because it was against the law to work for a foreign country without registering with the U.S. government. They were in Paris for about a week. They learned a lot about France and especially the French language, e.g., *pomme frites*, *croque monsieur* and then when the meal is over *l'addition s'il vous plait* to the waiter. He was getting almost proficient, but Mary would always correct him with her textbook French.

One day, while he was in meetings, Dad and Mary went on a tour of the Notre Dame Cathedral. The tour guide spoke extremely fast in French throughout the tour, and they could not understand what was being said. When the tour ended up in the bell tower, Dad pulled out a coin and gave it to the tour guide as a tip. The guide looked at the coin, then abruptly turned and rushed down the stairs past the tour group. He was waiting at the bottom as they came down and promptly gave the coin back to Dad. Mary said she looked at the coin and realized Dad had given him a Swedish 10 ore coin worth less than one cent U.S. that the guide interpreted as an insult. Dad just shrugged.

They spent most of one day visiting Versailles, which was very interesting. The architecture, a blatant show of wealth to build it, and the awesome beauty of the gardens impressed. He was able to get a special photo that has become another family classic that hung on the wall in his office for years.

When he had finished with the UNESCO meetings, they took the train to Rome, with three stops along the line. But when Mary was trying to buy tickets for the trip, the ticket agent demanded that Mary speak



French in ordering tickets or he would not sell them to her. She was in near tears, when Dad stepped in and told the agent to, “Stop the bullshit!” with a certain force. The agent understood and complied. Dad said later that the agent was just showing off to a pretty lady.

The next day, they took the train to Nice on the French Riviera. The ride was fast, clean, and inexpensive. Aside from the “nice” shops and small restaurants and hotels, there were two incidents that he remembered clearly. Dad spied the first nude lady sunbathing on the rocky beach under an

orange umbrella and had to see more. They walked to a nearby bridge for a better view. There were only a few nudes that day only because it wasn’t that warm, but he took an iconic beach-scene photo, in which a solitary nude sunbather can be seen beneath a red umbrella. That photo too became a family classic. An enlarged version of the photo was framed and hung on the wall for many years. They walked down to the water’s edge and noticed that the beach was a noisy place, with the sounds of churning heavy rocks. Upon inspection, the beach was made up of well-rounded, well sorted, almost cobble-size rocks in place of normal beach sand that usually consisted of medium- to fine-grained quartz sand.

The next stop was Marseilles, where they had a fine meal near the harbor. Mary ordered the *bouillabaisse* that the restaurant was famous for. With some trepidation, he ordered the soup too. When it arrived, he recalled it looked more like a witches brew with small, whole squid and pieces of octopus, with occasional appendages of sea creatures that he could not identify. He only took a sip. When they were all finished he said to the waiter, “*l’addition s’il vous plait.*” When the bill arrived, he nearly fell out of his chair. The cost of the meal was sky high. He challenged the charges, but the waiter persisted, saying it was the famous *bouillabaisse*. He thought about asking the waiter if one of bill, but he thought better of it for a lot of reasons.

After they arrived in Rome, he soon flew off to Sardinia to join Professor Larsson and the UNESCO team. They were beginning to assess the application of the geostructural model developed by Professor Larsson a few years earlier. The area along the southern coast contained rocks that the group would be examining during the field trip with Professor Larsson leading field team. The group stayed at a hotel of individual bungalows of beautiful, well-stocked white cottages overlooking the coastline.

While he was doing fieldwork in Sardinia, Mary and Dad would see the sights in Rome. Long arduous walks were common during that week. Dad held up well. Mary only got stronger with all the exercise. They took walking tours every day, including the Colosseum, the Forum, Sistine Chapel, and other places. A few days later, Mary and Dad took the train to Venice. At the booked hotel, the manager said that their reservation had been cancelled and the hotel was full, but after much discussion, they were offered a tiny, windowless room to share. They departed at first light the next morning to see the sites. They went into an active glass-blowing shop on the Island of Murano, and she was able to watch the artisan glass blower make an incredibly fragile glass horse for her, which still sits on her dresser at home.

By the end of the week, he and the UNESCO team finished their work and concluded that the team should press on to other sites that have similar geological characteristics. He arrived back in Rome from Sardinia. Reunited, they took a non-stop fast train to Paris.

They arrived in Paris well after sun-down. They took a taxi to a well-known, reserved hotel and they introduced themselves to the desk clerk and once again found the reservation had been cancelled. It had simply been erased from the reservation book. The name, "Campbell" could be faintly seen in pencil only partially erased. He created a considerable ruckus about the issue to no avail; he was clearly an ugly American for a few minutes. Their concern was partly caused by the fact that they were very low in folding currency that night and had planned to go the American Express the next morning. They had to hire a taxi with the last of their folding money to drive around the city late on a Saturday night to find a hotel. Everything was booked. They finally found rooms in a Paris suburb. The taxi driver took what folding money they had, rolled his eyes and departed leaving them in front of the hotel. They had to walk up a couple of steps and stepped into the hotel. The desk clerk appeared, looking like an Anthony Perkins double from *Psycho*. They signed in for two adjacent rooms on the 4th floor. The clerk the elevator was broken, and they had to carry their five bags up the thin squeaky stairs.

They arose the next morning and left for the Paris de Gaulle Airport but had to stop at the closest American Express office to retrieve some local currency to pay for the taxi and for any expenses at the airport. Their flight was on time and off they went back to the USA, once again. He looked forward to real French fries.

Although he never discussed the matter with his Dad, he was sure his Dad had a fun time on that trip. He did say that many people looked at him with Mary and probably thought that he was a sugar daddy to have such a beautiful young woman on his arm. She received much attention during that trip and many others. Being a beautiful woman does attract attention in Rome and Paris, and everywhere for that matter. He didn't mind until he caught a young man who was obviously beguiled by her beauty while in an outdoor restaurant. He attempted to pass her a note, but he interrupted that transfer, and the young man ran off. She was not out of his or his Dad's sight for the rest of the trip.



A few weeks after they had returned from Europe, Mary, he, and David H. moved to a very nice house on Georgetown in West University Place. They soon had started their menagerie of three cats and a rabbit. One day he got the idea that they should have a party and invite his Rice graduate friends and his GCO associates, including Ted Foss.

As it came and went, he recollected that it was a fun party but despite his effort to mix the industry geologists with the academic geologists, after a while they would just unmix and resegregate. He eventually gave up. For Mary, it was little fun, he found out later, because the Rice people knew they weren't married yet, but the GCO people were under the impression that they were married. Mary apparently had been on edge throughout the party for fear of being asked tough questions and having to obfuscate, although he thought the party had been a success. She didn't. Future parties were decidedly better for both of them.

The neighborhood was quiet, except when he had a minor car accident in front of their house in his pre-Omega-3 period of irritation control. One thing they planned to do at the new house was to buy a rather

expensive grand piano. She had studied music and loved to play the piano when she was growing up in New Orleans on Wren Street near Lake Pontchartrain not far from the family's Methodist Church. She had also grown up with a maid in the house to help with household duties and had attended the Benjamin Franklin High School for gifted students, as did her husband-to-be Lee. She was thinking about teaching art history but either changed her mind or circumstances changed her thinking for her.

She was a private person and found solace over the years ahead in doing incredible work as a consulting certified professional genealogist, from which he was to receive the benefit decades later. Her father, Mr. Wiley, called Wiley by friends and family, served in the management section as a CPA for Freeport Sulphur Company for all of his professional life and was an accomplished member of the *Power Squadron of New Orleans*. Wiley once took Dad and David C. and David H. sailing in Lake Pontchartrain. A severe storm had blown up rapidly and caught them in the middle of it. Dad reported that they could only ride it out. He spent the hour or so hugging the small onboard toilet, which was laughable to see according to their vivid accounts after the storm passed. They all doubted whether they would make it home alive, but Wiley brought them home safely.

Her brother, Jimmy W., a gearhead scientist-in-the-making from birth, was to be a Ph.D. in physics and remained an integral part of the fusion research team at the University of Texas at Austin for many decades as a plasma physicist. Mary also had a younger sister, Nancy, with Down Syndrome, whom she would look after for decades in later life. But only a few months after they moved to Georgetown, Mary's mother, Lenelle, died from cancer. Although she knew it was coming, it was still a shock. A few months after that, they arranged with a family attorney for no-fault divorces for both Jerrie and he and for Mary and Lee, and a few months later they were married. She was everything he wanted in a potential wife, intelligent, confident, and very beautiful, even more so than his favorite actress, Lesley Anne Down. They had a private civil marriage ceremony performed by a judge in downtown Houston on May 4, 1977. Mary's son, David H., was the ring bearer and the Best Man. The ceremony was quick and to the point of pronouncing them "husband and wife." After the Judge had finished, David H. spoke up and said rather urgently, "Is that all there is?" Everyone laughed and the judge patted him on the top of his head.

One of first things they did as a married couple was to go on their honeymoon, of course, to spend the money they would have otherwise spent on a church wedding. They had always heard that Acapulco was the place to go if one could afford it. Now that he had an excellent job, off they went, for almost a week. It was true about its reputation, the *Las Brisas* 5-star hotel complex was the place. The very private, individual casitas built into the high hillside overlooking Acapulco Bay and downtown hotels of Acapulco was known for decades as being one of the most romantic hotels in the world. They would return there many times over the decades ahead.



When they returned from their honeymoon, he turned his attention to the new NURE data that was coming out of ERDA in Grand Junction. In his research of the NURE reports that were just released on the Solomon Quadrangle located in the eastern section of the Seward Peninsula, Alaska, the results indicated very high concentrations of uranium and thorium in more than one igneous suite of rocks not far from the village of Golovin on the coast of the Bearing Sea. He discussed the potential of the area with his brother, Steve C., and his friend, Doug L., who had access to exploration funding and they formed new companies to manage the project.

Phase II Program: Steve C. (Left to Right) Bill D., Chuck W., Kevin B., Allan T. (pilot)
Four Golovin Teenagers Made up the Claim Staking Team and Charles W, far right
bottom.



An investor, who owned and operated a drilling company had found remarkable success in exploring for natural gas in the shales of West Virginia. The project owner would be the Omega Energy Corporation, founded in Beckley, West Virginia. The exploration group to manage and develop the project was United Resources International (URI). The project was to be conducted in two phases. The first phase consisted of a preliminary reconnaissance of the subject areas, and if their findings were favorable, he would expand the scope to include a Phase II claim staking, mapping and sampling program the next year. Phase I was deemed a success and Phase II was planned for the following year's field season. He bought a number of guns for the team to use for protection from bears and moose: one 10-gauge shotgun, one 30-06 rifle with scope, and two 44-caliber handguns brought by the pilot and one of the team members. Chuck W. manned the bear-gun throughout the period. The pilot came to be responsible for getting many of the evening meals with one of his handguns by shooting big salmon migrating up stream in the shallow creek near their campsite. With the pilot's help, David H. shot the gun too.

After that phase was completed, the next year, Steve C. again served as the Operations Manager and would provide oversight and manage field operations, coordinating deliveries of field supplies and overseeing the installation of more than 100 claims with the aid of a Bell Jet Ranger helicopter deploying innovative claim corners with cement bases and high orange fiberglass poles with orange flagging. The Rice University team of URI arrived with him from Houston at the beginning of the field work to define the geological objectives and exploration tasks and then return to Houston to manage his other projects and finish writing up his Master's thesis and defend it.

Aside from Chuck W. having to go through some flashbacks of his recent Vietnam experiences that the large mosquitoes brought to mind plus the rainy weather, Chuck W. powered his way through the issues and Phase II went off as planned, with some interesting results. The team focused on a zone of especially high radioactivity and many samples were taken along the identified trend. As Phase II was coming to an end, he brought Mary and son, David H., to Nome and he then took the family to see the field area of interest via helicopter. After dropping off the field teams at their designated areas to finish their sampling and mapping, he took Mary and David H. for a ride in the helicopter to see the Darby Mountains, Bendeleben Mountains and the McCarthy Marsh.

Back at Nome, the next day the three of them walked along the embankments of the Snake River that flowed through the eastern part of Nome and emptied into the Norton Sound of the Bering Sea. The salmon were running, and David H. cast his fishing line out into the middle of the narrow channel. In an instant, he had a hit and it almost dragged him into the river, but he caught him and helped him reel in whatever that was at the end of his line. He pulled the heavy jerking line up the wall and out of the channel. It was a large tail!



Wait! He had hooked a large salmon by the tail. They laid it on the ground flopping round and finally wrapped it up in newspaper to freeze and take it home. At the end of field season, he sold the \$350.00 30-06 rifle to the pilot for \$100.00. He would have liked to have taken it home, but he didn't want a gun in the house while the children were around. Brother Steve C. took the bear gun back to Ohio, but over the years, he inherited it somehow and he has it tucked away.

The team all went back together to Houston. Chuck W. worked on sample descriptions; Kevin B.'s wife, Kathy, worked on the cathodoluminescence investigations; he and others worked on the microscopy and other thin-section studies. The laboratory data arrived with a number of surprises; he assembled the report of findings on the project over the ensuing year. But that year, 1979, the incident at the Three Mile Island nuclear power plant occurred, which brought uranium exploration to a halt. The 700-page report was put on the shelf for another day.

After they returned to Houston, the landlord announced that he had decided to sell the house on Georgetown. Mary found a small pink bungalow of the Bermuda style on Barbara Lane, with red tile floors and arched doorways, which was located only a couple of blocks south of campus. It reminded him of a Disney house where Snow White and the Seven Dwarfs might have lived. She thought it was charming, but so did others because the owner also decided to sell the house during the ballooning real estate market and they only lived there six months. While there, they traded Mary's 1966 yellow Mustang for a new blue Toyota Celica. Their female cat had kittens and their menagerie grew.

Mary found a different kind of house, larger and recently remodeled, on Charlotte located very close to the small shopping center to the west of the Rice campus near West University Place. It had a separate garage that was soon filled with their accumulating possessions. It also had a great second-floor covered and screened-in veranda. David C. and Julianne visited with them their first summer there.

A few months later, Jerrie and her British boyfriend, Peter, came through Houston on the beginning leg of their first trip to Europe. She had her thesis about finished but she had dropped out of Ohio State for some reason. She stored her draft thesis and boxes of household goods without letting them know how important the materials were. But they agreed to store the boxes in safekeeping in the garage. Jerrie made it clear to him that she wanted the children to have a well-rounded understanding of the world and that was one of the reasons for the trip. She had already seen a part of the world with him in Australia, but she also wanted to see the non-English-speaking part of the world on their approaching trip. She said the children will thank her one day for this trip. She also asked if they could provide more than \$300.00 in childcare. He made the point to her that the money was for the children's benefit, not to pay for a 4th class trip for her and her boyfriends.

With \$300.00/month in her pocket, off they went on their first world tour landing in Dublin and then hitchhiking to Portsmouth, England where the troupe stayed in Peter's parents' tiny camper while they

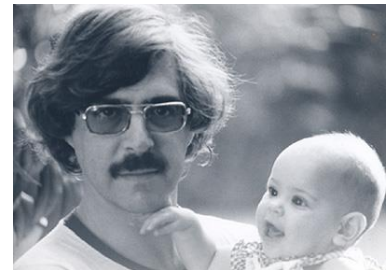
looked to buy a sailboat. The sailboat they selected was a 41' long sloop named Mimi and looked perfect until the surveyor found that the bow had been damaged and had a plate hidden in it that would have surely failed in the first rough weather. According to David C., they found a low-cost way of getting to France and then hitchhiked to Paris. He had sent David C. \$100.00 for his birthday, and Jerrie used \$90.00 of it to buy a used Morris Minor car. They drove through France, Austria, Switzerland, Italy and finally Greece, camping out like gypsies along the way. As they ran out of gas money, his son, David C., who was 10 at the time and #1 daughter, Julianne, who was about 8 would stand guard as Jerrie and her boyfriend, Peter would siphon gasoline from parked cars.

As they moved through Europe, David C. remembered that the peaches in southern France were the best ever. They made their way into Italy but did not think much of that place. They then found their way to Greece, where David and Julianne remembered seeing and hanging out around the impressive sites of the Parthenon and other Greek temples. They ended their trip there, but he never knew how penniless they were and yet still able to return to the U.S. and to San Diego. But this was not the last of their travels.



As the months rolled by, Mary and he decided to start a family. All systems were a go. Many months later, Jennifer Wiley Campbell arrived in mid-February of 1979 and they were very happy. He instantly could tell she inherited her mother's beautiful face, not his. This time he was there for the delivery, as promised, at the Texas Women's Hospital in the Medical Center. There was some talk of helping with the pain, but Mary struggled through the delivery. Oddly enough, he had developed pains as well, but the doctors dismissed them as sympathetic pains, which were common as many fathers had begun to stay with their wives during

the birthing process, often at their own risk of abuse for being responsible for the pain. After a few weeks of recovery, though, they decided that Jennifer was such a delight that they would have another child in a couple of years just like her, so she wouldn't be an only child.



A year or so later, Jerrie and his older children, David and Julianne, would be off to India. This trip consisted of traveling to London then through France and then finding their way to Cairo. They spent about 6 months in Egypt (Cairo, Alagamy, Alexandria and Port Said). After looking for passage on ships to India (and having met Indonesians who made living in Indonesia sound great) they decided to go overland. They took a ferry to Greece, trains through Turkey and Iran, leaving there only a few weeks before militants in Iran seized 66 American citizens at the U.S. embassy in Tehran and held 52 of them hostage for more than a year. They continued through Pakistan on buses to India. It took them almost a



year to get through India on crowded trains with steam engines and buses, with more camping along the way, until they finally made it to Sri Lanka. But they wanted to go to Indonesia so they then took a Penang, Malaysia, a train to Thailand and then down to Singapore to try to get a residence visa for Indonesia. The cost was over \$5,000, so they gave up on that idea and bought goods to sell in Sri Lanka and moved back to Sri Lanka. He received letters from David C. and Julianne regularly describing what they were doing and that they were OK. Christmas care packages were sent full of items that could only be found in America. They finally had made it to Kandy, a beautiful town located in the Central Highlands of Sri Lanka, surrounded by low mountains.



Earlier, they sent some spooky photos too, taking it all in during their Middle Eastern, Indian, and Sri Lankan travels.

Jerrie and her boyfriend were apparently oblivious with their new life, augmented by a plentiful supply of Mary Jane and magic mushrooms. They were hippies and were very aware of their low cost lifestyle and didn't care, using her children as servants to shop, fix things, clean-up, and do laundry, etc.

He wouldn't hear from them again for some months until, later in 1979, he received a reverse-charged telephone call from David and Julianne saying that they had had enough and wanted to come home.

As part of his function with Keplinger & Associates, Inc. (K&A), he stayed engaged with the United Nations groundwater project that began while he was at Rice University. He was asked to continue to be a part of a multi-country lecture tour that would travel in late 1979 to Coimbatore in the Tamil country of southern India. He was to spend two weeks lecturing daily at the Institute on groundwater development and water well technology. The UNESCO team for the India lecture tour consisted of a well-known hydrology professor from the University of Uppsala, Sweden (2nd from left); a geology professor from Chalmers University of Technology from Gothenburg, Sweden (4th from Left); a geography professor from the International Institute for Aerial Surveys and Earth Sciences from Enschede (3rd from left), The Netherlands; a geophysics professor from the University of Lulea, Sweden (2nd from right); he (far right), and of course, Professor Larsson, as the Professor-in-Chief of the team (far left in the photo). The India team also included a Frenchman, who was an International Advisor in water resources from the United Nations in New York (3rd from Right); an American Senior Officer of the Water Resources Service of FAO in Rome, Italy (not pictured); and an American Senior Geologist from the U.S. Geological Survey in Reston, Virginia, who all contributed case histories in water-development projects (also not pictured).



At the very first organizational meeting in Paris a year earlier, there was to be a Russian member of the UNESCO team, a geology professor from Moscow University, Professor Borsky. Professor Larsson announced that their meetings and world lectures to come would be held in English, not only because the second language in the countries to be visited was English, but also for the benefit of the Americans who would be part of the team. This instantly upset Professor Borsky, who began an obviously irritated outburst in French on how he understood the proceedings would be in French and that he did not intend to contribute to this lecture

tour in English, as the interpreter seated beside him made clear to him in English. The Russian professor gathered his papers and strutted out of the meeting, followed by two worried UNESCO staff members.

Professor Larsson then made a comment that without the presence of a Russian representative it will make the lecture tours far less complicated. He didn't have a clue as to what that meant at the time until the Tanzania lecture tour came around a year or so later.

He asked Mary if she would like to go on the India trip and she said she would not miss this trip of a lifetime. David H. and Jennifer would come along too if their pediatrician approved. They were concerned about taking Jennifer to India, but their doctor said that they shouldn't be a problem assuming her food and water intake was controlled. So, they took a suitcase full of Heinz baby food enough to last the whole trip and then some. They arranged the trip so they could detour slightly to Columbo, Sri Lanka and then drive to Kandy to pick up his children.

To accomplish the pick-up, they flew to London and then landed in Mumbai (Bombay). As they walked through the main terminal, the glass wall facing the outside was stacked with people crowding on top of one another who had come to meet arriving relatives and friends or were selling items to tourists. People were seated everywhere on the floor. The heat, dust, and the noise were intense. This was pure culture shock. They collected their 17 bags and went outside to find a taxi. Taxi drivers swarmed around them competing for their business. They chose one and were taken to a nearby hotel to sleep for a few hours before their flight on Air India to Columbo, Sri Lanka. After they checked in, they were getting situated in the room, when several of the housekeepers noticed Jennifer and came over to admire the baby. One of them asked if she could hold her and before Mary knew what was happening the woman had headed off down the hall and disappeared. In a panic, Mary ran after them to retrieve Jenny. A group of housekeepers were gathered in a utility room nearby petting and exclaiming over the baby, who was enjoying the attention. Apparently, they had never seen a white-skinned baby before and were enchanted by her.

After a nap of a few hours, they returned to the airport. By this time, Mary was having some kind of allergic reaction to the air of Mumbai (Bombay). She began to wheeze and was having increased difficulty breathing. It was clear she was having an attack from pollen or from the Indian dust that seemed to be everywhere, and it was getting more serious by the hour. He could see off in the distance a tall, fair-skinned person wearing a blue UN baseball cap. He approached him and he explained the problem and asked if he could help them find a doctor. It just so happened that there was a distinguished-looking Indian man who had been talking to the UN fellow when he approached them. He said in perfect English that he was a doctor and could probably help her.

He guided the doctor to where Mary was sitting in that huge waiting room. The doctor took one look at her and hurriedly escorted her through the crowd, through customs, which he waved away when an official approached, and helped her into a large black car that was parked nearby. The rest of the family followed and piled into the doctor's car. He made sure no one got separated in the crowd. He held Jennifer while Mary was coughing and wheezing. They only drove a few blocks to his office. The doctor administered a shot of adrenaline with an old-fashioned 3-finger chrome syringe and soon she began to feel better. He gave her some antihistamine pills to take with her as well. Soon, she fully recovered. After a while, he took them all back to the airport and escorted them back through the crowd, past security, and to the ticket counter, where their flight was waiting. They both thanked the doctor and he pressed too much money into his hand, but he refused to take any money. He never learned the doctor's name and never thought to ask for his business card to someday thank him properly for quite likely saving Mary's life.

They flew on to Columbo on Air India. The most remarkable thing about the flight was their discovery that they could not eat any of the delicious-looking food because it was so spicy. Mary loved spicy food although that food was too much. His tongue was on fire from the first bite. Once they landed, they hurriedly found a café and had a quick meal to satisfy their hunger.

They walked through the airport and the four of them piled into a hired car with their 17 pieces of luggage for the 3-hour trip up into the hills to Kandy on the central plateau, where Julianne and David C., Jerrie and her friend Dan, had been living. He had advised his children of the date and approximate time they would arrive at the main hotel in the middle of town. The road was straight for some time but then winding, with hairpin turns, and beautiful views of tea plantations and the rainforest and people everywhere. Once they arrived in Kandy, they checked into the 19th Century British colonial-style Queen's Hotel, that was originally a grand residence and then the governor's mansion. They were impressed by the hotel's interior that looked like an Agatha Christie movie set. David H. was fascinated by the antique open-cage elevator in the lobby. They were given a large suite of adjoining rooms of varied sizes, shapes, and levels. They settled in and then returned to the lobby to wait for Julianne and David C.

Only a few minutes later, Julianne breezed through the front doorway with a big smile and hugs for everyone, explaining that David C. was still at school and they would meet up with him later. They showed her their interesting suite and she told them about what they had been doing in Kandy. Jerrie and Dan had already departed for the States, where they intended to sell some gemstones that they had bought locally. Julianne was staying with friends, an elderly English couple, while David was finishing the 9th grade at boarding school. They then went to David C.'s school to pick him up. He was happy to see them and eager for the school term to be over. He later told them how he had experienced bullying by some of the local boys and was glad to 'get away from that place.'

Unfortunately, as charming as the historic hotel was, the dustiness of it set off Mary's allergies again and she began wheezing. The antihistamines were helping, but she was still uncomfortable. Mary and the kids would remain in Kandy for another week until David C. finished school. They then left the dusty Queen's Hotel and moved into a bed & breakfast (B&B) up in the surrounding hills.

Julianne's Turn on the Elephant



After a brief visit with Julianne and David C., he was off to the planned meetings in Columbo with hydrogeologists of the Sri Lanka Geological Survey on rural groundwater matters associated with the UN program. He would return to Kandy later the next week and they would then all make the trip to Madras and then to Coimbatore, in India.

In the meantime, Mary, Jenny, David H., David C., and Julianne spent a week in the comfortable B&B and touring around the area, visiting the Kandy Market, famous for handmade batiks, a traditional Buddhist dance performance, a tea plantation, and even an elephant ride in the Kandy jungle. Jenny developed a stomach bug and, once again, they visited a local doctor, this time in downtown Kandy. The doctor prescribed a diet of *Pedialyte*, just as their doctor at home would have done, and soon she was back to normal.

When he returned, they loaded up the large taxi he leased in Columbo and the Campbell clan of six now traveled the road back to Columbo, but it was certainly no freeway. It was littered with sacred cows, mothers with children dancing around them and ox carts loaded with products of all types, from fruits to rolls of plastic. When they arrived at the terminal, as they were checking-in, he was having a problem with the ticket agent about their papers, visas, baggage, etc. The discussion got very heated, but he talked the agent through the issues and they were allowed to board the plane. He later told Mary that the agent was none too happy they were going to "Tamil country," and was reflecting his bias against the Tamils (of southern India), who were creating civil unrest in northern Sri Lanka.

The six of them departed Columbo and flew to Madras. They had to layover that night at a local hotel. The ride from the airport at night was strange, he remembered as the taxi had large holes in the floorboards and the driver had to request an advance on the fare to fill up with gas. The hotel was rather new and modern, but many of the fixtures didn't work and the shower produced hot and chilly water alternately at regular intervals. He had to move out of the hot water stream and chilly water that followed, trying to time the acceptable temperature in rhythm, which made showering a whole new experience. But, the hotel had great air conditioning, and they slept well.

They boarded the flight to Coimbatore in bright, sunny weather. They landed and were met by one of the local University people who took them to the arranged hotel, which turned out to be a beautiful colonial-style club, The Coimbatore Club, where maids, bed-tea, and great meals became the norm. The morning bed-tea serving included bananas and toast for early breakfast, resulting in crumbs and spills in the children's beds. After a day or two, Mary realized that the maids hadn't changed the sheets and asked them to do so. With some hesitation, saying that they normally changed them weekly, they agreed. Later that day, Mary and the children were taking a walk by the river adjacent to the hotel and saw the hotel staff in the river up to their knees busily washing the sheets, slapping and rubbing them on the protruding, rounded rocks. Mary was mortified that she raised the issue in the first place and later apologized to the staff for causing extra work for them. The children were impressed with the delicious English-style meals, especially the desserts with custard sauce. They went on sightseeing tours almost every day. They celebrated David H.'s 10th birthday there.

The next morning, a driver arrived to take him to the university to begin the lectures. The Coimbatore Institute of Technology (CIT) was organized in the 1950s to provide unique professional training with special emphasis on industrial activities. Like the Professor Ingemar Larsson's Royal Institute of Technology in Stockholm, Sweden, they focused on the philosophy of connecting the academic with applied industrial experience, which had been his philosophy also at Rice and at the NWWA Research Facility.

On the first Saturday he wasn't lecturing, they hired a driver and took a trip to the Nilgiri Mountains (aka Blue Mountains) north of Coimbatore, which form part of the Western Ghats in the western part of the State of Tamil Nadu. As they passed 5,280 feet above sea level, however, he began to get a splitting headache, so they found a suitable hotel, picked by the experts among them (i.e., David C. and Julianne) for him to stay the night and they would then pick him up on the way back down the mountain in the morning.

During the first week, a young, and quite attractive, Indian girl about 20 began to hang around the family while they were in the hotel garden having lunch or tea. She made it clear that she wanted to go back to the States with them and kept promising that she would be their maid for five years if they would take

her back to the States with them. Mary tried to be polite with her but finally had to explain to her in detail the many reasons they could not help her get to the U.S. She departed, disappointed.

His lectures were completed and then the next few days were spent in the field with the class demonstrating geophysical surveying using a number of methods designed to identify faults in igneous rocks, some having significant permeability and some too tight to permit sufficient groundwater flow to serve as a viable water supply. The final day, the class members and lecturers all came together for a group photo.

The next day, they boarded a Boeing 747 Air India plane to New Delhi and, from there, they flew on to London, missing any chance to see the Taj Mahal, that ivory-white marble mausoleum on the right bank of the river Yamuna in the Indian city of Agra only 3 hours by road south of New Delhi. Mary still fumes about missing the Taj Mahal, but he felt that they needed to be in Ohio for Christmas.

A delicious pink dessert was served on the plane. He didn't like the look of the pink pudding. By the time they arrived at their hotel in London everyone but him was sick with apparent food poisoning. They had to lay over a day or so until everyone recovered. Although he was glad he didn't get sick, he felt badly for the rest of them. His instincts about food were confirmed.

When they were all ready and well, they were off to the London airport to catch their flight. There were problems in getting flights because it was the holidays. Because they had had to miss the booked flight due to their run-in with the pink pudding, they had to arrange a new flight. They happened upon the British Airways ticket counter. With great surprise, the agent said they had space for them for a flight that was about to leave for New York and would upgrade them to the near-empty business class area, only if they ran to catch the flight. They ran and caught the flight and most of the family stretched out almost the whole night because the agent was correct. There was plenty of room. As they were landing at the New York JFK airport, he noticed that there was snow everywhere and it was blowing the big plane around, but the pilot did an excellent job setting the plane down safely and smoothly.

They were processed through U.S. Customs and then went to the TWA terminal to catch their booked flight to Columbus and to Grandma's (aka Maxine and Clarence's) house for Christmas. The agent announced that a snowstorm was approaching and that there may be a considerable delay. But after a few minutes, the agent announced that the flight was leaving ahead of schedule, and everyone present was to board immediately. They all boarded with haste and the plane was pushed away from the gate and the pilot fired up the four engines on the Boeing 707, taxied down the tarmac, turned onto the active runway and off they went into the snowstorm. The pilot announced overhead that if they had waited another 15 minutes, their flight would have been grounded because of limited visibility. But he said they should be breaking out of the storm soon and should be able to see a full Moon. Everyone on the plane clapped and yelled, which woke up Jennifer who had just settled in for a nice snooze. She cried only a few minutes and then Mary snuggled her back to sleep. The Moon was indeed up and full. Quite a sight.

They landed in Columbus in clear weather, far from the storm, but it was cold. Maxine and Clarence, and brother Steve and Lynn, were there to meet his new family consisting now of he and Mary, and David H., and Jennifer, and David C. and Julianne. The family arrived in Lancaster late that night. They were all glad to



be back in the USA in late 1979. He remembered that a family photo was taken that Christmas Day at Maxine and Clarence's house, his old home, of all of them, including his brother, his wife Lynn, and their only daughter Michelle, and his sister, Carolyn (who was a registered nurse by then) and her first family, George (a Vietnam Medal of Honor awardee and artist in ironwork) and their son Jared. The family was to further expand in the years ahead.

As the 1980 Rose Bowl came and went, the Buckeye fans took solace in the fact that USC won by only 1 point during a period when the team "up north" had lost 1 in 8 games over those years, but neither could the other Big Ten teams win in the Rose Bowl. But the Buckeyes at least won three games during that decade.

The family of six returned to Houston, and Mary and he decided that they needed a much bigger house. Mary searched the possibilities around northern Houston keeping in mind the travel distance, traffic, and driving time to his downtown office. Dottie A. (from Australia days) had started her own real estate company after Robert and she moved back to Houston from New York. She helped Mary find a rental house on Anvil Drive in Ponderosa Forest, a sleepy suburban development just north of FM-1960, the main east-west thoroughfare in that area in North Houston. She tried to talk Mary into joining her in her company and to get her real-estate license, but Mary realized that it would require time away from her growing family and politely declined.

It was a two-story house with a stucco and wooden front surrounded by tall Loblolly pine trees. It had a large fireplace in the family room and a heavy, metal-enclosed and re-enforced closet in the foyer to protect fur coats that doubled nicely as a storm shelter. Yes, Mary had a nice 3/4-length fur coat. The iron box could sleep 4 or maybe 5 people safely, if necessary. There were four bedrooms upstairs, sufficient for the two Davids, one Julianne and one Jennifer, plus a comfortable master bedroom with a study for Mary and him. Their back window overlooked a new swimming pool with two beautiful palm trees. It had a sizable formal living room and dining room with a smaller adjacent room that served as his home office. A large world geological map would cover the wall behind the desk. The detached garage, containing rows of metal bookcases, was used to house his growing library, which meant the two cars sat inline front of the garage beside the house at the end of a long driveway.

This was also the period when he decided it was time to let the Jaguar go. He sold it for around \$1,500.00 and they purchased a two-door Oldsmobile Cutlass, a beautiful, well-built car. He wondered how much the Jaguar would have been worth if it had been stored for 20 or more years, but he didn't want to pay for storage at the time.

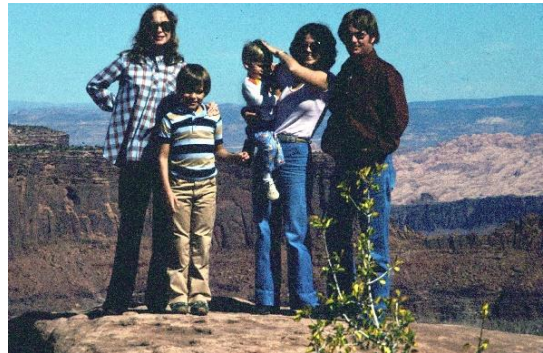
This new house had a pleasant and comfortable feeling. The four upstairs bedrooms provided lots of space for the four children. He operated his private projects from his home office out of necessity because the NURE projects on the Seward Peninsula began well before he joined K&A. The dining room was made into his office and was adequate, but a bit cramped.

The pool in the backyard was the first in the family and they had to make rules like no swimming alone, no running for any distance around the pool, and no diving into shallow parts of the pool. He had to maintain the hydrochemistry of the pool, which actually needed a chemistry major to start but with practice it became possible to maintain safe hydrochemical ranges. The boys were responsible for the weekly pool cleaning, which caused a lot of grumbling. When it came time to choosing the next house, they both said, "No pool, please."

The drive to his office downtown usually took about 30 minutes to travel the 30 miles, mostly on the main freeway I-45 and that was without consideration to traffic. He learned to avoid the morning rush by leaving about 9:15 AM and the freeway was generally cleared by then. To avoid the evening rush-hour, he wouldn't leave the office until around 7:00 PM. He was only able to arrange this schedule because he was the leader of his group. The rest of the staff adjusted their schedules accordingly, which made everyone happy, except for the petroleum geologists and engineers in the other sections of K&A, who complained about his group having banker's hours, which sounded vaguely familiar. After a while, Kep, Henry's son who was the new President of K&A, told his sections to cut the complaining, and they all adjusted their schedules, although a few brown-nosing engineers maintained their 8:00 AM to 5:00 PM schedule. But there were always exceptions for unique events.

Kep, also known as Henry junior (hence Kep was his fraternity name) was an affable fellow about his age. He had the reputation as a fraternity boy with platinum spoons in his pockets only because his father, Henry, had already mounted a sizable family fortune in certain pipe stocks and other investments. He was a graduate in geology from the University of Texas at Austin. He also had the reputation as a ladies' man around town and was highly sought after by aspiring young ladies. Over the seven years spent with Kep and K&A, he worked on many projects. Some were reflected in public reporting in his chronological list of publications, but many were not because of their confidential nature.

He traveled with Kep to New York City and many other cities to make presentations regarding groundwater and mining issues, while Kep and his Chief Geologist would present oil & gas related reports on future trends. One day, Kep asked if he would sponsor him as a member of the American Institute of Professional Geologists and he said yes, although he thought that might not be appropriate. But he let that go.



Mary, David H., Rita, w/ Pete, and Doug L.

The coal project in Utah had been reviewed earlier that year and based on preliminary drilling and coring, he had concluded that additional investigations needed to be conducted regarding the reserve base. But over the ensuing few years, the client bank in NYC ignored the details in his report and funded the project to about \$8 million, although his report clearly cautioned the veracity of the estimates on the coal quality and reserve-base. As the project moved forward, it was to be the first open-pit shallow coal mine in Utah, named the Dirty Devil Mine, after the adjacent river, which was located 70+ miles south of Price, Utah. The need for an on-site coal processing plant became obvious to Buddy M., the promoter, who had presented the project to the bank for the initial funding and had presented the preliminary geological reports on the coal occurrence. He also managed the day-to-day operations of the mining operations.

Corkie S. and Grimm M., investors, who had just cashed out of a Saudi oil & gas project in Africa, had learned of the project through the bank and provided bank guarantees on the project. It was at this stage that K&A (aka he) was asked by the NYC bank to provide technical oversight on the mine development and delivery of coal to the processing plant at the mine site in central Utah. The plan was to mine the coal, deliver it to the processing plant which was to reduce the ash content and thereby improve coal-burning quality, and then ship it by truck south passing by Factory Butte through Hanksville and then to the road north to Price.

There, a coal-loading facility was being built designed to automatically load coal to a unit train of one hundred cars slowly passing beneath it, automatically supplied with coal from the 25,000 ton stockpile regularly renewed by the trucks coming from the south and the Dirty Devil mine site.

The pit was expanded, the coal was being mined, transported, and loaded for rail transportation to the power plants in Las Vegas and elsewhere. About four-unit trains were shipped and delivered and the mine revenues recorded by the bank as repayments began. He had spent time with both Corkie S. and Grimm M. over those weeks.

They owned, or had access to, a *LearJet* to look after their investments in the U.S. One trip, he took Mary and David H. to Utah on one of his regular inspection tours of the mine operations. Doug L. and his wife Rita just happened to be visiting the area. Corkie S. and Grimm M. arrived in Price at the airstrip the same day they arrived from Houston. Mary and her son, David H. took their first ride on a *LearJet* and they saw the sites of Utah from on high.

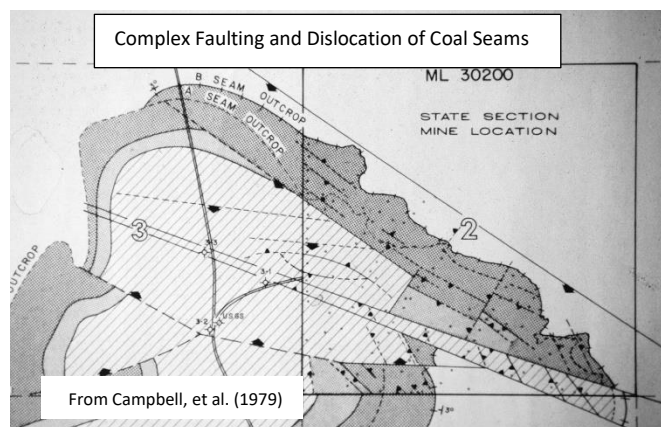


Back down in the coal mine, however, a problem was developing. During one of his trips to the mine he noticed that the ash values recorded in the paperwork of the processing plant operations were going up. He went into the pit to examine the three bench areas that were present, while front-end loading was underway with a small bulldozer; he examined the three sites of the exposed coal seams up close. Sure enough, the ash seam had increased in thickness while the coal seam decreased in thickness, drastically. At the next blasting pattern and after the material was removed to expose the coal bed, the coal-seam thickness was down to inches instead of feet and the ash seam was measured in feet. That day, the mine closed, the processing stopped, and the stockpile was exhausted with the last train to Las Vegas having just departed the Price facility. The next day, the power company in Las Vegas issued a high-ash warning to the last unit-train shipment, which terminated the purchase contract, as initially arranged.



Factory Butte from the mine (He and David C.).

The lawsuits began to fly from the bank personnel, essentially to cover their overly aggressive funding. But they began with one of their star fact witnesses. He defended his report and its warnings of caution and defended his lack of involvement after his report was submitted to the bank and of not being notified that funding of the project had subsequently occurred by the bank. The case was settled with minor finger-pointing at him, but the men involved at the bank learned a hard lesson, which was to always read their consulting reports carefully, but they were gone in a few months in any event.



The bank funded a follow-up re-evaluation of the coal resources in the area in case there were assets available in mineable coal reserves somewhere, but in the drilling he conducted, he found complex faulting and the coal seams were also not of mineable thickness or depth in the drilled areas.

This was the first litigation he encountered along the way. The first as a fact witness, but the rest were as an expert witness for some 40 cases. All but one was settled. One turned into a fuzz ball where information was presented but emerged as an information paradox, where questions by a plaintiff attorney might go along of the lines of:

Plaintiff Attorney, "When did you quit beating your wife?"

Answer, "I didn't."

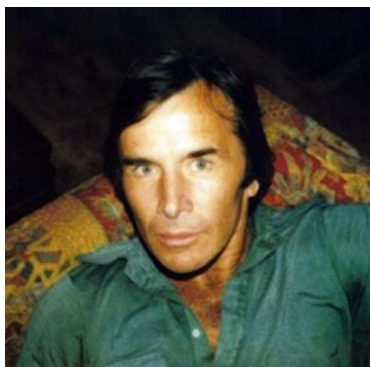
Plaintiff Attorney, "So you haven't quit beating your wife?"

Answer, "I quit."

Plaintiff Attorney, "So you once beat your wife, but no longer beat your wife?"

This type of questioning represented the 'paradox in premises' approach to interrogation even of a facts witness that were often applied by an aggressive plaintiff attorney. When utilized by an ignorant or ill-equipped attorney, it can lead to unruly depositions. The site was visited again in 2016.⁴⁴

This was not the last he heard from Grimm. Neither he nor Corkie S. had to produce any significant guarantees to the bank in repayment because of a number bank errors in the agreement, or so Grimm claimed. Grimm was another unique character that passed through his life. He had Cherokee in his heritage and his profile view could have been a model for a coin commemoration. He was a star running back in high school and at the University of Oregon and was destined for a great football career when a player smashed into his knee and shredded the bones. After years of surgery, he recovered enough to enter the draft in professional baseball and was taken into the farm team for the Chicago Cubs. As an outfielder, he was on his way again, when the knee gave out, which brought the end of sports for Grimm M., except for golf.



His parents lived around the Monterey Peninsula in Carmel, in sight of the lone tree on the lone rock, he remembered seeing at Grimm's house one day. His parents were very well off and, as the only son, he grew up pampered by many ladies, but mostly by his mother, who was his support when all else failed. He was a gentleman and, oddly, rarely used foul language. All these features made him a classic, effective promoter.

His father was a doctor in the area and decent golfer and long-time member of the *Pebble Beach Golf Club*. He took Grimm with him to the golf course on a regular basis when he was young until high school. He was a bogey golfer by age 15, but was then distracted by the young ladies, high school, and then college, until the incident. After he left the Cubs, he went back to golf to help rehabilitate his knee. In no time, he became a scratch golfer at Pebble Beach, which was not easy. He

⁴⁴ <https://i2mconsultants.com/downloads/corp/CampbellandAssociatesFieldActivitiesUtah1976.pdf>

made out well in the side-betting that went on and earned pocket-change for decades. What that meant in terms of dollars he never disclosed but based on his expensive watch, shoes, and cars, it was quite likely a substantial amount of money, because he said he hated to take money from his parents after he was an adult.

Some years after the Utah project had simmered down, the first phases of the Seward Peninsula uranium and REE project were gathering momentum. Grimm would come to Houston on occasion and they would invite him to dinner or they would take him out to dinner. Grimm overheard he and brother Steve C. talking about a project on the phone during one of his visits and he asked about it. They already had raised about \$240,000 from Omega Energy Corporation in West Virginia. Grimm asked if he could contribute. They settled on 1% for \$60,000, which brought the total budget to \$300,000. for the Seward Peninsula project.

Mary thought Grimm was very handsome. He loved to tease and wrestle with the boys and tickle Julianne and Jennifer. Grimm never once offered to pay for lunch or dinner out, having the classic alligator arms, saying that he could write it off as a business expense, which it was, and he did. On one these visits, the subject of the American Civil War came up. Mary offered, out of blue, that if she had known that he had been born and raised just two blocks away from the birthplace of General Tecumseh Sherman, she never would have married him. He thought she might even have been serious, but dismissed it. It reminded him instantly of the incident involving his misrepresentations to Carol C. in California some 20 years earlier.

Grimm, during one occasion, took him aside and asked if he could loan him \$2,000 with the provision that he would pay him back very soon. That went to \$3,000 his next visit and then \$4,000 the next. They talked about golf a lot and especially his success at Pebble Beach. Grimm took a special liking to his older Ping putter. They putted golf balls around the living room rug. He said he really liked the feel of his putter and he asked if he could borrow it. After some thought, he agreed and Grimm departed. On his next visit, he refused to respond to requests for more loans, and after that Grimm didn't visit them again. He later heard from other associates that Grimm had borrowed money from all his friends.

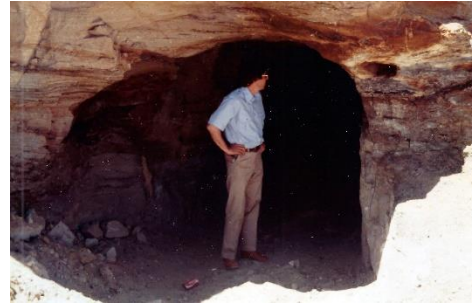
A few years later, Grimm called and asked me to take a look at a "gold-platinum property" for him and the claim owner. He flew to Las Vegas and met Grimm. They drove 100 miles in his BMW, which was the roughest ride he ever had in a car. The suspension in that BMW seemed to be almost nonexistent, he



remembered. That project turned out to be a typical black-sand sham, involving cohorts at small labs with alleged platinum, osmium, and other elements reporting in the ppm range, which were often confused with iron lines in the spectrographic methods employed in those days by the small labs. He did not recommend further action on that project. Grimm mentioned to him that he participated in the financing of a large copper project outside of LaPaz in Bolivia. He expected Grimm to ask for money, but he didn't.

The last time he spoke to Grimm, he happened to ask him when he was going to send back his Ping putter and Grimm said, "You know, I have made more money with that putter than I have made from our Seward Peninsula project." He told him that he needed to be patient. Grimm told him more about his copper project saying that it is about to be funded, and he will bring the putter with him the next time he comes to Houston to settle up with what Grimm owes him.

A few months later, one of Grimm's associates asked him to make an assessment of a uranium property in Utah. He and an assistant traveled to Utah and went into one of many abandoned underground mines in Southern Utah, after they inspected the roof in some detail. The photo shows "a tail" (the back trace to a uranium roll front (dark band), which exhibited very high radioactivity, consisting of daughter products (radium, etc). A few weeks later, he was asked to examine the mineralization exposed in an abandoned uranium mine that could be placed back into operation when the uranium market improved.



After a few months, one night he received a telephone call from Mrs. M., Grimm's mother, who was sobbing. As best he could make out, Grimm had died the previous day in a hotel room in Lima, Peru, while on the phone with his mother. She recounted that they were talking about how the project had just been funded and he had just asked her to manage the money that would be arriving shortly in his bank account in Carmel. She was a Director and co-signer for his company. She said all of a sudden he began to talk gibberish and he said he had one hell of a headache, and then she heard the phone falling and hitting something, then groaning, and then nothing. She knew Grimm must have just had a stroke or heart attack. She disconnected and called back to the hotel desk to get their doctor to go to Grimm's room ASAP. A few minutes later the hotel doctor call Mrs. Mason to say that her son, Grimm, had just died of a massive stroke and could not be resuscitated.

He provided her with as much solace as he could as she meekly said goodbye. He thought she might follow her son; she was that inconsolable. A few weeks went by and she called again. This time she sounded better but still heartbroken. She said that she had Grimm's debit book, and it showed that he owed him \$5,000. She asked if that was true, and he told her that he thought it was \$4,000. She then asked if the Ping putter was his and he said it was. She indicated that Grimm's project had indeed been funded and that she had more than \$750,000 in the bank at the time and royalty checks would be arriving soon. She mused that wouldn't you just know it, with all of Grimm's promotions, this one came in as he was dying. At least his two daughters will have adequate college money now, she said. Grimm never mentioned that he had two daughters or an ex-wife. A few weeks later, a FedEx envelope and triangular FedEx box arrived. One containing a check for \$5,000.00 and the box contained the red-hot Ping putter, which was put to use a few weeks later. It was no longer red-hot.

Over the following months, he drove 30 minutes down the freeway in his dark-blue Delta 88 Olds and arrived around 10:00 AM at his office of Keplinger and Associates, Inc. in the downtown Entex building on the 32nd floor. He had a developing project from another coal deposit investigation and other mineral reviews with a trip scheduled soon to the mercury area at and around the Mariscal Mine near Big Bend country within sight of the Rio Grande River border with Mexico.

They arrived after a long drive. He spent three days with one of his staff geologists looking that area over. One of the first things he noticed was the number of rattlesnakes; they were numerous to say the least. Inside the old mine adits, it looked like a rattlesnake hotel. He instantly spotted with his flashlight at least 10 snakes coiled up littering the dark floor and perched on crevasses in the wall of the adit. He made a note in his logbook, "Get snake exterminator to clear all adits before further investigations can be conducted." Even the surrounding outcrops contained rattlesnakes hiding under rocks or sunning themselves. He had the thought,

‘At least these guys let you know they are pissed off before they strike, as opposed to the absolutely awful brown snakes of death in Australia.’

Oddly enough, the area had been an important mercury producer. At the peak of operation in the 1950s, the area produced cinnabar ore from underground mines containing about 1,400 seventy-six-pound flasks of mercury - nearly one quarter of the total produced in the United States. The area is called the Terlingua District, located 90 miles south of Alpine in Brewster and Presidio counties with the Big Bend on the near horizon. The area residents were thinking about having rattlesnake roundups, which he heard later had become quite an affair. He prepared his report recommending additional exploration, but the client declined, probably because of the rattlesnakes or because it was too close to the Marfa lights.



In 1982, a client indicated that he had a contact with a prominent Native American in Nome, Alaska, who indicated there were “nuggets” showing on a property near Helen’s cabin, just north of Death Valley on the



Seward Peninsula. He assembled a team to consider the matter. The team consisted of he and his brother, Steve C., and Dr. Eric Nelson (his previous office mate at Rice University from a few years before). His brother had evaluated the weather and indicated that a large high pressure system during that early winter season would be dominating the subject area in Alaska for a few weeks. With that “weather



window” in mind, he gave the go to the project. When they arrived in Nome, they met Helen and proceeded to the property some 100 miles to the east in a Bell Jet Ranger helicopter. Turned out that the “nuggets” were just pointed rocks sticking out of the snow that had the shape but not the content. But they conducted



ground magnetometer surveys because the area contained highly mineralized rock in “floaters” (isolated rocks) and found a significant ground magnetic anomaly as the wind was beginning to increase and the temperatures were falling that day. The ambient temperature was low enough that frost from breathing by both Eric N. and he became encrusted and froze their mustaches, eventually breaking off making their faces look untidy and unkempt for weeks afterward.



The photo shows Eric N. at the head of the survey line with Steve C. reading out the magnetometer readings and he recording the readings and taking samples. Death Valley is located just over the rim in the photo. After



they finished the survey, the winds began to pick up the light snow on the ground making visibility difficult.

They flew back to Nome in blustery weather, for the “weather window” had closed as winter began in earnest on the Seward Peninsula of Alaska in that early November. They all returned to Houston and Eric N. to Golden, Colorado and his School of Mines, where he was a professor by then. He conducted microscopy on a few of the samples and Eric reported his findings to him, who in turn, prepared a report to the client and included Eric N.’s report in the appendix. He gathered the findings of the assessment of the rock samples from the altered zones, and after having them analyzed in a Houston laboratory, the results of some of the samples indicated that they were heavily mineralized, not with gold, but with silver, lead and zinc. He recommended further investigations and the publication on the previous year’s results was completed the next year.⁴⁵ The follow-up field investigations revealed a significant magnetic anomaly.⁴⁶ Sometime later, he sent Steve C. and David C. to Nome and then to the north rim of the Death Valley for the purpose of excavating a pit by blasting to observe and sample the apparent source of the magnetic anomaly. They found that the rocks were highly fractured and drilling to place sticks of dynamite down the holes was impossible. They engaged a licensed blaster in Nome to supervise the blast protocol that followed with only minor penetration into the zone of the anomaly. The final report was completed. The area remains highly prospective for metals.

When he had finished with the Death Vally report, he began to prepare additional lectures and overhead slides for his approaching UNESCO trip to Tanzania. Ingemar Larsson called one day to discuss the upcoming trip, and during that conversation, he warned that this trip was going into potentially hostile territory. Ingemar said that previous SIDA-sponsored activities had never had a problem and that they knew how to manage such conditions. He also said that he would be joined in Paris by a Swedish Vice-Counsel to travel with him to Athens, on to Cairo, and then to Dar es Salaam, Tanzania, where the UNESCO team would assemble before travelling by air to Arusha, a sizable town near the Kenyan border.

Before he departed on that trip he had no real concerns about Ingemar’s warning, but he decided that he and Mary should have some way of communicating and signaling in case he was ever in political trouble. They decided on the procedure that if he was allowed to talk to her on the phone and he said, “The sun was shining brightly” in any context, that was the signal to call the U.S. State Department and indicate to someone on the Africa desk that the “The SIDA UNESCO Lecture tour in Tanzania was in some kind of trouble.” That would set things in motion for the State Department to look into the matter.



When the time came to depart for Tanzania, he knew that Mary had things under control in the new, enlarged family. David C., Julianne, and David H. were settling into their schools at Westfield High and Ponderosa Elementary schools. David C., now a sophomore in high school in Houston, was thinking about going out for baseball and Julianne and David H. were making a lot of new friends.

⁴⁵ <https://www.i2mconsultants.com/downloads/corp/JGG-2-023.pdf> See pages: 47-58.

⁴⁶ <https://www.i2mconsultants.com/downloads/corp/DeathRidgePlatel.pdf>

This trip he was on his own. Mary would not be present to help him deal with the problems that were to come, but he only held minor concerns. The early flight from Houston to NYC and then to London and on to Paris went like clockwork. The weather was good all the way to Paris. He arrived late evening and took a taxi to the hotel near UNESCO headquarters knowing he had plenty of French folding money to pay the driver, this time, remembering that last time they were in Paris not that many months ago.

He spent a day at the United Nations's UNESCO offices, which were surprisingly complex operations that he had not been aware of in previous trips. They had operations and projects underway in many countries, but the SIDA project of Ingmar's was one of the larger projects, if the size of the meeting room and the number of staff members who also attend the meetings were any guide. There were six experts from various countries. He was the only American scheduled for the lecture tour, although there were other Americans involved earlier in the Indian trip from the U.S. Geological Survey in Reston and from FAO in Rome. They were not included in the Tanzania trip. SIDA was similar to the U.S. AID government program.



Some of the UNESCO team shown in the photo are Professor Erick Ericksson (a birthday party with a small flower wreath on the head), a well-known hydrology professor from the University of Uppsala, Sweden; Professor Gunnar Gustafson (far right), a geology professor from Chalmers University of Technology from Gothenburg, Sweden; Professor Gerrit Krol (far left), a geography professor from the International Institute for Aerial Surveys and Earth Sciences from Enschede, The Netherlands; Professor D. S. Parasnis (second from right in front), a geophysics professor from the University of Lulea, Sweden; him, and, Professor Ingemar Larsson (back row right), as the Professor-in-Chief of the team. There were also four SIDA government representatives, but none of them interacted with the lecture team at all for reasons he was never told nor asked about for that matter. They were always just around the team but never a part of the team during that trip. He did see Ingemar speaking to them from time to time.

They arrived in Arusha in a very old plane and he was relieved when they were on the ground. He had noticed as they were landing that Arusha was located at the base of Mt. Meru, a volcano that was relatively young in geological terms at least. They were bussed to a hotel complex that reminded him of the living quarters at the Coimbatore Club in India. The bungalow was private and surrounded by Palm trees and a lush garden. About 50 yards away stood a large Blue Jacaranda tree in full bloom. It was incredibly blue and one of my favorite trees, although it is called a big plant by someone in the know.

After he unpacked and was waiting to attend a planned gathering of the team that evening, he sat down in a comfortable chair and looked out over the quiet, beautiful surroundings. Off in the distance towards the northeast was an odd looking short cloud near the horizon. He looked back at it a number of times and noticed that it wasn't moving. Maybe it was one of those lenticular clouds. Then he realized what it was. It was the snows of Mt. Kilimanjaro.

Once there, they were to present six days of lectures, one day of which was for his lecture, and then to travel by road to Dodoma, the new Capital of Tanzania. The plan was to visit the city water supply wells, treatment plant, and power plants and see the construction sites of the new government buildings. The

UNESCO team would travel by road some seven hours back to Dar es Salaam for a closing dinner with government officials and the UNESCO team.

That first evening with the team was especially pleasant because the team members had become friends during the trip to India and they began to tell family stories, in sometimes very broken English. He said to Ingemar that he would not consider it an insult if they would rather speak in Swedish, but Ingemar said that this gathering allowed the Swedish members of the team to practice speaking in English, so it was no problem. He also noticed that when he would approach a group they were speaking in Swedish until they realized his presence, at which time they would instantly switch to English. He found that ability to be fascinating.

During the meeting, Ingemar laid out the plan for the lectures that would be starting the next morning. What he said next came at great surprise and was a little disconcerting,

Ingemar said, "Although we have seen no sign of it yet since we have been in Tanzania, this country has been quietly occupied for some time by the East German Army, which is basically the Russian Army. My people tell me that they think they have done so to try to control the natural resources, such as oil & gas, uranium, and precious metals. My people also tell me that we should expect to see armed East German guards patrolling the university area for possible trouble. Should those guards drop by to observe our lectures, we plan for them to hear only broken English being spoken by the lecturers so they should soon tire and move on. We do not wish to expose you, Professor Campbell, and your American-accented English that we are told the guards are trained to recognize. There may even be standing orders to the guards to arrest any Americans encountered for interrogation of unknown duration. Therefore, we will take special steps to avoid the problem entirely. I hold here in my fingers what they once called a Froggie during WW2, which when pressed makes clicking sounds, like some species of frogs. We have observers placed at strategic locations around the lecture hall who will watch for any approaching guards. If a guard approaches while you are speaking and you hear this sound, "click-click," please cease speaking and walk down the steps from the podium and sit next to me. I will rise and go to the podium and begin to speak about what I have not yet decided. When the guard(s) are then well out of range, I will turn to you and say, "Professor Campbell, if you will." You will then return to the podium and continue your lecture. I trust the students and faculty won't notice what is going on. We may even have visitors from the Nairobi area if they can successfully navigate the patrolled border with Kenya. It is only a four-hour drive through the Serengeti. Are there any questions? OK, let's have a great lecture series for the students and faculty of this university and of the many similar schools in the area in attendance."

As the lectures began the next morning, he realized that he was gaining a lot more information listening to the lectures a second time. Their so-called broken English had become crystal clear by then. The lectures went well, with an enthusiastic group of at least 100 students and faculty and maybe more. Every day, at least one guard would appear in silhouette at the entrance in the back of the lecture hall with his AK-47 machine gun strapped as crossed-arm rests.

A Finnish mining geologist studying the fluoride in the groundwater in the area came into the hotel where the team gathered every evening. He spoke to most of the Swedes only briefly. Ingemar told him later that they had brushed him off and didn't wish to engage him because they thought he may have been an agent. He avoided him entirely, which Ingemar later told him that was the correct move because even

Ingemar and his SIDA people were not sure yet who he was and that meant that he might have been a Russian agent, who spoke Finnish, or just a Finnish geologist from a Finnish university who didn't know Ingemar or the rest of the team and vice versa.

The day of his lecture came, and it wasn't until about 11:00 AM near the end of his morning lecture that sure enough he heard, "Click-Click." He stopped speaking in mid-sentence and casually sat down next to Ingemar, who rose and began to tell a story about his childhood in Sweden having to carry water from a mountain stream to his grandfather's house for cooking. While he was in the middle of his story, a guard appeared, but this time stayed until the bell went off for lunch. He then turned away and disappeared, probably for lunch with his people in a private part of the school cafeteria. After lunch, they all reassembled in the lecture hall and he resumed his lecture until 4:00 PM that afternoon. That evening, a few of the team members engaged him to say that they enjoyed his lectures once again and that they noticed that he had added new material and new overheads. Ingemar also said to him that he was pleased that his lecture went well, even with the interruption.

After all the lectures had been given by the team members through the end of the week, they packed up and headed south along a dirt road into the southern Serengeti toward Dodoma for a trip that took about 6 hours. As darkness arrived, they were still on the road. The other truck had a flat tire and that took about an hour to fix. He was sitting in the back seat on the left side of the Landrover with the window open. The air was cooling off from a blistering day. He could see movement along the side of the road but couldn't see what kind of critter it was, until a great long neck and head of giraffe appeared in the treetops illuminated by the headlights of the truck. A truly impressive sight. It was probably curious what the light was about.

Then everyone settled in again as they moved down the road. After a while, he then saw off in the distance toward the east a line of very bright lights. He asked the driver to stop and retrieved his binocular case from the floor of the truck around his feet and took a look. He wanted to say, 'Holy shit' but didn't and only said, "Wow." It was a row of maybe 50 or more tanks and military-looking tents in a great long line. He didn't see anyone walking around, nor did he see any markings on the tanks or flags of any kind. He reported what he had seen to Ingemar, and they then continued their trek to Dodoma. As they continued, he noticed that Ingemar in the front was busy doing something. He leaned forward to look over Ingemar's shoulder and could see that he was looking at a map and marking coordinates in his notebook, probably of the tank locations. So, he concluded to himself that they were on a spy mission. He wondered whether he should let his State Department know as well when he got back to the States.

They arrived in Dodoma late in the evening and found their hotel and everyone went to bed after a small meal. They spent the next few days driving around Dodoma through crowds of people on official-looking inspections of city water works, consisting of large-diameter deep water wells and adjacent treatment systems that applied rudimentary chlorination to the water before distribution to a series of pipes that ran along the surface in many directions. He asked someone why they didn't bury the pipes, and their response was that it cost too much. The team also was shown the power stations that consisted of oil-fired burners that heated water to turn turbines that created electricity. Most of these plants were only used at night unless there was a special need that developed for the construction of the new government buildings. The closest power would be operated almost 24/7 in those areas.

They completed the city tour, and it was time to head back to Dar es Salaam the next morning. The organizing team declined the offer of a plane to take them back to the old capital and chose to make the 7-hour drive. He too preferred to travel by road in Tanzania.

The last event of the tour was the farewell dinner for the UNESCO team given by the Tanzanian government and invited guests. They all attended dressed in their best field clothes. When they arrived by car from their hotel, they saw that the event was to be held in a very old historical building of colonial days, he was told. The six members of the team were led to the receiving line of government officials. He stuck close to Ingemar, as requested. The team shook hands with everyone in line without saying much. Ingemar advised him before the event that each member should shake hands and make strong eye contact, while smiling but with minimal speaking. The government people spoke in perfect neutral English, which he thought was rather odd.

The team was escorted to their seats by Tanzanian guards in shorts and brown shirts. No sign of any East German guards, or weapons of any kind. The table must have been at least 10 yards long. The meal was mutton-based with a variety of vegetables, small potatoes, and chapati (aka unleavened bread). His preferred food throughout the trip had been chapati with jam, which was widely available in Tanzania. The Minister, who sat at the head of the table dressed in a dark, multicolored galabeya said something that he didn't hear because he was busy chewing the chapati. Ingemar leaned over to him and said, "He said you have been given the honor of having the eye of the sheep," and the platter of sheep's head was placed in front of him by a young man, who pulled the eye out of its socket and placed it in his outstretched hand. He took a bite and then another and pretended it was a large oyster and allowed it to slip down his throat with only minimal mastication. There was applause around the table.

The Minister spoke at some length about the value of Tanzania's natural resources, especially its ground water and the need to develop it, and the need for energy resources to provide electricity, which was the key to growth in their country, as it was everywhere. There was 'after dinner' tea offered, but no alcohol, of course. Upon Ingemar's signal they rose from their chairs after the Minister rose and everyone shook hands enthusiastically.

The team had breakfast together the last morning then departed for their homes in Sweden. Ingemar told the team that he was very pleased with the trip. They parted with handshakes and hugs.

His trip, however, was not over yet. He had arranged meetings in Johannesburg in South Africa and booked the flights before he left the U.S. When undergoing the airport screening, the agents became excited about his boots because their hand magnetometers would signal loudly when passing the probe over them. They made him take them off and then they disappeared with the boots into another room. They returned a few minutes later shaking their heads and gave them back. They were safety boots with steel-toe covers beneath the leather. They had never seen boots like that, apparently.

His destination was Johannesburg, but there were no direct flights. His flight took him to the capital city of Lusaka in Zambia. When he arrived at Lusaka, he went to the ticket counter and then things became a little strange. The ticket agent took his ticket and then said, "Do you see the short man in the brown suit? Go sit next to him. When he gets up follow him. He will take the stairs down to the tarmac and head for a bus. Make sure you do the same."

He said, "OK."

The agent then said, "The bus will then take you down the side of the main runway and then turn to the right down a crossing runway. You'll then see your plane. Understand?"

He said, "I do. Thank you."

He sat down across from the fellow, and they never spoke. About 15 minutes later, the man got up and so did he. He followed him to the bus and they both got on. There was already almost a full bus. The bus travelled down the runway and took a right turn down the new runway. At the very end was sitting a Boeing 727 with the liveries and logos of "South African Airways." The bus stopped beside the plane. There was a portable ramp on wheels in place and they took the steps up and into the plane and settled into their assigned seats. The lady sitting next to him smiled and he asked why the plane was sitting this far away from the terminal. She said, "Zambia does not permit flights from the terminal to South Africa. Something to do with the Apartheid troubles."

About that time, the plane began to roll down its runway and off they went to Johannesburg. As they gained altitude, he could see the countryside below dotted with villages with round huts and streams of white smoke spiraling skyward. After a while, they landed late that afternoon and he took a taxi to the hotel, but he had to ask the driver to wait while he went into the hotel's concierge desk to ask for taxi money. The fellow asked in clear English what tip do you wish to give. He said 20% and he counted out some money and handed me folding money for the driver as he was lugging my not-so-new, but heavy Samsonite suitcase to the check-in counter of the hotel.

Kep had asked him to return through Johannesburg so he could have a meeting with people from a company there for the purpose of getting some information on the coal/lignite-to-oil conversion plant that was near completion not far from the city. Someone at the plant was to meet him at the hotel, have dinner, and the next morning be taken on a tour of the plant. There was a note waiting for him from Kenny D., the contact saying that he would meet him in the hotel bar at 7:00 PM.

He and a bellboy went up the elevator to his room, which Kep's people had booked. It was in fact, a suite with all the accoutrements, a full bar, snacks, big television, and a luxurious bathroom. He soaked in a bathtub for more than an hour to shed the Serengeti dust out of his ears and nose and everywhere.

The time came and he went down to have an actual drink, although he was by no means a drinker, but he was still a smoker, a fact that he was planning to correct one day soon. Kenny, who was maybe 45 in age, balding and a sharp dresser, brought me up to speed on his company, SASO, which was just beginning to produce synthetic oil from coal in their Secunda synthesis plant nearby. He was a London School of Economics graduate but there was no sign of an accent.

The next morning Kenny took him to the plant and plant personnel made a full presentation in their board room, which took about 45 minutes. Then, donning overalls and safety gear, they walked the entire process line, from coal piles, to crushing, to fine crushing, to liquefying, and then passing through proprietary circuits, out came the synthetic oil. When the presentation was finished, even with commemorative group photos that he never saw, he was presented with a thick 3-ringed notebook of data on coal-quality requirements, process descriptions, marketing, and distribution reports.

Once back at the hotel in the bar, he thanked Kenny for adding a stopover before heading back to the states. He said the Serengeti can be tiring. He also asked what he thought of the process. He told Kenny that his petroleum engineers would have to go over the data and then they would let them know what the next steps should be. That comment seemed to please Kenny, who rose and said he had dinner with his wife and they shook hands and off he went.

He sat at the bar and finished his Scotch. His flight to New York was early the next day. He took a taxi and along the way he could see the evidence of the mining that created this major city. There were still large, high tailings and waste-rock piles standing as earthen monuments to the billions of ounces of gold and other metals produced from deep underground mines since the beginning and first discovery. Since he was here, he should have developed some contacts to get a tour of one of the deep mines, like in Mt. Isa.

The next morning, however, he boarded a Boeing 747 South African Airways jet for NYC. That was to be a great ride, but what topped it all was the cheesecake that was served in Business Class. The Business Class was not very full and he asked for seconds. One of the nice-looking stewardesses offered a third slice. He accepted. Afterwards, he slept most of the way in that seat on the upper floor of the 747, probably digesting all that cheesecake, and by the time he landed at the JFK airport, he was no longer tired.

Back in the Houston office, the first thing he did was to call the lady at the State Department and asked her if she was aware of the tanks in Tanzania.

She said, "We are keeping an eye on that matter. By the way, how was your Africa trip? You have been busy in Cairo, Dar es Salaam, Lusaka, and Johannesburg."

He said, "You were keeping an eye on me, as well."

She said, "We do what we can."



His overseas travels had just begun. He received a phone call in early 1980 from none other than Robert A., his boss from Australia and the Conoco ventures. Jimmy Royds had brought Robert back to the Conoco corporate office in New York, where they worked together for more than 10 years. Jimmy received an offer from a major mining company in California and left Conoco behind. Shortly after, Robert had an offer to manage the mineral exploration program of Texas Eastern Nuclear (TEN) in Houston, no less. In the meantime, Jenny was wishing for a little sister.



Robert asked if he was available for consulting work. And, of course, he was. Robert needed a review of the conditions in the uranium industry not long after the Three Mile Island nuclear incident in Pennsylvania. He spent about three months on that private project and concluded that TEN would encounter low yellowcake prices and significant political opposition to additional nuclear power plant construction projects in the foreseeable future, which would likely further depress the price of yellowcake since much of it was already coming from overseas, albeit insecure sources, like Russia.

Then Robert described his next project for TEN. Robert indicated that Texas Eastern had developed an interest in oil and gas in southern Sudan. As part of a potential deal, the Sudanese Minister asked that TE also conduct mineral exploration in the Red Sea Hills District of northeastern Sudan. The area was underexplored, although there were reports that ancient Roman gold mines were present in the area.

He located what little information was available in the Rice University Fondren Library and scoped out the first trip. The first phase would involve going to the Sudanese Geological Survey library to determine what geological mapping had been conducted to date. Based on that, target areas could be established for follow-up on the ground. He would need to lease a plane with a local pilot but he was not comfortable placing his life in the hands of an unknown pilot. He did know a pilot he trusted. His brother Steve's friend Doug L., who was long in self confidence in piloting his small plane. It was an incident that happened about 5 years before just after his McGraw-Hill book was published that solidified his confidence in Doug's piloting abilities.

Having earlier established Doug's credibility as a pilot with Robert A., he recommended the extra expense of taking Doug with him as a back-up pilot and field assistant and photographer on his trip to Sudan. Robert, he, and Doug flew to London and then to Khartoum, the capital of Sudan, near where the Blue Nile and the White Nile merge. He soon learned that the two rivers derived their colors from the sediments they carry. Originating in the Equatorial Lakes region, the White Nile was rich in light-gray sediments. As this long river meanders over flat terrain, it loses over half of its water to evaporation. The Blue Nile originates in the highlands of Ethiopia and Eritrea, picking up black sediment en route to Khartoum and is fed by monsoon rains. Swimming in the Nile was not permitted. The disease *schistosomiasis* was endemic to the freshwater rivers and lakes of Africa, and in its various forms is believed to infect some 200 million people in Africa, Asia, and the Caribbean. Only imported bottled water or soda were recommended for drinking but the cooked food was safe, although not salads.

They stayed at the Khartoum Hilton, which was very similar to any Hilton in the U.S. Robert went off to meet with the ministers, while Doug and he went back to the airport to find out where the rental planes were parked, which wasn't difficult to find. They went into the office and an Indian fellow, Aziz, met them and asked them if they were the Texas Eastern guys he was expecting. Aziz told them that he spoke English and a number of other languages, as they walked to the hangar where the plane was parked, and he told them about his parents in India. He had a very large necklace of small gold bars around his neck. He said that he wears his family's fortune around his neck in case he had to leave the country quickly.

The bright orange plane was a high-wing, long-nose Italian aircraft with surcharger and fat tires to land on rocky streambeds. The pilot and Doug got in and took a short flight above Khartoum to check it out. When they returned, Doug pronounced it as a fine plane.

With His Scintillometer Draped over His Shoulder in NE Sudan

The three of them departed the next morning for Port Sudan, on the Red Sea, their closest airport and fuel for hundreds of miles. When they landed, they rolled by a line of old Soviet MIGs.



They were surprised at how small they actually were. They stayed the night in the best hotel in Port Sudan, which had bugs, everywhere. He slept in a chair in the foyer for the night and never unpacked anything. He brushed his teeth with a Coke the next morning. Doug and the pilot had a similar reaction but slept in the bed anyway. They took a long shower to rid themselves of any bugs, but the shower water was suspect.

They flew up along the coast in the morning until they reached the challenged border with Egypt and turned toward the west to his first target area of highly oxidized rocks. They circled the site to see if anyone

was present, and, determining no one was present, the pilot set up to land on a long reach of a stream bed next to the brownish-red rocks. He laid the plane down safely and rolled to a bumpy stop. They got out and Doug and he climbed up the target outcrop. It was almost a pure gossan. There were no signs of fumaroles, but he did see a highly altered, albitized granite where plagioclase and feldspar had been almost completely removed, with quartz veins and boxwork cavities produced by the weathering of sulfides. He took three samples. 'That area should be examined in detail,' he wrote in his notebook and added some of the reasons for that conclusion.

They then flew south along a certain mountain range to find the abandoned mine shown on one of the maps he found buried in Khartoum Geological Survey files. They came across patches of white piles and that was it. They landed in another nearby stream bed and hiked about a mile up to the long-abandoned mine. The material was clearly old tailings from some previous operations, the date of which could be assumed to be within a hundred years only. The Germans were known to be active in the area before WW1. Aziz noticed a pattern of rocks laid out in an oval and said he understood that indicated a Roman soldier had been buried there. The site was not to be disturbed, which they didn't and walked on. They arrived at the mine site. It looked very old. The wooden supports to a couple of buildings were almost totally rotted away, but the mud-walls still remained although very weathered, likely from the rare rain that came to the area. He took samples and Doug took photos. And they were off again. They also visited the [Gebite Gold and Silver Mine](#), NW of Port Sudan.



As they flew down the valley, he noticed what looked like a "U-shaped" valley located up the outcrops that had been truncated by faulting. He took a photo of it for later examination and marked the location on his map. He noted in his field book that, 'these rocks were supposed to be PreCambrian in age, but a "U-shaped" valley indicates that those rocks had been eroded by glaciers?'

As they headed back toward Khartoum, Doug noticed a camel caravan and suggested they make contact.

There was an interesting outcrop he wanted to see in any event, so they landed on a wide, flat area and rolled right up to the outcrop of interest. Aziz was a very good pilot, he recalled thinking on numerous occasions during this trip.



The caravan approached as Doug and he climbed down from the outcrop. The caravan stopped and they gathered around the big orange bird they saw fly over earlier. Aziz was talking to them, and Doug pointed at one

of the swords that was sticking out of the bags loaded on one of the camels (actually the dromedary, a one-hump camel). After a quick negotiation, Doug handed a bunch of Sudanese money to Aziz who handed it to the apparent leader of the caravan. Everyone seemed to be pleased with the deal.

Back in the air, they were cruising at a fairly high altitude near 8,000 feet. Aziz suggested that he should consciously breathe deeply so he would keep his blood oxygen levels up. As they flew on, he was watching the ground move by him; he saw the circular outcrops of full mountain chains and wondered whether they were all intrusive centers, now heavily weathered, or whether some at least were impact craters. He looked for the tell-tale center rebound outcrops and he could see a few that might have them. He made a note in his field book to look at these in greater detail on the Landsat photos that Robert had obtained for the project. He took a photo of the large structure thinking it might be worth framing one day for his office wall, and knowing that Gene Shoemaker would have enjoyed this trip as well.



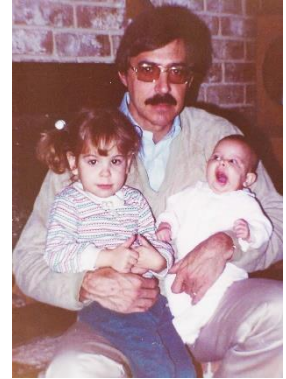
They had nearly completed the budgeted days of flying the Red Sea Hill areas and had visited the priority sites he had selected gathering about 20 bags of samples to be examined and analyzed later for their precious- and base-metal content. After they landed that day, they took the samples to the Khartoum Geological Survey office as agreed earlier and split the samples with them along with providing a map of the sample locations. There were other areas he wanted explore the next day.

When they arrived back at the hotel, however, Robert was sitting in the lounge drinking some sort of beverage and looked glum. He asked how things were going and Robert explained that the TE deal with the Minister had just come apart. Apparently, Robert allowed, the Minister decided he needed additional furniture for his new residence that was going to cost \$250,000. TE President was on his way in the TE's plane for a signing ceremony that would no longer happen. Robert had just sent the message to his President's plane to divert to the Azores because the Sudan-Texas Eastern oil & gas and potential mining deal was off. Robert, he, and Doug packed up and departed the next morning to London via Frankfurt and then finally back to Houston.

He had arranged before they left for Aziz, the pilot, to stay in touch. This was useful because he heard from Aziz a few weeks later that the BRGM, the French equivalent of the U.S. Geological Survey, had arrived in Khartoum a few weeks after they had departed. Aziz was asked to take two French-speaking geologists to the old mine they had visited earlier. Aziz said he pretended that he did not speak French (although he was fluent) and overheard them say that the Minister had invited them to inspect the area because they had just received samples from the area that contained anomalous gold and silver concentrations, and, if interested, the French government would have the rights to subcontract to mine via an agreement to be considered, likely because, he assumed, the Minister really had to have additional furniture.



In 1981, Mary and he decided to add one more member to the family. In mid-October, Jessica Wiley Campbell arrived with all the appropriate faculties. She also took after her mother. One could tell, she was going to be as beautiful, and hopefully along with her good teeth and brain. As Mary was managing the new one, he was doing what he could to help, but he was getting busy again with K&A projects, one of which concerned geothermal energy, which he always considered should be evaluated by hydrogeologists because such systems were nothing more than hot-water aquifers. An oil company client asked him to look into a potential geothermal project in Dixie Valley, Nevada, on Highway Route 50, some 70 mile east of Reno along the well-known *Loneliest Road in America*, which of course was a misnomer. It's more likely the most dangerous road for geologists in the U.S. because the area is a largely unfenced cattle-grazing region, which means that driving this road at night was very dangerous, not unlike the Barkly Highway in the Northern Territory with the kangaroos. In the winter, the road was known to ice-over in places. Before it was known as the Loneliest Road in America, Route 50 was anything but. In the 1850s, the Gold Rush sparked a caravan of wagons to head West along this thruway to Reno and the goldfields beyond in California. The "Roaring Road" (as it was called) became so congested at times that hopeful miners and their families would have to wait days before they could access it—a Panama Canal of sorts - standing between the new frontier of potential wealth and the old, suffering working class from the eastern U.S.



As he evaluated the geothermal potential, the metal potential in the Stillwater Range that was adjacent to Dixie Valley on the west also appeared to have some merit as well. He proposed to the oil-company client that they install 10 federal claims over an area indicated by his geological assessment. He, accompanied by a K&A field assistant, Gary F., traveled to the area that summer of 1981. After they passed Fallon, a major U.S. naval air station and training base, they noticed a very large sand dune north of the road tucked into the southwestern edge of the Stillwater Mountains. A little farther on was



the famous Lazy B Ranch south of the road and in a few more miles was the nondescript turn north into Dixie Valley. The area south of the turn was a bombing range. There was also an abandoned house at this intersection that used to be a bar. After a drive of about 15 miles north they could see the white smoke from the reported fumaroles coming out of the rocks halfway up the side of the western ridge. He and Gary pulled up and got out, put on their field belts and floppy wide-brimmed hats, and climbed up the rocks to see the fumaroles and hot springs, but they couldn't get that close because of the acrid sulphurous gas. Native sulphur coated the rocks yellow where the fumes met the air. They were able to get water samples below the fumaroles where the spring water had cooled somewhat. It was very hot that day and dust whipped up by the wind of the dry lake in the center of the Dixie Valley would produce small dust devils.

They spent the afternoon locating the major faults on the side of the hill and then measuring the strike and dip of every major fault and of the minor faults between the major faults. He noticed south of the dry lake there was an unusually large dust devil heading their way, but he had little concern, until it grew larger looking more like a tornado than a dust devil. As the swirling air mass was about on them, he yelled

at Gary to get behind the vehicle with him and to cover his face. Gary instead dove under the truck. It went right over the top of them. He had sat with his back to a tire and pulled his hat over his face. In less than five seconds, the noise and wind was over and it went charging up and over the ridge. He rose and dusted himself off and slapped his hat against his leg to clear the dust as well. Gary crawled out from under their truck and stood up. He had a big grin on his face when he looked at him. Whoa ! His eyeglasses had been frosted white. Gary took them off and handed them to him to look at in greater detail. Sure enough, they had been sand blasted, all right.

Gary asked, "Will the company pay for their replacement?"

He said, "I don't know because you were instructed to get on my side of the truck, not under it."

Gary said, "I guess I screwed up."

He said, "I was only kidding, of course the company will pay for new glasses."

They usually worked until dusk before heading for the hotel to clean-up and have dinner. They stayed in a hotel on the outskirts of Fallon that had a nice restaurant. They spent four days mapping and installing the ten federal claims. The final day they had to file the claims at the U.S. BLM office in Reno and then they were finished. He called Mary to say that he was hoping to make it home by about 8:00 PM. She said that dinner would be waiting. There was a non-stop flight to Houston, so he was able to be home in time for a late dinner with his large family.

That year, Kep expanded the international efforts in China and involvement in government contracts by hiring Dr. W. H. Tonking from Brown & Root as Chief Geologist and Executive Vice President of K&A. This addition would provide assistance to his group in expediting proposals for government contracts and additional counsel on his group's projects. Bill, a year or so later, went on to GCO as EVP to help GCO integrate International Paper (IP) properties by initiating and structuring joint-venture agreements to develop the energy and mineral resources of IP land. After GCO was dismantled, he became an international consultant in mineral resources. Over the years since, Bill and he worked on a number of projects. After Bill's death in 2014, he was encouraged to write Bill's professional memorial by his many friends..⁴⁷

The next morning, he arrived at his office the usual time and his secretary informed him that K&A had been awarded the DOE contract to measure the interior cavities of the salt domes that had been created to hold about 700 million barrels of crude oil in the new Strategic Petroleum Reserve. His group spent the next few weeks setting up and operating the scanning tools to lower into the cavities created in the salt domes at Bryan Mound at Freeport, Texas; Big Hill, Winnie, Texas; West Hackberry, Lake Charles, Louisiana; and Bayou Choctaw, Baton Rouge, Louisiana.

Kep's "after work" parties were legendary. One evening, he had to get Kep's signature for something. His office was on the top floor and occupied at least half of the space on that floor. The big door to Kep's office was closed, and when he opened it, he was blasted by music. At least 20, maybe 30, young ladies dressed to the hilt were either dancing with the oil & gas geologists and engineers or sitting on or draped over the fellows. It instantly reminded him of what he had seen in Playboy Clubs. Kep had invited him many times, but he sensed that might create problems, and he was right. Kep was very generous with the secretaries in K&A. One evening he was working late in his office and one of the secretaries, Cassie, who

⁴⁷ William H. Tonking Professional Memorial, <https://www.geosociety.org/documents/gsa/memorials/v43/Tonking-WH.pdf>

he knew, came into his office and said, "Why don't you come up to the party at Kep's office." He sensed she was potential trouble and politely declined saying that he had to get the report finished.

Cassie then said, "You want to see what Kep bought me?"

He said, "Sure," thinking it was a ring or watch, but it was two massive things.

She said, "Have a look at these puppies," and she started pulling her blouse up.

He said, "Ah, they look nice, but you don't have to get them out," she looked disappointed and tucked her blouse back in.

She said, "Do you have any idea how painful it was to get implants this size? I cried for two days in pain, even with painkillers."

He said, "I am sorry to hear that, Cassie. You look very nice in that blouse."

She said, "You are a sweetie. Are you sure you can't come to Kep's party?"

He said, "I'm sure," and she blew him a kiss and disappeared around the corner.

Kep was also generous to his professional staff by signing for home mortgages. He always thought that was unusual professional pressure to stay with K&A, but he never had to deal with those issues.

And then, in 1983, the oil & gas industry prices fell drastically, which caused a worldwide layoff and thousands of oil people were out of work. K&A had some legal problems with oil and gas reserve estimates and a judge's ownership, which took down K&A, but he never heard the details of those issues. Ninety percent of the staff were laid off, including his group. He received \$40,000 in retirement/profit-sharing and promptly reported that as regular income for IRS purposes. A couple years later, the IRS called him for a meeting. A very nice, cute IRS lady met with him to advise that he should not have treated the profit sharing as regular income. She recalculated the schedule and began to look up tables and do some more calculations on the adding machine. When she finished she said, "The IRS will return to you \$7,000 in over payment and \$1,000 in interest." His immediate reaction was a pleasant surprise, and then he said something quite naive by asking the IRS lady whether returning that much money would upset the IRS when looking at his tax returns in the future. She chuckled and said that the IRS does not hold grudges, and he would pay what is due, no more, no less. She asked him to have his wife also sign the recalculated schedule and return it to her. He did and about 4 weeks later they received the check for \$8,000.00. which included interest.

The staff all moved out of their offices in the Entex building and Kep gave me a number of 'thank you' items, such as the silver fighting roosters, the rock slab with a dinosaur footprint, and a number of items for his new desk at home.

And that was that for Keplinger & Associates, LLC.



After meeting at the HGS, he continued to have lunches with Ted Foss throughout the period with K&A. Ted was still at Watts, Griffis and McQuat Limited (WGM). They talked about the fact that the mineral prices, including gold, were beginning to go up and that there should be a lot of work for small consulting companies. Ted was becoming disillusioned with his company. So, in 1983, Ted resigned from WG&M and they formed a new company, Campbell, Foss & Buchanan, Inc.(C,F&B). The latter person was a Pepperdine MBA who had worked for Ted at WGM for a brief period. They thought he would be useful in the new venture, but his presence also allowed Ted to have control, 2-1 in any corporate voting that might arise. It never did.



He served C,F&B as President, and Senior Partner. Ted served as Chairman of the Board, and Senior Partner, while Keving B., served as Vice President.

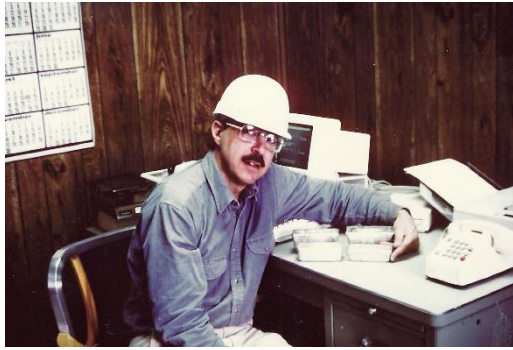
Mary and he had been discussing that maybe it was time to buy a house and she found the “perfect” house that was available in their neighborhood that would be suitable for their family. With the help from Robert, yes, his old boss and friend from Australia, who had retired from Texas Eastern and had gotten his real estate license, to arrange financing, combined with help from Mary’s father, Wiley, who provided the \$18,000 down payment for an adjustable-rate loan, they bought their first house on Sandy Cliffs Drive, but during an otherwise sellers real estate market.



Jessica and Jennifer saw their first snow in Houston just after they moved in. It was a brand new custom home. The contractor said that it had 10 times the number of nails in its construction than in a normal house and should therefore stay together in a hurricane, he said. It also had a porte-cochère and a three-car garage. A long family room over the attached garage served as his office. They also installed an internal spiral stairway from the far corner of his office down into the third-car garage that was converted to a carpeted library with a separate entrance with Pella French doors

into the library and another door into the two-car garage. It was a beautiful house with a cathedral ceiling over the living room and large fireplace. He installed a basketball backboard mounted in cement, which had plenty of room for play. They later installed a large, heated spa and gas-fed barbeque grill in the back yard. The Master bedroom was downstairs and there were three bedrooms upstairs for the children.

The new company (C,F&B) would be engaged in domestic and international environmental and natural resource management projects involving geological, hydrogeological, and engineering programs,



environmental investigations, and characterizations (Permitting, and Property Transfer Assessments), mine dewatering, project management, natural-resource assessment, reserve analysis and acquisitions for industry, mining (Alaska and Utah), financial, and banking communities. After a series of reviews of five gold properties that were near the production stage and had sufficient drilling to suggest that a mineable deposit was present in the western states and one in South Carolina, they selected one that met their criteria. Actually, they combined two

operations into one. One operation was at the Windfall mine, where an existing processing plant and heap-leach pads were available for sale that had produced a fair amount of gold over the previous decades. There were two large open pits that were apparent as evidence of such mining. They sampled eight mine dumps from the previous underground mines of the late 1800s and early 1900s and found substantial silver in the dumps but only a little gold. But this was not enough to start up operations again.

Through their contacts in the mining industry, they arranged for a triad of companies to come together to purchase a large gold property just a few miles south of Eureka, Nevada, from Amselco Exploration, Inc., a prominent gold-silver-lead-zinc producer at the time.

That company had spent hundreds of thousands of dollars on drilling and sampling the Lookout Mt. property, but they decided to develop other properties instead and sold the property rights to the new company called Norse Windfall Mines, Inc. His C,F&B group provided consulting services to the NWMI, which consisted of one of Ted's friends, Bob Duncan, who managed a Norwegian oil company in Houston and had contacts with an Italian Investment group working through a Swiss Bank. C,F&B arranged a mine loan



of about \$6 million for confirming the mine plan, acquiring the rights to the existing processing plant and leach pads, constructing the 8-mile haul road, and for start-up operations, such as mine payroll and operating infrastructure. C,F&B received \$24,000 per month for services rendered.

C,F&B conducted more drilling and sampling of prospective zones. Jeff K. had worked for Ted's WGM group in Houston on tantalum exploration in New Mexico and on gold projects in the past. He also had worked on the Alaska placer mine sampling for C,F&B previously, although the client, a fellow by the name of Mark Jones, refused to pay the invoice because the report was negative. Ted cleaned his 0.38 revolver.



Jeff lived in Seattle and was a very capable geologist, strong in character, and able to manage people with ease. The NWMI operations gathered up all of the available dump material by front-end loaders and haul trucks and constructed a large, new leach pad on top of the multiple previous leach pads using leaky-pipe to apply a weak cyanide solution to leach the gold and silver out of the oxide ore, instead of using sprinklers as was the general practice, a method that allowed a major

loss of leach solutions through evaporation and concentration of the dilute cyanide in solution. The return PVC piping system was connected through a main drain to a pregnant solution tank that served as feed to the processing plant. The dumps produced mostly silver with some gold. They then decided to develop the Lookout Mountain area that had been drilled in considerable detail. They built the 8-mile haul road through difficult terrain to connect the mine with the existing, upgraded, precious metal processing plant. The road cost approximately \$800,000 to complete, with BLM and U.S. Wildlife Services approval.



Dr. Ted Foss, (Right) C,F&B Chairman
with Norwegian and Swiss Mine Owners

As they were putting the mine plan together, he proposed to Ted that: a) because they knew that their project only planned to mine and process oxide ore, but b) a sizable sulfide zone of mineralization lay below the oxide zone in the Lookout Mountain area that had the potential to become a large-scale project,



c) perhaps one of the large gold mining companies in Nevada would be interested in acquiring the rights to the underlying sulfide zone in return for using their large trucks to haul the Lookout Mountain's shallow oxide ore to the processing plant on the new haul road. This would have reduced the overall cost to NWMI and improved profitability. They would retain a 5% royalty from any sulfide mining by that other mining company.

Ted liked the idea and they approached the President of one of the major mining companies based in Houston with current operations in Nevada. He also liked the idea and visited their operation the next week to assess the conditions. His name was also Ted and he was a geologist. Ted and he gave the new Ted and his two associates a tour of the properties around [Lookout Mountain](#), the new haul road, and the upgraded processing plant. They also provided some of the drilling data on the deep sulfide zone.

The new Ted liked everything he saw and, as he was leaving he indicated that he would get their attorneys together to write up an agreement. That was to happen the next week. Ted and he were very pleased. The next week came, and they received the draft agreement. Ted and he looked it over and concluded it was acceptable. Two days later, however, the bottom dropped out of the deal. The new Ted, the president, called and said that his wife had just been diagnosed with terminal cancer and that they wanted to spend as much time together as possible so he was retiring shortly and would be leaving on a world tour in a couple of days. He was very apologetic, but they were sympathetic. They also had the feeling that the new Ted's EVP who would be taking over would not go for this idea, because he had made a few comments about using the large trucks on such a small project. When Ted F. spoke to the EVP, he declined the project for that very reason. He didn't want "to mess" with a small project. Not being a geologist, he hadn't apparently understood the upside potential to acquiring the rights to the deep sulfide deposit.



They turned their attentions back to the original mine plan to contract out the ore transportation to a local trucking company. This evolved into contracting in-pit crushing and loading facilities. Once delivered to the pads, the ore was to be agglomerated with calcium (dry cement) to form small balls of ore that when encountering the dilute-cyanide solutions would dissolve the gold and release it into solution more effectively than raw ore. The processing plant consisted of a dual electrolytic cascading system of 14 cells. The gold-loaded steel wool would then be mixed with a slag-producing material and smelted to doré in an outside gas-driven furnace and poured into a 450-ounce mold. The gold being heavier than the slag, it would sink to the bottom of the mold forming the doré bar. See a photographic summary of the operations.⁴⁸

The previous mine owners had built a laboratory in a single-wide house trailer at the mine office site. Keving had hired a lab manager, Marvin R., who had worked for other smaller gold mining operations in Nevada. He was an older man with smooth white hair. He was married to a very nice Native American woman with two children. They all lived in a nearby trailer at the primary office site next to the processing plant. Many of the workers were hired because they had worked for the previous mine owners, the Wilson family, so they knew where the bodies were buried, so to speak.

As the drilling was completed and the 3rd-party contracts to mine were signed, staff members to run the mine and processing plant and heap-leach system were hired, along with all with environmental liaison and necessary approvals from state and federal regulatory agencies, the NWMI became active in early 1985. It was a 24/7 operation. He and Ted would provide management consultation for the NWMI officers and owners in two-week shifts, with an overlap of a day or so to discuss any pending issues.



⁴⁸ <https://i2mconsultants.com/downloads/corp/PotpourriPhotographicNWMI-Operations.pdf>

For the first time, they were able to evaluate the economics of a mining operation by computer modeling. They bought a new Apple IIe, with floppy disk storage. They also used the new software of spreadsheets that were available that also offered graphic plotting abilities to print out the entire economic model on 32 feet of calculations on paper generated by a wide-carriage Epson dot-matrix printer. These were cut to fit the wall for detailed analysis. Ted was very good at spotting an inconsistency in the calculations and code-breaks that usually meant a value or function had not been entered correctly. Inputs could be changed by only a few keystrokes and within a few seconds the entire spreadsheet's economic model would be recalculated and presented.

They could input the tons of gold ore mined, crushed, agglomerated and placed on the leach pad and then record the concentration coming off the leach pads, and allowing for the time for leaching, estimate the amount of gold that would be available to the electrolytic cells (aka steel-wool cascade), and finally be able to estimate the amount of gold poured in ounces of doré transported to the refinery. It would require some time to calibrate, but they were hoping to be able to predict the doré recovered in a few months of operation. Given the preliminary data, the project economic modeling suggested repayment of debt within 4 years of operation, even with a stable gold price set at \$300.00/oz.

All was going well, until the third partner in C,F&B became a problem. Keving B. lived in Reno and bought a flashy Lincoln car and immediately began to accumulate speeding tickets between Reno and Eureka. With a hairdo like the actor Gene Wilder, he reinforced his appearance of a dandy, and they began to isolate him from the project operations. Ted hated Gene Wilder. Keving was tasked with managing the environmental regulations and the regulators. On one occasion, he was driving by a meeting that Keving was having with a BLM lady in the field next to the haul road. The body language was intense. Arms were being waved and faces had anger written all over them. He decided to stop and join the meeting. When he approached the group, Keving was vehemently objecting to something.

He introduced himself to the visitors as President of C,F&B and asked what the disagreement was about. The BLM lady began to explain what they wanted done, and Keving interrupted her and continued babbling about something not being fair or needed. He then knew Keving had to be removed from this encounter or considerable damage might be made to BLM relations. He took him aside by grabbing him firmly by the arm and walked him to his flashy car parked up on the haul road. He told him to go back to the office and he returned to the BLM group and asked what the issue was. It was whether another deer feeder and water supply was needed below the new haul road, a matter of a maximum of cost of about \$500.00 to the NWMI. Once learning this, he apologized to the BLM lady for Keving's behavior and said that he would be the management contact in the future. She was pleased and they continued the site inspection without incident and without unusual commitments.



He, C,F&B President and Senior Partner; and Keving Buchanan, Vice President

When they departed, he went back to the office and there Ted and Keving were sitting having coffee. Ted looked irritated. He explained to Ted what the issues were and how Keving was treating the BLM lady. Ted said that he figured as much and he had already taken Keving off the BLM task, and then he turned

to Keving and let him have it by saying, "You, Get out of my sight. I don't want to see you for the rest of my stay at the mine this trip." Keving left in his Lincoln in a cloud of dust as he disappeared down the mine road back to Reno.

The doré bars each containing about 96% gold were taken once a week by one of the senior C,F&B partners, carrying a concealed weapon, by road to Ely and then by plane to Salt Lake City and delivered to the refinery. The refinery people later told them that their doré bars were the highest grade of all the doré produced in Nevada. The big mines produced dirty gray cones of doré containing only about 50% gold, which then was processed to about 100% gold by the refinery. This type of doré was produced to discourage robbery, no doubt. The value of each NWMI doré bar was about \$135,000, assuming a gold price of \$300/oz. He and Ted took turns delivering usually two doré bars (about 900 ounces) to the refinery. Each trip was worth at least \$270,000 to NWMI; the trips were taken only by he and Ted, carrying the 0.38 caliber revolver in the brief case containing the gold doré bars to Salt Lake City refinery by road and plane.



Steven Dinkowitz at The Lookout Mine

Ted and he decided that they needed someone else to assist in the management of the mine operations, someone to stay 24/7 at the mine. Their 3rd partner was of little help or contribution, and source of trouble. They offered Jeff K. the job that was to lead to appointing him as the mine manager if his trial period worked out. They also hired Stephen Dinkowitz as the mine geologist and Eric K. as the mine engineer, both of whom worked out very well and went on to fine careers.

During Jeff's period of getting up to speed on the mine operation, he was wanting to run some geochemistry surveys across some areas that had not been covered in previous geochemical surveys and run some surface geophysical surveys.

Dr. H. C. Clark (his Rice professor) was engaged to conduct some ground magnetometer surveys over altered zones. One day in the late fall, after the snow had arrived and the ground was covered, but the rocks still could be easily seen, he and Jeff began a survey, using a 50-foot long rope. That would be the spacing between each rock-chip sample taken. Jeff was at the front of the line. After a certain number of steps, he would stop. He being 50 feet behind him with the rope end would then chip off a rock sample at that spot with his hammer. He needed to take off his gloves and place the sample in the small Hubco bag, tie the drawstrings, and write the ID number on the yellow tab. He would then place the bag in his backpack and put the gloves back on because it was cold. Jeff and he had gone about 1 mile up to near the top of a ridge and he was watching Jeff count off his steps. He then noticed a squarish sort of patch of snow in front of Jeff. An alert went off in his head and he yelled to Jeff to STOP. Jeff froze.



Dr. H.C. Clark

He ran up to Jeff's location, Jeff saying, "What's going on?"

He said, "There is something about that patch of snow right there," pointing at an area a few feet in front of them. He picked up a big rock and pitched it into the snow patch and all of a sudden the whole snow patch fell into a 10 ft. by 10 ft. mine shaft. He dropped another rock down the shaft to evaluate the depth.

It took 4 seconds to hit bottom, which would make it about 250 feet to the bottom. They were both shaken about what had just transpired and what could have happened. They decided that was enough for the day and, as he began to put his gloves on again, he noticed that his wedding ring was gone, apparently having slipped off when he was taking off the gloves about ten times over the past hour or so. They decided to go back down the hill the way they came looking carefully around each sampling location where he had removed his gloves. They looked and looked, but it was gone. He figured that he could always get a replacement wedding ring, but never did, primarily because his finger was too thin to wear a ring. Mary was sad about the loss of the ring and so was he.

In late 1984, he and the family traveled to Ohio to spend Christmas in Lancaster. They also drove to Chillicothe to visit Aunt Carolyn and Uncle Wilbert, for the last time. Over the next decade his aunt and uncle passed on.



The next week they found the time to complete the geochemical survey, so they resumed the survey under less harsh weather conditions. The snow had melted so that risk was eliminated. After they finished the survey, they sent the samples to the lab in Reno for analysis of the gold and silver content. A few weeks later, Ted was at his office when the mail came. Ted had just related at lunch that his horoscope said that he was going to get very good news that day having something to do with rocks. They laughed about this until the mail containing the report from the lab was opened. Then they laughed some more. The subject samples of the area contained unusually high-grade gold. He is shown in the photo reaching

On his next trip to the mine, he and Jeff went to the site of the anomalous sampling of high-grade gold. Sure enough, it was a highly oxidized zone of much more intensity than the normal hydrothermal oxidation common in the area. And this type of oxidation was all over the surface, covering at least a hundred feet at the surface. They did a quick calculation and figured that there was at least \$2 million in that hillside alone, making certain estimates of likely depths. They decided that the site should be saved to leach at the end of the project to pay for remediation and for clean up at the site that would be required.

After a while, the mine operations settled into a normal rhythm. They hired a local girl, Kathy, (who a few years later married the son of one of the mine owners, Bob Duncan) to manage the books, while Ted and he would sign checks for payroll and operational expenses. Keving was not authorized to sign. One day the state police called to advise that Keving had been arrested and taken to jail in Fallon, Nevada on Route 50 for having more than 20 speeding tickets. The policewoman advised Ted that Keving said that he would provide the bail. He remembered Ted saying, "No can do. Tell him to have his wife bail him out."

A few weeks later, he was on duty at the mine. About 2:00 AM, he was awakened by Bobby, the foreman of the late shift. Bobby said, "Something has just happened at the processing plant."

The day shift staff were in the process of enclosing the cells so that they were tamper proof, but they hadn't finished the job yet. They arrived at the processing plant and walked up to the electrolytic cells.

Bobby said, pointing, "As you can see, the steel wools of the first three cells are missing. Someone has stolen them. We were going to have a pour in the morning because they were loaded with gold. I think I spooked someone as I came in the building a few minutes ago. They didn't have time to replace the new steel wool."

He said, "Who's on duty this shift?"

Bobby said, "Just me and Dindell up on the leach pad." The latter function was needed to make sure the cyanide applications were going as designed and that there were no leaks.

He said, "Could you go now and find Dindell? But if you find him, do not tell him what happened." Bobby nodded and was off in his truck up the hill toward the leach pads.

He looked around and found a pair of rubber gloves on the bench in the processing plant, which was odd; he did not move or touch them but shined his penlight into the gloves and he could see fingerprints at the tips of the rubber gloves. He thought instantly that it would be difficult, although not impossible, to get those fingerprints into focus with a camera for identification purposes, but then dismissed the whole idea because anyone could claim the gloves had been there for days.

Bobby came back to report that Dindell was in his truck sleeping and he awoke him and told him only to stay awake and sleep during the day.

He took photos of where the steel wool had been removed and the rubber gloves, and asked Bobby to continue until morning. Early the next morning the pour was called off, while he called Ted and explained what had happened. Ted asked if he had seen Keving around that day and he said that he had not. He asked if there were any suspects. He said, "One suspect, Dindell." Ted caught the next flight and drove from Reno arriving at the mine late that afternoon.

Ted and he sat around the table in the manager's trailer, which was quite comfortable, and even had satellite TV from a very large dish mounted on a cement pedestal next to the side of the trailer. After some debate and after a call to one of Ted's HR friends in Houston, they decided to have a meeting of the entire staff at noon the next day to announce the robbery of the gold and that the mine management has decided that each member of the staff will undergo a lie detection examination by a licensed examiner from Denver. By the time the examiner arrived, they had prepared about five questions they wanted to know about and provided them to the examiner as general go-bys. If anyone refused to take the test, they would be fired (If Dindell objects, the cause would be for sleeping on the job) and removed from the

project at least. The three members of C,F&B would be first to go under the examination. Then Jeff and then Bobby.

There were some objections from the leach-pad workers, but NWMI management moved ahead in arranging the testing. Ted called Keving and requested that he attend a meeting, not indicating the reason for the meeting. The next Monday the testing began with the C,F&B team. When Keving arrived, he was informed about the robbery and then about him having to undergo a lie detector testing. He exploded in self-righteous indignation. But then Ted told him that everyone was being evaluated beginning with the C,F&B group. After the four of them were assessed, the examiner had a private meeting with Ted. In a few moments, the examiner left for the main office across the driveway to begin testing the staff. Keving left without having to be told to do so by Ted. After Keving left, Ted said that they evaluated solidly, but the examiner had some concerns about Keving. The examiner told Ted that although Keving appeared to know nothing of the robbery, Keving was very uncomfortable about Marvin R.'s activities.

As the testing was about to be finished, Kathy came to the manager's trailer to advise that Dindell had refused to take the test and had quit, claiming the testing was a violation of his rights.

Ted said, "There's your culprit!"

And that was that, or so they thought. The operation went back to normal, less about \$150,000 from the missing steel wool that had been loaded with gold. Ted spent some quality time with Marvin R. to try to get a bead on him. He suggested that they should have background checks through a reputable group in Reno on Marvin and on Keving, although he had originally said that he had fully checked Marvin's background. One on him and one on Keving, just to see if anything turned up. Ted said, "Do it," and he did it. What came back in a few weeks blew the lid off the project. Jeff and he were sitting in the primary office talking and Ted was taking a nap. A report came in the mail and Kathy gave the envelope to the President of C,F&B. He pulled the report out of the envelope. He read the report and handed it to Jeff.

Jeff read it and laid it down slowly and then said, "Holy crap."

Ted walked in the door to the office, and he got up and closed the door behind him.

Ted said, "What's with the secrecy?"

He handed him the report.

Ted, after carefully reading the report, laid it down slowly and said, "I knew that didn't make sense."

After a few minutes of absolute silence, Ted said, "That's why that SOB was nervous about Marvin R." The report had said that Marvin R. had spent years in prison for stealing gold as a mine's lab manager and had been fired from two mines under suspicion before he was convicted of robbery and sent to prison.

He said, "Keving must have found out about Marvin R. after he hired him and has kept quiet since. Now this puts us in a terrible fix. C,F&B has some liability here for having a convicted criminal on the staff of NWMI. Maybe that's why their estimate of ounces produced from the mine had not even been close to the number of ounces poured and sold."

Later, he found that this type of scam was not uncommon in Nevada.⁴⁹

Ted said, "Another area of concern is whether Dindell's alleged activities are related to Marvin R. in any way, and whether Keving has been conspiring with Marvin R. even before the project began."

Jeff said, "Ted, maybe you should have a talk with Keving to find out: a) why didn't he tell us after he found out about Marvin R., if that was after he hired him?, and b) has he had any conversations with Marvin R. about the matter?"

Ted said, "You are right, I will call Keving today and ask him to come to the mine tomorrow. I'll see what I can get out of him."

Ted and he talked later that evening whether this would be a suitable time for C,F&B to leave the project and Ted said that he thought it might be time. They understood that there was a clause in the loan agreement that would release their guarantee if NWMI fires C,F&B. This was done to ensure C,F&B provided consultation to NWMI management. The next day Ted had a meeting with Keving but developed no new information; Keving was clearly withholding information. Ted thought that there were some things to play out, but he didn't know what. He just had a feeling.

Then a few weeks later, they received a call from the Sheriff who told an incredible story. The Sheriff said that the Sheriff's office received a call from Mrs. Dindell who said that she may have just killed Mr. Dindell with an aluminum baseball bat. The Dindell's lived about five minutes away in a brand-new double-wide house. The officers arrived just as Mr. Dindell was waking up with a large bump on his head. They had been smoking marijuana in the house, which gave the officers cause to search the house. What they found was incredible. Behind a wall panel were bags of drugs, mostly amphetamines, and other types of drugs, along with some small bags of cocaine. There were also a large metal mortar and pestle with steel-wool residual in the bottom, an acetylene torch, and a little book with names, addresses, and their drug orders with dates.

Mr. and Mrs. Dindell were arrested on felony drug charges and possible robbery. Their young children were spending the night with friends down the street. The next morning, Ted, Jeff, and he went down to the Sheriff's office to see where the steel wool and small pieces of melted gold had stuck to the bottom of the vessel. About a week later, the Sheriff called again to advise that the Dindells' bail of \$1 million had been raised and they were released from jail and picked up by someone in a black Lincoln and haven't been seen since.

Ted said, "I think it's time to leave. There are way too many weird things going on." He agreed. Ted called Bob Duncan, President of NWMI in Houston that afternoon and explained what had transpired over the past few weeks. Bob told Ted that he should consider C,F&B fired. The next morning a fax of the letter arrived at the mine. They talked to Jeff about their departure and said that he would henceforth be reporting to Bob. Jeff was unsure about all this, but he said that he would stay on for a while as Mine Manager. They said their goodbyes to Stephen and Eric and Kathy without explanation.

Ted and he were back in Houston by evening, relieved to get away from a mess that was about to become a severe problem. When it did, they would be far away. They had some concerns about Jeff, but they knew he could manage it. Ted left his 0.38 caliber handgun in the drawer in his room of the manager's

⁴⁹ See pages 142-165 of the document: <https://www.i2mconsultants.com/downloads/corp/ShoemakerMineTheftsMDCC.pdf>

trailer and told Jeff where it was. That next Monday, Ted and he met at his office in Houston to figure out what's next in their careers. They, as well as Jeff, would be together in another venture in a few years.

That was that with the Eureka gold project, but things were to happen at the mine before the end of the year.



Chapter Eleven

1988, Corporate Management & Industry Geoscience



Inherited from R. I. Rackley, "Winter at the Mine" Central City Area, By J.A. Kennedy, 1974

In 1988, the first transatlantic fiber optic cable was laid, which was able to carry 40,000 telephone calls simultaneously. The first major computer virus infects computers connected to the Internet. The U.S. stealth bomber was unveiled. The antidepressant Prozac was introduced, which quickly became the market leader for treating depression. A bomb exploded on Pan Am Flight 103 over Lockerbie in Scotland. Stephen Hawking publishes "A Brief History Of Time." Movies circulating within the American culture were: "Who Framed Roger Rabbit," "The Naked Gun: From the Files of Police Squad!" "Beetlejuice," "Dangerous Liaisons," and "A Fish Called Wanda." After 8 years there were 1.5 million dead as the Iran-Iraq war ends.

The Lotus 123 Spreadsheet program cost \$299.00; the Star NSX Dot Matrix Printer cost \$189.00; a Logitech Mouse cost \$89.99; an Amiga Computer with color monitor cost \$849.00; the IBM PC with 30Mb Hard Disk, Mono Monitor and 512K Memory cost \$1249.00.

President Reagan's Iran-Contra Affair was a scandal that involved the illegal sales of arms to Iran in exchange for U.S. hostages being held in Lebanon by Iranian terrorists. NASA resumed the Space Shuttle program during September of 1988, with the launch of the Space Shuttle Discovery on the STS-26 mission. The program had been halted after the 1986 Space Shuttle Challenger disaster for about two and a half years.

Mary C. had gone to work when the Eureka project ended. She had taken a job for American Medical Communications, a medical television productions company, as the assistant to the President and Chairman. She commuted weekdays.

In early 1988, he joined Law Engineering as Senior Hydrogeologist with a substantial signing bonus and in two years he was elevated to senior corporate hydrogeologist (equivalent to Chief Hydrogeologist) in support of the 50 Law Engineering offices around the U.S.

Ted joined the University of Houston at their South Campus to teach geology, ranging from environmental issues to natural resources development. It wasn't long before he encouraged Ted to take the Pettyjohn short course in hydrogeology that his former professor at Ohio State had offered after he had moved to the Oklahoma State University. It was a three-month course in Stillwater, OK, during the summer, and offered both classroom and field studies. It served the growing environmental industry well in cross-training hundreds of oil and gas geologists and engineers and others with professional backgrounds. The signing bonuses he received in the 1980s indicated how badly some companies needed bonafide hydrogeologists.

Later that year before Christmas, Jeff called to let him know that he had departed NWMI. Based on his discussions on the matters with people working at the mine, he said that there was a lot of interesting news:

- Based on the Dindell address book, there was a major sting operation by federal and state police over eastern Nevada, and hundreds of arrests were made on drug charges,
- Dindell's children were picked up by the same black Lincoln that pick him up after meeting the \$ 1 million bail and disappeared.
- The mine engineer said that Keving hired a number of trucks and a front-end loader that winter to excavate the area of high-grade ore that Jeff and he had identified a few years earlier and then trucked it to the leach pads and made doré in the processing plant with Marvin's help.
- Keving opened an account at the Johnson Matthey Refinery in Salt Lake City in his name and had almost \$2 million in that account derived from the deposits of doré from the mine that he made during that winter.
- With this loss of mine revenue, no funds would be available for NWMI to remediate the site after the project was drawing to a close, as planned by NWMI.
- After Keving had finished leaching the gold from the new ore at the mine and departed the area, Marvin R. committed suicide with a handgun.

While talking to Ted on the phone, they wondered whether Keving threatened Marvin R. with exposure and possible jail knowing that Marvin R. had said that he was not going back to jail under any circumstances. This would have been one way to eliminate a witness to Keving's suspected theft of the shallow NWMI gold ore that Jeff and he discovered a year or more earlier.

As they heard about what Keving had allegedly done, and that there was ample evidence from the Salt Lake City refinery records alone to prove it, he suggested to Ted that they sue Keving. His response was cited in a memorial that he wrote after Ted's death in 2003:⁵⁰

".....when asked whether we should pursue criminal charges against an ex-associate for allegedly stealing gold from one of our projects, he [Ted] said, "Why should we? He will get what's coming to him, sooner or later. He will carry the weight of what he has done for the rest of his life."

⁵⁰ <https://www.geosociety.org/documents/gsa/memorials/v33/Foss.pdf>

At the time, rumors abounded around Eureka for years that raw gold medallions had been coming out of the old Windfall and even the new mining operations from “off the books” sources and were still finding ample fences in the local bars. Since that project, he and Ted had often pondered whether they had walked into an existing system of skimming gold from the process that had been operating for years or whether it developed during the time of C,F&B involvement in the project for NWMI. If either or both, Marvin’s prison history must have been widely known and those working with him were likely complicit in the operations since both Marvin R. and Dindell had been part of the previous operations for many years. Learning what allegedly happened after Ted and he departed the project suggested that the system at the mine could have even corrupted those drawn into it from the outside, like Keving. One thing was clear, Mrs. Keving could have done much better for a husband.



He enjoyed the change of pace away from managing a mining operation with Ted and Jeff to working with geotechnical engineers on various types of projects, from dewatering to environmental studies in support of leaking gasoline into the groundwater below filling stations, to working on lignite mine permitting involving groundwater protection, to property transfer studies regarding potential groundwater contamination, to sand and gravel studies and even to geological and geophysical studies in support of the Superconducting Super Collider Facility near Waxahachie, Texas.

He had found over the years that most engineers had a very bad habit of claiming to know about groundwater and about hydrogeology in general, which was far from the truth. The exception to this complaint was that geotechnical engineers were generally a pleasure to work with because they had just enough geotechnical training to know the value of a hydrogeologist in their projects, when applicable. Law Engineering was just one of those places. Most of their engineers were geotechnical engineers, not civil engineers, not structural engineers, and not chemical engineers. He had to watch when reviewing reports for the engineers’ incorrect use of the term “soil” for any fine-grained sediment and not only for the upper few feet of growth-promoting soil. Another term they often misused was in describing clay and shale as dry at depth and in using the terms: “first zone of encountered water,” when in fact from the water table downward, all sediment is saturated, just not highly permeable.

Law Engineering had been in business for more than 50 years and had 40 offices around the U.S. and they were adding geoscience people of many varieties, e.g., engineering geologists, geochemists, even an agricultural engineer who claimed to be a hydrogeologist, and whom would be confronted in the years ahead. Don Z. was the manager of the Houston office when he was hired and Rick Pearce, Chief Engineer, announced in their first meeting that he spearheaded his hiring based on his outstanding experience, and that he would be mentoring him through the company politics, which always existed in companies the size of Law. He made his growing technical library a part of his signing agreement, on the basis that he would be sharing (not selling) his library with Law personnel, and brought everything from his garage library into Law’s office. Fortunately, there were widely available spaces in the floor plan of the office where his library and bookcases would stand.

During the first year, Rick P. and he worked well together and Rick did as he promised. He led him through the arduous senior certification process at Law, where multiple senior members of the staff had to sign off on the competence of



the person through direct project experience. The next step had never been attempted before in Law. That was to elevate his position to Senior Corporate Consultant in Hydrogeology, which was equivalent to the company's Chief Hydrogeologist. This was the first time in Law's corporate history that the management group, led by Law's Chief Engineer, Rick P., approved a person for this top geoscience position in the Law companies. The ceremonial appointment was made during that following year's annual meeting. There had been other professionals with a similar title at Law Engineering, who was a Senior Corporate Consultant in Geotechnical Engineering. The one he remembered was George Sowers (from Georgia Tech). According to Telfryn John (who worked at Law with him), there were others who came later: Syed Ahmed (in the Houston office), Clay Sams (in the Charlotte office), and Marshall Lew (in the LA office), all Corporate Geotechnical Consultants to the Law companies.



A few years before, Maxine had continued to work for the DCSC until the Vietnam war wound down. She said that was a suitable time for her to wind down as well. She retired but consulted for a few years on issues that developed. After her retirement party, which from the evidence was a pretty big deal in appreciation for her work over two wars, she left a note on her desk... saying in big letters "Maxine has gone fishing!"

As for Dad, as time passed and more mechanical/electronic recording devices were being used for the administrative paperwork, the more Dad got frustrated with trying to hold a device in one hand and write on it with the other. Dad finally asked Maxine if she minded if he retired. She said, "Of course you can. We will manage." She had been bringing home three times the salary he was for more than a decade, so they managed quite well in retirement.

Carolyn's first marriage ended in divorce after 13 years, and of this union came their son, Jared. After attending Ohio State in agricultural studies, he became a long-time sheriff's deputy serving on units in the street, SWAT, detective, canine and currently Chief Deputy under the Sheriff, as well as firearms instructor in the Police Academy in the Fairfield County area. He and his wife, Jenny, were avid boaters, hikers, and kayakers. After a few years, and as Carolyn was progressing in her nursing career at the Ohio State University, she met, worked with, and eventually married Dr. Dan Martin, one the pioneers of laparoscopic surgery.

In his retirement, Dad cooked and kept house and he seemed to enjoy it. But he only lasted a few more years. His smoking, beginning when he was 13-years old, finally brought him down, with suspected fine-grained lung cancer that spread to his brain and became inoperable and untreatable. The family watched him slowly decline. Carolyn, and her husband, Dr. Dan, looked after him in palliative care with Maxine. Julianne spent time caring for him as well.

Julianne C., Josh, Dr. Dan, Caity, and Carolyn



His faculties blinked out one at a time as the brain deteriorated, but one thing that the family noticed was that one of the last conscious activities he could muster was to ask for a light of his pipe so he could puff away, which he soon did peacefully. The tobacco addiction was so insidious that it went down with the lifeboat. Dad and Carolyn's husband, Dr.

Dan, had great fun together. Dan got what Dad was all about – his enthusiastic sense of humor - and he approved of it. Dan was a terrific addition to the Campbell family.



Dan was a man of great skills and personality, who was later to be hobbled early in life by a mistake during surgery to repair his heart that damaged the brain with lasting effects until his death in 2007.⁵¹ This was a great loss to the medical community and to his wife, Carolyn, and their children, Josh and Caity. After Dan died, Josh and Caity exhibited tremendous resiliency, tenacity, and grace in the way they have conducted their lives. His loss was strongly felt by Maxine (grandmother to the children) and by Jared, and the loss still reverberates throughout the Campbell family, especially during family gatherings.



For years, Dan could only communicate through a typing device.



He spent a few years traveling around the U.S. to the various Law offices in response to the requests made by the Chief Engineers of those offices to provide counsel on specific problem projects involving groundwater and particular hydrogeological issues. He also contributed to the training protocol for new personnel. He played golf with the staff all over the Law system and was beginning to get reasonably good at golf. He came in 3rd Place in a Law Golf Tournament in Atlanta one year, the one when he was introduced to President Carter. He even developed the idea of opening a Law office in Seattle, having Jeff K. manage it, and another one in Tulsa, where Tom A. could be involved as well. Both were individuals he trusted and knew could manage the fuctions. In working the Law projects, he came in contact with a number of professionals throughout the Law Companies in the U.S., many of whom were outstanding. Don P., Kendall P., Telfryn J., and Don F., as well as General Judy, came to mind. One particular senior geologist had been passed over for the Chief Hydrogeologist position, primarily because he did not have the comprehensive hydrogeological training as did he. But this spread some disaffection among certain segments of the professional staff. Owen S. had been employed by Law for a number of years and was a Texas A&M graduate. Rick had counseled him to be patient with Owen and so in any



⁵¹ OBIT for Dan Martin (will be augmented with Memorial video when located): <http://obits.abqjournal.com/obits/show/176203>

project contact between them he made sure to treat Owen appropriately, respect his views, but exert professional seniority if necessary. On occasion he would need to clarify some hydrogeological issues, concerning which Owen generally saw the merit. He also made presentations during technical conferences and was sure to include certain staff professionals.^{52, 53} He maintained two offices. One at the main Law Engineering office on Guhn Road, but another at the Law Environmental group's office a few blocks away.

The following year rolled by with project after project, but he had yet to receive a reasonable bump on his salary nor had he received the company car that had been promised by Don Z., who was the CEO for the Houston office of the Law Engineering Companies. In early December, he wrote a memo to Jimmy stating that if he did not receive a raise and company car by January 1, he would begin to consider other offers that had recently surfaced. Silence. After months had gone by, he submitted a memo dated January 1, 1990, with his formal resignation that included a two-week departure clause. That first week of the year, he was sitting in on a meeting regarding one of Owen's projects along with four other professional staff members. Over the office-wide loud-speaker came the voice of Jimmy's secretary saying, "Attention, Will Michael Campbell please come to Mr. Z.,'s office." He excused himself from the meeting and got up to leave and headed out the office door. He noticed that Owen rose as well and walked behind him through the doorway. As he walked down the aisle between staff office cubicles, Owen caught up and said, "What's going on?"

He stopped and said, "I suspect that Jimmy just saw my resignation letter."

Owen stopped and said in a very loud voice that turned everyone's head in the open office area in their direction, " You can't quit, I was just getting used to you," which created a chorus of polite chuckles from those that heard from a fellow who had never complimented anyone, even in the twisted way that he just did.

He turned to Owen and said, "Thank you, Owen, I appreciate that," and walked off toward Jimmy's office. As he entered his office, Jimmy was understandably irritated, "Are you sure you want to do this?"

He said, "There was supposed to be a review 6 months ago, and a company car, so I have been strung out long enough. My project billables have been way up the past year so there was no reason for the delay. I have enjoyed working for Law and the fine group of employees you have here and in other offices. I will be sending some people to collect my library."

He began to leave when Jimmy said that he thought Law had purchased the library with the signing bonus. He responded politely that their agreement stated that the library would be made available for sharing, but no indication of selling the library. Jimmy opened his file and read the agreement and then said that he understood. They shook hands and he departed.



It was only after a few months that he had heard that one of his favorite professors, mentor and reference had some serious issues with the EPA. While Dr. Jay Lehr was the Executive Director of the NWWA, and

⁵² <https://www.i2mconsultants.com/downloads/ela-iet/MDC90.pdf>

⁵³ <https://www.i2mconsultants.com/downloads/ela-iet/TES91.pdf>

Editor-in-Chief of the journal *Ground Water*, Jay was getting disillusioned with some of the program activities undertaken by the U.S. Environmental Protection Agency in Washington, D.C., an agency he helped to create a few years earlier. He wrote three editorials in the prestigious journal *Ground Water* that were very critical of EPA activities. This one is just an example.⁵⁴ He was also the administrator of various contracts that they had been working on since the early 1970s.

There was no doubt that Jay Lehr raised the reputation of the NWWA above that of the mud-covered water well contractor to near-professional status. Dr. Lehr has remained, in the minds of his students at Ohio State and many others in government, a geoscience star, an iron-man, a great geoscience speaker as the first bonafide Ph.D. in hydrogeology in the U.S.⁵⁵ Today, he continued to make his contributions in a number of diverse ways for a number of years, albeit politically askew to his.^{56,57}



At one of the hydrocarbon conferences early that year, he had met Ben Thomas, Ph.D in Toxicology, who was a senior consultant at ENSR Consulting & Engineering, Inc, in Houston. ENSR was one of the premiere geoscience-based consulting companies in the U.S. He and Ben had spent a lot of time together during the conference and, as they were about to part, Ben suggested he should think about joining a geoscience-based consultancy like ENSR.

After he had resigned from Law Engineering, he decided to look into ENSR and called Ben, who set up a meeting with Dick S., the Regional Vice President and General Manager, Southern Region, at the ENSR office the next day. They talked for two or three hours, and he liked the feel of the office and of the people. His initial impression was that the office was a very professional outfit. Involved in the deal was a sizable signing bonus, subject only to a 90-day grace period in case things did not work out. He discussed the move with Mary. He accepted and moved his library from Law to ENSR, without entanglement. His office was next to Dick's on one side of his office and Ben T. on the other side. His library was in an adjacent room. His title was published as *Chief Hydrogeologist and Regional Director, Geosciences*.

Right off, the project staff meetings were professional, calm, and confident all around the table. Project proposals were written and ENSR was awarded most of those proposed. Everyone seemed to be pleased that he had joined the company. A couple of corporate officers came to Houston on business and to meet him. They had dinner at the Palm Restaurant and had a great evening discussing their past experiences. They appeared to enjoy hearing about his Australian adventures.

Carl B. was an engineer and an attorney, so he was an odd man out, although highly respected. He came to value Carl's views on many subjects. They spoke on many occasions about developing projects using salt domes for waste disposal of all types except nuclear waste. He also met Chi Chi Chang, Ph.D. at ENSR. CCC had studied hydrogeology at a Korean university, and was a top-notch groundwater modeler using simplistic measures and early computing methods to solve groundwater-flow equations. The only foreseeable problem was Jim Hanson, the manager of the groundwater group, who managed the Phase I and small Phase II remediation projects. Dick S. had instructed Hanson to brief him on all new projects

⁵⁴ Dr. Jay Lehr Editorial in Journal *Ground Water*, 1987: <https://i2mconsultants.com/downloads/corp/JayLehrEditorial1987.pdf>

⁵⁵ https://www.amazon.com/Books-Jay-Lehr/s?i=stripbooks&rh=n%3A283155%2Cp_27%3AJay+Lehr&s=date-desc-rank&page=2&qid=1659797296&ref=sr_pg_1

⁵⁶ <https://www.americaoutloud.com/author/jay-lehr/> URL replaced with most recent: <https://www.youtube.com/watch?v=vAxhA4E42bQ>

⁵⁷ https://www.amazon.com/Jay-H.-Lehr/e/B002888144%3Fref=dbs_a_mng_rwt_scns_share

and for him to review all reports before they went to the clients. A few weeks passed and he heard or saw nothing from Jim H.. He decided to seek him out downstairs to inquire about the delay. He arrived at Jim's office doorway, and he was sitting behind his desk with books, papers and reports stacked up on his desk, on the floor and on the surrounding tables. Here was a fellow who was projecting that he was overloaded. He looked up but did not greet him. He entered and shut the door behind him.

He said, "OK, clue me in. I'm new here."

Jim said, leaning back and putting his feet up on the edge of the desk, "I was promised the Chief Hydrogeologist role. And then they decided to bring you in from Law Engineering."

He said, "I understand. I had a similar experience at Law Engineering,"

Jim said, "So I heard."

He said, "You know Owen, I presume?"

Jim said, "Yes, I've known Owen for many years."

He said, "Then you well know from Owen then that he was getting over his resentment toward me as we worked together on projects, until your ENSR people showed up."

Jim said, "He was still pissed at Rick P. and Zimmy, and at you."

He said, "Well, you, like Owen, have three choices. 1) quit, 2) get over it, or 3) get your ass fired for insubordination. What's it going to be?"

Jim said, "Owen was right, you can manage disputes in a straightforward way. I like that."

He said again, "So what's it going to be?"

Jim said after looking out the window, "Item #2."

He said, "Good. You know, you have a good background, but there was a reason they didn't trust you to take over the Chief Hydrogeologist position. I will try to find out what that was, and I may be able to make it happen after I leave, if you support me now. I could train you for that position. Just be patient."

Time passed quickly as the ENSR projects were awarded and the reports were issued. All the projects were interesting, far more so than at Law. Even Jim H. was getting his career in order with his help. Toward the end of that first year, he was beginning to settle into the nationwide ENSR system of experts and was feeling like he might stay for a while, when Tom L., one of the Law engineers called to say that he had just moved to DuPont. Tom thought that he would be perfect to lead DuPont's new environmental group and that he had recommend him to Jim W., the manager of the DuPont group who would like to discuss the possibilities with him over a lunch one day.

The next week, they met at a restaurant down the street from the ENSR office. Jim W. was a few years younger than he, but was a third- generation DuPonter, meaning that they get respectable job assignments. Jim was a University of Delaware graduate, another plus within DuPont, and was the Administrative Manager of the new environmental group he was forming, with an office very near where he lived in Ponderosa Forest in the northern part of Houston.

Jim said, "Tom L. thinks highly of you and thinks I should bring you in to build the Technical Group. I hear you are near number one in your field."

He said, "Tom tends to be hyperbolic sometimes. But I have a good background technically and I am an effective manager of people."

Jim said, "Humble too, I like that. Now, tell me why you left Law and might leave ENSR?"

He said, "Simple, Law reneged on a commitment, and I gave them 6 months to correct it. They didn't, so I took that as a vote of no confidence and resigned. The company people were great, and I enjoyed collaborating with them. Regarding ENSR, no one said I was leaving ENSR."

Jim said, "OK, what would it take?"

He said, "I have only been in ENSR for less than a year."

Jim said, "What would it take?"

He said, "What's the business plan for a chemical company to get into consulting, as I hear from Tom L."

Jim, "DuPont spends about \$300 million a year on outside environmental remediation consultants. Senior management thinks we might save a lot of money if we did the work ourselves inside DuPont."

He said, "What about the independent integrity matter and about the integrity of the professional work?"

Jim said, "Good questions. The new company would be independent, although owned by DuPont. You would be responsible for the integrity of the work that was performed by your technical group."

He said, "Sounds interesting. Salary: \$150,000, including a substantial signing bonus."

Jim said, "Of course."

He said, "Let me kick this around, especially the ENSR problem."

Jim said, "OK, no rush."

He talked to Mary about it that evening and she had similar concerns of his "job hopping," but she liked another substantial signing bonus, which would be his third signing bonus in over four years, and the proximity of the DuPont offices to their neighborhood that only required 7 minutes to travel from his house to the office as opposed to 30 minutes on a major freeway into town and back.

He was also thinking for some time about how he was going to manage the decision to leave with ENSR. But the next day, he was about to bring up his decision to leave, when Dick interrupted and said that he was leaving within the next few weeks. He told Dick that he was planning to leave too. His leaving would not damage Dick's reputation with ENSR corporate. So, they agreed that Dick would announce first and then he could announce. It looked better that way all the way around. He never had a chance to talk about the Hanson potential advancement, and he never called to inquire.

A few days later, Dick announced his departure. He decided to wait a few days. Then on the freeway the next morning heading for his ENSR office, he noticed something odd about the telephone poles he was passing. Poles halfway down looked like they were offset. There was no pain, just everything that had a vertical line to it was offset, like a fault. When he got to the office, he called Dr. Key's office and explained.

His receptionist checked with Dr. Key and she said that Dr. Key wants you to come in as soon as possible. He called Mary and told her what was happening, and that it was not good, and asked her if the new health insurance was active. She said that it was. He had remembered that he already had cataract surgery on both eyes over the past year, and vaguely remembered hearing Dr. Key saying that there was only a 5% chance of retinal damage in such procedures.

He arrived at the ophthalmologist's office, and Dr. Key was nearby and took him into an examination room. He looked at his retina with a device and then with a large magnifying glass and said, almost to himself, "Yes, there it is," and he then said that they needed to go upstairs. He grasped him lightly by the arm and led him through the receptionist area and then to the elevators. Once off the elevators, he guided him down the long hall to a door with a very large brass plate inscribed in big letters, "RETINAL SURGERY."

He knew that was not good. With Dr. Key still grasping his arm he guided him past the receptionist to an open door in a white room with two already masked doctors apparently waiting for him. They wore magnifiers attached to a frame around their heads. Dr. Key turned him loose and they instantly grasped him in a comparable way. He wondered whether they were expecting him to faint, or worse. They had him lay down on the examining table and he noticed Dr. Key was putting on a new white coat. They produced a very large lens connected to the apparatus on their heads and aimed a very bright light into his eye that actually hurt some but only while they looked deeply.

One doctor told Dr. Key that the retina was curling down from the top and they needed to act fast to stop it.

He then said, "I take it that you want to operate in the morning?"

Dr. Key said, "No, we have to do the surgery now. Use that phone and call your wife and ask her to bring a change of clothes for tomorrow. You be staying the night. Give me her number, I'll tell her where you'll be."

It could not have been more than 30 minutes before he was in a patient gown and on a gurney heading for an operating room somewhere in the Texas Medical Center. He figured this was the best place in the entire world to be. The doctors knew what they were doing there, which was the last thing he remembered thinking until he awoke sometime later with a slight headache, a big bandage on his right eye, and Mary holding his hand the next morning.

The report was good. They had put a patch on the edge of his retina which should stay put for his lifetime, they said. Mary drove them back home north of FM-1960. The doctor had prescribed steroids, prednisone, to promote fast healing, a drug some people are sensitive to, and he turned out to be one of them. A few days later, he returned to work in his home office, and in late afternoon he turned on the television. In no time, he noticed that he was yelling back at the TV news about something being said. He caught himself, thinking that was strange. A little later at the dinner table, he was trying to get some white bread and blew up over the twist-tie being twisted in the wrong direction on the bread bag and demanded to know who was responsible for the mis-deed. He looked up and noticed that Jennifer and Jessica had tears in their eyes, and, when he looked over at Mary, it was obvious that she was very concerned at his unusual behavior. Yelling at the TV news may be justified, but the latter was certainly not.

She said, "I think the prednisone is making you aggressive so let me call the doctor's office and let's see what can be done instead of locking you up in a rubber room." That cheered everyone up and made them all chuckle. She talked to Dr. Key and he said to just stop taking the medicine immediately.

By the next morning, the drug had worn off and he was only slightly aggressive, which was normal for him in his pre-Omega-3 days.

He called Dick at ENSR to brief him on what had happened and asked him when he was leaving. Dick said it would be next week. He said that he would be faxing in his ENSR resignation letter to him dated seven days after a week's vacation that he had accrued over the past year or so. Dick said that would be fine. They exchanged cordial goodbyes and best wishes.

He called Jim W. and formally accepted his offer. A few hours later, the formal employment letter was received, signed and returned. Just like that, he was an official member of the DuPont team, Regional Technical Manager and Chief Hydrogeologist. He had line responsibility for five sections, the geology section, the environmental services section, two engineering sections, and the deep-well section. His other function was to recruit additional staff members for his technical group.

He visited his new office and was very impressed ... top floor with clear glass windows on two sides of his corner office. He still wore the eye patch, but he wanted to meet the existing staff before he began recruiting around town and elsewhere. He was talking to Tom L. and Tom S. when walking down the hallway came two of the ENSR marketing fellows he knew well, Jack. G, and Bob H. They greeted him enthusiastically and asked how his retinal surgery went, and then said,

Jack said, "Ah, What are you doing here?"

Bob said, "Are you working for DuPont too?"

He told them that he had resigned from ENSR the previous week and was obviously still recuperating from the eye surgery. He introduced the DuPont fellows as being old friends from Law days.

He then said, "What are you guys doing here?"

Jack said, "We market Dupont plants and we heard that Jim W. was opening a new DuPont office and we thought there might be some work for ENSR."

He said, "Let me show you my new office and I'll provide some details for you to take back to our friends at ENSR."

The three of them walked down the hall to his new office. He invited them to sit on his couch. And then he sat down in a visitor's chair across the coffee table from them. His new secretary, Victoria, a very attractive African-American lady, appeared and asked if anyone would like to have something to drink.

He then continued, "Now, first, you asked if I worked for DuPont. As of a few days ago, the answer is yes and I will be moving my library out of the ENSR offices soon. As to ENSR working on DuPont projects, let me walk you through the two essential elements of the business plan of this new DuPont company. My new group, which covers the southern region of DuPont plants, will be conducting most of the work that has been previously done by consulting groups such as Law Engineering and ENSR. There is also an Eastern Group and a Western Group forming up as we speak. The hundreds of millions of dollars that DuPont has been spending on consultants each year will no longer be spent on consultants but will be retained by DuPont and spent on projects managed and implemented by the new group of professionals like me.

The second element is that the new groups will be marketing companies upstream and downstream of DuPont plant operations. We will be going after environmental work needed by companies that provide products to DuPont and by companies that buy products from Dupont.

In other words, we will already be a large environmental consulting company with built-in clients even before the new company opens its doors for business.”

Jack said, “Wow. That’s going to impact a lot of projects around the company and a lot of consulting companies.”

He said, “For a while maybe, but let’s see how it goes. There is still a lot of consulting work out there for environmental projects from other companies.”

They talked about Dick S. leaving and he let them know that he had no idea where Dick was going. The two ENSR guys left his office probably wondering what was happening in the world when a large chemical company could become its own consultant. He had similar concerns, but with him in control of the projects, providing the technical oversight, and selecting the personnel working for him, he felt good about the new venture.

He also felt that things were changing around him, not just in his new job, but in the world as well. The widening use of computers not only for project reporting and spreadsheet recording and calculations, but for the Internet with the new World Wide Web (aka www.) that was beginning to create social media and e-mail communications. Ideas and news were being transmitted at the speed of light. More and more satellites were going up that would increase even further the speed of communications to include global positioning systems (aka GPS), which was a space-based radio-navigation system consisting of a constellation of satellites broadcasting navigation signals and a network of ground stations and satellite control stations used for monitoring and control. National politics began to be debated easily and privately from home and even anonymously. Names, such as Newt Gingrich, began to appear in the news and he and others began to play key roles in undermining democratic norms in the United States and initiated political polarization and partisanship that was to increase over the years.

As he began to get settled into the new DuPont position, he began to recruit to rapidly buildup the staff to manage the many new clients with DuPont. He asked Ted F., yes, his previous business partner, to become the manager of the geology section. He also recruited staff from Law, ENSR, and other consulting firms around Houston and even overseas. He also encouraged diversity in the ranks, but well-educated Afro-American geologists were difficult to find. He did find one candidate from Indiana University.



In 1988, Mary’s son, David H. graduated high school and began college at the University of Texas at Austin. It was at this time that Mary began to be interested in genealogy when she realized that they lived only about 5 miles from where her great grandparent’s farm once existed and where her grandmother and her mother was born. She found the Chaparral Genealogical Library in Tomball, Texas (a northern suburb town adjacent to Houston), and later found the Clayton Genealogical Center near downtown Houston.

In the spring of 1990, while he was presenting a paper at a conference in Denver, Mary called to tell him that her father, Wiley, had just died and she was on her way to New Orleans to manage matters. He departed Denver as soon as possible and joined Mary in New Orleans for the funeral. With Wiley’s death, Mary became responsible for Nancy, her sister, with Down Syndrome, as her guardian. Nancy came to live with them and fitted right into the family. The room at the head of the stairs at the house on Sandy Cliffs

was perfect for her; it had a separate bathroom and shower and a personal television. The new responsibility placed a heavy burden on Mary that was absorbed into the rest of the family as well.

After a few weeks went by, one morning, he went upstairs to his office and sat down, took a sip of his coffee, and then reached for his pipe, which he had turned to years before after Lesley had made it clear that she hated the smell of cigarette smoke but loved the smell of *Half & Half* pipe tobacco. All of a sudden, he realized that what he was about to do was really stupid. He visualized the air pollution and all of the little alveoli in his already clogged lung tissues that were about to be filled with his tobacco smoke was not acceptable. He later realized that he had his first real epiphany. He decided that was it with the smoking. He gathered all of his pipes, including his Dad's hand-carved Lady Meerschaum pipes, tobacco cans, and even his emergency cigarettes, and threw them in the trash with disgust as to why it took 25 years for him come to his senses.

Oddly enough, he had no further thoughts of ever smoking again. He had the name of the nicotine game, an odd type of addiction that impacts some brains differently than other brains. He figured that he was just lucky to get away, while his dad struggled for years to quit but just could not do it, even with Maxine's help, and as indicated earlier it took him down. The only difference he noted was that he had a lot of extra thinking time and just plain extra time. The addiction presented the user with the opportunity to put his feet up on the edge of the desk and light up a cigarette or pipe and then just stare off into nicotine heaven disguised as thinking about something important. It was just nicotine insertion. The garbage trucks came that morning and that was that for his nicotine addiction.

Years later, one spring, he was dealing with what had become a yearly bout of bronchitis, some years requiring antibiotics. During a yearly physical examination, the doctor noticed that he had deep drainage pathways down the back of his throat that indicated that he must aspirate from time to time. The doctor suggested he take Zyrtec in the evenings only six days per week. It worked, no more bronchitis.

He realized that a few years earlier he had been dealing with GERD and one early morning he experienced a serious bout of aspiration from lying flat in bed on his right side (the wrong side). He awoke with a very sore throat; after a few hours working in his office, he began to shake uncontrollably, and had a slight fever. Mary asked her son, Dr. David H. for input. He said the symptoms sound like pneumonia, and he should go to the hospital. They did, and the x-rays indicated pneumonia, but he indicated the cause was due to aspiration. The x-ray also re-confirmed the presence a granuloma in his left lung that had been there since childhood apparently. A doctor once said that it was something that he had likely inhaled earlier that was encased and isolated by his body processes. He did recall that in high school days that he and his brother had taken a good look in their folk's furnace that was being repaired one summer. He had crawled into the large vent in the basement and climbed above the natural gas burners coil and noticed silky coverings on the inside of the vent. He also remembered hearing an odd sound when he was in the vent when he took a breath, like he had just breathed in something, but then promptly forgot about it until the spot on lung was resolved with the newer x-ray equipment. He later learned that asbestos was used in furnaces in the 1940s and 1950s, and was silky to the touch.

To fight against infection from the more recent aspiration, the doctors put him on IVs of powerful antibiotics and a week of large antibiotic tablets. He has learned since to sleep elevated on numerous pillows on his left side, and he eventually began taking nightly CPAP treatments, being sure not to consume food after 9:00 PM. Meanwhile, the encapsulated asbestos fragment remains unremarkable, but re-confirmed during each of his yearly physical examinations that included chest X-rays.

The projects began to roll into the DuPont Houston office, and he set about creating a DuPont consulting company, as requested. The President of the new DuPont company in Wilmington, DE told him that his principal job was to play golf with the 15 to 20 managers in his district. He scheduled one per month maximum, any more he considered to be ridiculous. He created a large totem board on the wall outside his office showing personnel and billing hours each week on which projects, etc. to encourage competition. In one of their first senior staff meetings, he raised the question with the HR person about their procedures in hiring an individual. For example, he asked the HR lady that once Jim W. or he were about to hire someone, did HR confirm all degrees listed on the applicants' resumes? The answer was astoundingly ...No. He instantly instructed the HR people to confirm degrees by calling registrars of the indicated universities, and confirm their exact degree as cited in diplomas awarded. He is shown the photo to the far right. Linda, the HR lady, said that they had had a problem with an engineer that had recently worked for Law Engineering. He recalled that the fellow always wore a beautiful necktie, and he would flip it nearly every time he passed him in the hallway, saying, "Nice tie." He thought at the time that most engineers wouldn't be caught dead wearing such a tie.

At some point, the fellow quit Law and went to work for the new DuPont company just a week before he arrived at DuPont. Tom L., whom he had appointed as manager of the engineering groups, had vouched for him according to the HR lady. He had



just taken a leave of absence because of a sick mother in one of the southern states. The HR lady had noticed that the fellow had run up a DuPont credit card account to about \$5,000.00, was instructed by the company to look into the matter. She called a number the fellow had filled out on his application. The lady who answered the phone was his mother and she allowed that she had been quite well thank you. The fellow was terminated and never returned to Houston.

He took Linda to task during the meeting for not checking his credentials before the fellow was hired, and she later checked finding that the university indicated he majored in engineering but had flunked out. To lighten her temporary disgrace, he said, "Just remember 'Beware of the engineer wearing a beautiful necktie.'"

He asked the HR to henceforth check the degrees of all new hires, and he said, "I also want you to check all existing personnel." A few weeks later, she appeared in his office looking a little grim. He asked why she had a look of a person with a problem.

Linda said, "Well, in my confirming everyone's degree with what they list in the resumes, we have found a problem."

He asked, "With whom?"

Linda said, "Tom S. claims to be a Hydrogeologist, but his degree is "Agricultural Engineering."

He said, "You must be kidding. That presents all sorts of problems, for our group and for my previous group, Law Engineering, where he claimed to be a hydrogeologist as well."

He said, "I'll alert Law, and I'll deal with Tom S. shortly."

Linda said, "I also have another problem, with Dick. W., who you knew and are considering hiring."

He asked, "What's the problem?"

Linda said, "It is sort of tricky. On his CV, Dick showed Ph.D.^{abd} It's the little ABD that's the problem. It means, All But Dissertation. Do you know what that means?"

He said, "I certainly do. It means he doesn't have a Ph.D. He just completed his course hours but did not prepare a dissertation or defend it. I'll handle Dick. I recommended him."

He called Dick on the phone and criticized him severely for not being explicit about his degree. He explained to him that it was his demonstrated capability that he saw while he was with ENSR that he wanted to have on the DuPont team, but now their HR people had become concerned about his resume and the others in the office will soon know too and so he couldn't think of hiring him. He told Dick that he should have managed that better and he would have hired him.

He next turned to Tom S. and asked his secretary to tell him that he wanted to see him. Tom, who he had designated as the manager of the Environmental Application section, came in and sat down. He forgot to shut the door after him. He informed Tom S. that they had learned about his degree not being in hydrogeology, but in agricultural engineering.

He said, "You have been misrepresenting yourself for years. I remember seeing your CV in many of the proposals that went out over my signature while at Law Engineering, which made me a part of your fraud. What were you thinking? I have to advise Jimmy and Bill B. about your previous misrepresentations. But regarding your future here at DuPont, you are in big trouble. You are lucky on the one hand that we haven't printed up all the new resumes for the new company brochures yet. But the fact is you lied to every one of us here in this office. Here what's going to happen,

- First, you are no longer the manager of the section.
- Second, your paycheck will be cut back a full grade.
- Third, at the next full staff meeting you will apologize to everyone.
- Fourth, If I hear one more hint of an ethical violation about you again, you will be fired."

Then he said in a very loud, angry voice, "Do you hear me, Tom? Now get out the office and I don't want to see your face again until Monday at the staff meeting."

Ted came into my office as Tom was leaving and said, "I'll walk Tom to the door, if you wish."

He said, "Yes, Thank you."

In a few minutes, Ted came back and sat down, and said, "I think you handled that quite well and I hope you didn't mind that I offered to accompany him to the door. He would have sought solace from the staff otherwise and tried to build sympathy for that little weasel. Don't know if you knew it or not but your door was open a little, and we all heard you giving Tom hell all the way down the hallway."

It wouldn't be the last time he would have a run in with Tom S.

He was able to build the staff to about 60 professionals and all the section managers were doing quite well, with that added awareness of safety issues for which DuPont was known so well. Their history of manufacturing munitions in the early days of DuPont during WW1 made the company acutely aware of the need for effective safety protocol. He was also beginning to build the *Institute of Environmental Technology*, which was based in part on the Pettyjohn Cross-Training course held in Stillwater, OK.⁵⁸ While he served as the Principal Instructor (in photo), and set the tone of the course, Ted H., Rae E., Bill H. from his DuPont staff and others in his network around Houston and elsewhere provided lecturers and contributors on their areas of expertise. His son, David C., was also contributing, while his son's Professor, Dr. Tom Sutton (Dr. Tom), at the community college where David took some courses before he entered Texas A&M, provided the initial lecture hall and facilities for holding the first years of the program. Dr. Sutton also provided the sites where Law Engineering drilled and completed monitoring wells that served as sites for demonstrations of groundwater sampling and testing protocol. He was joined in the creation of the IET program by Rick Bost, Chief Environmental Engineer, and one of the founders of the Houston office of ERM.



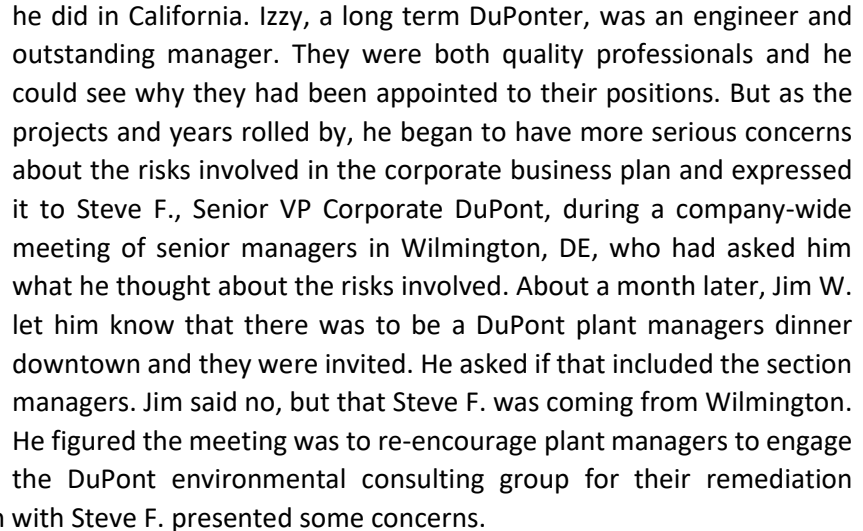
Rick was instrumental in providing lectures on remediation and other engineering-related topics and on health & safety protocol via hands-on demonstrations. He also recruited other senior professionals within ERM to provide lectures on case histories. He and Rick B. arranged the class for a field photo.

At about this time, he appointed Jeff K. as manager of the Law Engineering field office

in Seattle and Jeff developed the position from there. Later, he later created a new consulting company and earned the support of Weyerhaeuser and then DuPont on a major remediation project of a very old munitions plant near DuPont, Washington. The site was subsequently turned into a golf course and real-estate development project.⁵⁹ Because of this success, Jeff was then plugged into other DuPont projects throughout the DuPont Corporate system that lasted for decades.

⁵⁸ See a summary of the IET activities, <https://i2mconsultants.com/downloads/ela-iet/site/index.html>

⁵⁹ <https://i2mconsultants.com/portfolio-items/case-history-remediation-of-heavy-metals-residual-explosives/>



They arrived at the gathering in a large suite of one the hotels downtown. Jim and he knew most of the managers by then and they spent time working the room to make sure they greeted every manager present. A few minutes later Steve F. appeared without an apparent entourage this time. He circulated the room also making a point to shake everyone's hand and speak with each for a minute or so. By this time, Jim and he had finished greeting everyone and were standing along the side of the room observing the enthusiastic interactions between fellow managers of the Dupont southern district, with the largest number of plants in Dupont. The meeting reminded him of a fraternity get together and he mentioned that to Jim, who he knew was also a fraternity guy while at the University of Delaware, and Jim smiled and agreed. After a while, Steve F. approached them and Steve joined the line with their backs to the wall observing and nodding to anyone who passed by. Steve then turned to address them.

“What I’m about to tell you two is not to be repeated until the announcement is made in the press next week. I am retiring, and it’s somewhat overdue, but I wanted to give the DuPont Consulting business plan the opportunity to develop before I went fishing. But that is not all that will be surprising to you. What may perhaps be a surprise to you two is that my replacement has the axe out for DuPont Consulting system, and she will dismantle it as soon as she can, for the actual reasons you outlined to me during our conversations last month. She has concluded that the risk

of litigation emanating from our customers and/or from our suppliers over environmental disputes, and the conflict that could develop between the plant managers, their suppliers and their customers, and the Dupont consulting groups could damage DuPont's reputation and profitability. The new, soon to be announced, DuPont Executive Vice President, has taken the position that the idea was ill-conceived from the outset and plans to lay the foundation for separating Dupont from its legacy environmental issues as soon as possible. I wanted to let you know, Jim, that you and your HR people will be tasked to shed personnel over the next few months and disengage from projects and reengage the outside consulting companies for DuPont work. I didn't want you, Michael, to be put in the position of having to release those people you recruited, so I'm saying that you, and the two other Technical Managers in California and Wilmington, will also be released first and in similar ways. You will have a healthy severance package in recognition of your contributions to DuPont in building an outstanding consulting structure for the southern district. Based on our earlier conversations I know you are not surprised, but Jim, you may be surprised."

Just as Steve finished his announcement, the dinner gong went off and the gathered crowd began taking their seats. Steve steered Jim and him to chairs on either side of the end chair, Steve's chair. They sat down and Steve re-directed the conversation to other matters, family, national politics, and fishing, in which Steve and Jim discussed the merits of fly-fishing at some length. The meal was very good. The fellow seated to his left was a plant manager that he had played golf with a number of times and was wanting to play some more but he had been putting him off for some time because he had been so busy in the office. Based on the conversation he just had with Steve, it looks like he will have more free time than he had expected.

As the dessert came and went and after dinner liqueurs and coffee were served, people were beginning to push away from the table and to begin saying their goodbyes. He made a point to say goodbye to as many as possible, but for reasons he did not have before the dinner. He had been thinking during dinner that he should be able to make a go of private practice, where the plant managers might be new clients one day. Steve approached him with his arm on his shoulder saying privately that he would send him his contact information after the dust settles. He indicated that he would be pleased to serve as a reference for him, should he need it. He thanked him and Jim and he departed. On the way home, they were quiet for a while when Jim broke the silence.

Jim said, "I have to tell you that although I heard that Steve was thinking about retiring, I had no idea that his replacement would be pulling the plug on our company. It's going to be a mess. It's a good thing for you that Steve is getting you out of the shit-storm that I will have to deal with."

He said, "I am sorry Jim, but I will always support you, as I mentioned to you a few years ago, because you and I have had a good relationship. If you need me, let me know."

Jim said, "I appreciate your support, but as a third generation DuPonter, they told me a long time ago that this will be typical of what I will have to do for Dupont. I'll probably end up in the paint division after this is all over."

They worked out when Jim would announce his departure and the reason behind it was that he was going into private practice as an independent consultant, which was true. As Steve indicated, his severance package was substantial, but Mary kept her job in Texas Medical Center in any event. He assured his people in the office that Dupont would be going through some reorganizations over the next six months.

After Jim made the announcement, he spent the last week in the office assuring the people he recruited that they would be OK and that there would be re-assignments because there will be other opportunities developing in the near future.



David resting between dives in the Galapagos Islands

Ted was especially concerned but he assured him that he would be in great demand should reassignments not be offered to him by DuPont. Bill H. was also concerned, but he soon reduced his anxiety by telling him there were numerous plans up in the air, most of which included him, Rae E., and an assortment of his previous ENSR and Law Engineering senior associates and especially Jeff K., and his son, David C., both of whom would become integral to his development plans.

David and Julianne moved in 1982 to live with Jerrie in Carpinteria, California, just south of Santa Barbara. David finished the 11th grade, but he was having issues with Jerrie, so the family discussed the problem with Maxine and Dad and they offered to look after him for his senior year in Lancaster. David liked that idea and off he went to grandma and grandpa's house. After he graduated from LHS in 1983, David moved back to Santa Barbara to live with Jerrie and Julianne for a while, primarily because David didn't like the winters in Ohio. After he arrived in Santa Barbara, he decided he wasn't ready for college yet, so he went to work as a waiter at the *Epicurean Restaurant* and at a seafood restaurant. He bought a motorcycle and generally cruised around Southern California. He had developed a special relationship with a young lady, whom years later he would eventually bring to Houston. They had a son, Logan, but the relationship didn't last and she and her son moved back to Santa Barbara.

After a while, when talking to David on the telephone, he asked David if he would be interested in going to work for a drilling company in Nevada. David said he would like that so he made contact with an owner of a drilling company he knew, Oren Pollock, who had conducted the drilling at the Eureka gold-mining project in Nevada. He called Oren and inquired if he could use a new driller's helper. He told him about David's overall usefulness, and Oren had him set up a meeting in Reno with David so they could take the measure of each other. David rode his motorcycle to Reno and met with Oren. They must have hit it off, because he hired him on the spot, and off to Idaho they went.

After about a year or so, David called one night and announced that he had had [enough of the very hard physical labor](#) and was ready to start college. He and David agreed that if he moved back to Houston, the family would support him through college, assuming he would work hard on his coursework. He arrived one night rather bedraggled, but in good spirits. He spoke to Oren a few weeks after David arrived back in Houston and Oren said, "David was one hell of a hard worker and the drilling team came to rely on him." Coming from a crusty drilling boss, there was no better recommendation. Oren said to give David his best and to wish him well. He entered community college for two semesters and made a number of new friends among the geology professors, and then he was off to Texas A&M University to major in geology and biology. He worked hard and his grades were quite good.

The final day of his association with DuPont came with an office party that afternoon and a big cake. Everyone was upbeat, except for Carol W., who was the Manager of Offices Services. She was weeping in the corner. He approached her with a big hug, but she said that it wouldn't be the same around there without him. He told her that life was full of changes and new directions, which for some reason cheered her up and she disappeared into the revelry with the party goers. As he was about to leave, Jim W. caught up with him and handed him his departure envelope, which contained the severance check. Jim and he shook hands and they said so long.

His final thought of the company was that it was a class act by all those he had come to know in the DuPont system around the country with only a few exceptions. And that was that for Law Engineering, ENSR, and DuPont.

Chapter Twelve

1993, A Change in Direction with Private Practice & DNA



His Office from 2000

United States President George H. W. Bush and Russian President Boris Yeltsin signed the START II (Strategic Arms Reduction Treaty). The purpose of the treaty was to ban the use of MIRVs (Multiple Independently Targetable Reentry Vehicles) on ICBMs (Intercontinental Ballistic Missiles) which encouraged first-strike strategies. The U.S. Senate ratified the treaty in 1996 and Russia ratified it in 2000, but it never came into effect as Russia withdrew in 2002 after the U.S. withdrew from the ABM (Anti-Ballistic Missile) Treaty. The agreement was replaced by the SORT (Strategic Offensive Reductions) Treaty which mandated both the U.S. and Russia reduce their nuclear arsenals to between 1,700 and 2,000 warheads each.

NASA lost contact with the Mars Observer spacecraft during August, bringing an end to the mission. The Mars Observer spacecraft was a robotic space probe that had been launched during the previous year with the mission of studying the surface of the red planet, its atmosphere, climate, and the surrounding magnetic field. Contact with the probe was lost just before it was supposed to enter the orbit of Mars, so the mission effectively failed as it was unable to complete any of its mission objectives in respect to observing the planet. The development and launch of the spacecraft cost \$980 million.

With the increasing ability to monitor financial data via the Internet, people saw in 1993 that the yearly inflation rate was down to 2.96%. The year-end close of Dow Jones Industrial Average stood at 3,654, but the interest rates at the year end from Federal Reserve had been set at 6.00%, while the average income per year was \$31,230.00 and the cost of a gallon of gas was around \$1.16.

NASA's STS-55 Space Shuttle mission ended when the crew returned safely to Earth. During the mission, the Space Shuttle Columbia carried a crew of seven into space to conduct several experiments during orbit. The crew's commander was Steven R. Nagel and the pilot was Terence T. Henricks. The mission

carried the German Spacelab module and the crew performed about 88 experiments while in orbit. The mission was considered an overall success despite a few minor issues leading up to the launch and while in space.

Personal and business computers have become a necessity and computer software programs including spreadsheets were becoming increasingly user-friendly, with larger storage and more robust coding. The Ohio State football program did well during the Fall only to tie Wisconsin, but was beaten soundly by Michigan.

The night of the last day at DuPont, Mary and he went to Amerigo's restaurant to celebrate an end and a beginning. After a glass of Chardonnay, she asked if he had developed any ideas and he said that he had developed a few. But the leading candidate was the name of his new company, "M. D. Campbell and Associates, L.P.,"⁶⁰ which had a good sound for his private practice. And he planned to market the attorneys that he already knew for work in litigation support as an expert witness, or consulting expert, plus Phase II hydrogeological investigations and mining-related projects. The change in his activities was in greater attention to technical and geoscientific matters as opposed to additional



functions related to recruiting, personnel issues, and associated managerial functions that he had also been performing for decades earlier in Conoco, Teton, NWWARF, Keplinger & Associates, C,F,&B, Law Engineering, ENSR, and especially DuPont. In other words, more geoscience, less people interaction. Dealing with people was just a means to a preferred end in his thinking. He began to focus on his real interest: industrial geoscience in natural resource development and associated environmental implications.

As the 20th Century was drawing to a close and the 21st Century beckoned, Mary and each of his children began to make milestones of their own. Busy with cases and new projects, he had a challenging time keeping up with their activities and even accomplishments. What follows are summaries of what he was able to cobble together in terms of who did what and when.



David C. graduated in 1993 from Texas A&M University with a B.S. in Geology and David H. graduated also in 1993 from the University of Texas at Austin with B.S. in Chemistry and began medical school at the University Texas Medical Branch in Galveston, Texas. The sons were on their way to independence.

He went into private practice with his son, who had just graduated with a degree in geology and biology. This was about the time that America was showing the early signs of Fascism developing from the far right in the politics of the early 1990s that was to expand over the ensuing decades. This was exacerbated by the rapid development of technology that was to increase communications via the Internet and cell phones while increasing the pace of living and working. No

⁶⁰ This was the Home page of the first website by David C. for their consulting company, <https://www.mdcampbell.com/>

longer was it necessary to wait days for responses to letters or memos mailed via the U.S. Post Office. It was only hours or less to consummate contracts to move forward on a project. Ambulance response times also decreased rapidly which saved millions of lives over the decades. All this resulted in unprecedented growth in the economy, although the “trickle down” theory was found to be a Republican fabrication that has created American oligarchs with little help for the working classes, as pleasant and charitable as some may be. He was swept along with this trend making sure his family had the means to move well up into an upper-middle class environment, he focused on the responsibilities his profession required of him so his family saw less of him than with most fathers who held 9 to 5 jobs. At the same time, the world around him was also changing fast. The technological advances in communications allowed increased efficiency in a broad range of functions. With the growing reach of the Internet into the libraries of the world and the increased storage and computing speed of office systems, communications with clients became even faster over just 10 years. Presentations of capabilities via corporate websites and the development of Internet search engines allowed research to open into vast arrays of information sources from state, federal, and company documents that were becoming more accessible as each year passed. Thought-provoking Information for young children and young adults became available as well.⁶¹



David C. was to play a pivotal role in his abilities to respond to the recent technologies for the next 20 years through David’s numerous contributions to their consulting business. As a licensed Professional Geologist in the State of Texas (a P.G.), and webmaster for a number of domains, he was indispensable in the operation of his private consulting practice. In support of his activities in geological societies, institutes, and associations, David created company websites,⁶² a web portal,⁶³ and a website for the American Institute of Professional Geologists (AIPG) Texas Section,⁶⁴ among others. David also supported his practice in numerous consulting assignments in the U.S., and Australia, Vietnam, etc., and in litigation cases. David not only was the creator and webmaster of all Internet operations for the company, but he also took on the responsibility creating and maintaining the Lancaster High School, Class of 1959 website,⁶⁵ and others along the way.



Having a strong interest in marine biology, he created and maintains the popular MarineBio Conservation Society.⁶⁶ He also performed similar functions for Mary’s genealogical websites.⁶⁷

⁶¹ <https://www.youtube.com/watch?v=9hDDwBEobtk>

⁶² Current company website, <https://i2mconsultants.com/>

⁶³ The I2M Web Portal created by David C., <https://i2mportal.com>

⁶⁴ Current AIPG Texas Chapter, <https://aipg-tx.org/>

⁶⁵ Current LHS59 Class website: <https://lhs59.org/>

⁶⁶ David C.’s MarineBio Conservation Society website: <https://www.marinebio.org/>

⁶⁷ Mary’s Consulting website: <https://www.findingforefathers.com/>

In 1994, with his business beginning to increase quickly, Mary, Jenny, Jessie and Grandma (Maxine), who was invited only because Dad (Clarence) had gone on a previous trip to Europe with he and Mary), travelled without him to Italy to visit Julianne, who was teaching at the International School in Milan.⁶⁸ They toured Rome, Milan, Florence, and Venice. Maxine didn't think much of Italy, but notwithstanding Maxine's attitude at the time, Mary and the daughters enjoyed the trip. Jessie had learned much about her major subject matter, which was reinforced in her high grade-point average in college.

When they returned, Mary decided to go back to work to augment the family income. She interviewed at the Baylor College of Medicine, Department of Pediatrics, and was hired to assist Dr. Ralph D. Feigin, Chairman, Department of Pediatrics, and Physician-in-Chief of Texas Children's Hospital. He was a renowned figure in pediatric medicine. Mary had an office next to Dr. Feigin's office in the hospital and had a range of duties in a very busy academic office. Dr. Feigin managed both the department and the hospital, which had one of the leading pediatric residency programs in the country.



She enjoyed the work, but it was hard, demanding work. They all loved Mary for the same reason he did. She was very bright and a match for Dr. Feigin's pressure, she was a nice person, and she was a beautiful lady. Mary's main responsibilities eventually focused on the developmental editing of his two textbooks, *Textbook of Pediatric Infectious Diseases*⁶⁹ and *Osky's Pediatrics* and in writing his recommendation letters for faculty promotions and residency applications.

To meet the demands of a growing environmental industry and a shrinking oil and gas industry, in the mid-1990s, he formed the *Institute of Environmental Technology* and developed, managed and served as Principal Instructor for the 220-Hr Evening Semester Course, *Introduction to Environmental Technology*, first held on the campus of North Harris Community College and other convenient venues around Houston over the years for the purpose of cross-training petroleum geologists, engineers, chemists, and others as a prelude to entering or advancing in the environmental field.⁷⁰



⁶⁸ <https://www.icsmilan.com/>

⁶⁹ <https://www.us.elsevierhealth.com/feigin-and-cherrys-textbook-of-pediatric-infectious-diseases-9780323376921.html>

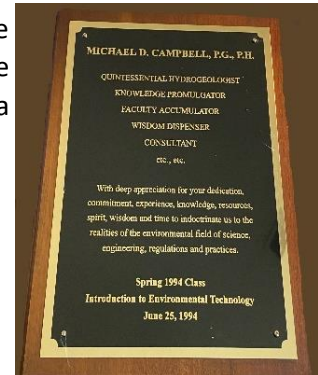
⁷⁰ IET and ELA group: <https://i2mconsultants.com/downloads/ela-iet/site/index.html>



He lectured on RCRA and CERCLA and on hydrogeology and project management, and selected and managed all guest lecturers from industry, government, and local universities. Almost 400 men and women graduated from the program over the years and were subsequently employed throughout the U.S., some of whom returned to the oil and gas industry with improved credentials.⁷¹

The IET training program continued after he left DuPont as he took up private practice with his son, David, and their associates. As Principal Instructor of the IET program (Field trip in above photo; he is at far right), he lectured on a range of topics over the period 1994 to 1999, such as,

- The State of the Environmental Industry,
- Oilfield Brine Contamination,
- Statistics in Environmental Investigations,
- Applied Hydrogeology, Typical LNAPL & DNAPL Behavior in the Subsurface,
- Groundwater Modeling, Practices & Pitfalls,
- The Role of Environmental Technology in Developing, Maintaining, and Protecting Groundwater Supplies in the 21st Century,
- Federal and State Regulations and Field Implementation in Hazardous and Solid Waste Investigations and Management,
- Ground-Water Supply Systems, Hydrogeology and the Delivery of a Municipal Water Supply, for a Seminar on New Municipal Groundwater Supply Issues, Houston, Texas,
- Hydrogeology and Mining, a Study Guide for Workshop presented at The National Mining Conference, Knoxville, Tennessee,
- Environmental Awareness and Its Development, An Emphasis on the Oil & Gas Industry,
- Resource Conservation and Recovery Act (RCRA) and Applications, and
- Applied Hydrogeology, Groundwater Flow



Over the ensuing 17 years he served in private practice with a growing supporting staff and consultants in response to the needs of the legal community in numerous litigation cases as an expert witness or as a consulting expert. Instead of attempting to recall the salient histories of each case, he decided to provide a link here to each case, which gives the style and nature of the litigation and the outcome.⁷²

⁷¹ About the IET, <https://ela-iet.com/IET-WWJArticle.pdf>

⁷² Expert Witness Case Summaries, <https://i2mconsultants.com/downloads/corp/MDCCaseSummaries.pdf>

Anecdotes of a Lifetime

He served as Principal-in-Charge and provided oversight via project/document review, and technical and QA/QC training for industry, consulting companies and law firms for RCRA, Superfund, and mining-related projects. Also, during the period of private practice, he served on the Editorial Board of the *Journal of Applied Groundwater Protection*, sponsored by the Groundwater Protection Council, and served as Special Editor for the journal, *Ground Water*. He also served on the Editorial Boards of the *International Journal of Environmental Forensics* and for two other new scientific journals in support of making the greatest use of the data obtained by industry during geoscience investigations. He also served on numerous panels.



The one shown here was about managing North Harris County water supplies by lecturers from the IET program.

In 1997, Jenny graduated from Westfield High School. She was recruited by a number of eastern colleges and she and Mary visited many of them. She chose Sarah Lawrence College in New York. Mary and he were concerned about the cost but with her high SAT scores and numerous activities in high school, such as playing the lead in plays, etc., SLC offered her a very favorable tuition package. They could make up the difference. Also, during that year, David H. graduated from medical school at the University of Texas Medical Branch, Galveston and began his transitional Internship in Austin, Texas. Julianne married Brian F. in Copenhagen and the whole family attended the reception in Santa Barbara, California, where they had moved. Julianne was in the midst of further advancing her educational qualifications.

Joe C.'s close friends joined the celebrations for his wedding. Everyone was present, except Dick and wife, Petey E. because of a schedule conflict. Mary C. also could not attend because she had to look after her sister, Nancy. But the rest of his guys were present, with wives.



Becky and Joe C., Bride and Groom

On the left to right (bottom): Karen and David L., The Deacon and Polly S., He, Dennis and Toni S.

On the right (next to Joe): Phil and Judy H., Gary and Becky B., Tom and Jean H., Judy and Jon N., and Annadelle and Steve B.

In 1998, Dr. David H., began Radiology Residency at The Johns Hopkins Hospital, in Baltimore under Dr. Stanley Siegelman. He had scored very high on the entrance tests.

At the end of 1998, the family traveled to Albuquerque to Dan and Carolyn's house for Christmas and Mary and he toured the Very Large Array Radio Telescope facility west of Socorro.



After 2000, he again began to attend conferences, present papers, serve as session chairman in technical conferences, and continued to be active as an officer of the AIPG Chapter in Texas,⁷³ and as an editor for a number of technical journals. In 2002, he was licensed as a Professional Geologist and Hydrogeologist in the state of Washington (P.G. and P.H.). In 2003, he was licensed in Texas as a Professional Geologist (P.G.). In 2004, He was appointed as Chairman of the AAPG Energy Minerals Division (EMD) Committee on Uranium (Nuclear and REE), a position he held until he stepped down in 2021.⁷⁴ He also maintained certifications in the field of health and safety training.



In 2009, he was later elected President of the EMD for the term, 2010-2011.^{75, 76} The above and more are cited in his CV.⁷⁷



But back in 2000, the family moved from Sandy Cliffs in the north Houston suburb of Ponderosa Forest to an urban three-story townhouse on Elmen Street in Montrose. The home and office were close to Mary's office in the Medical Center and closer to Clayton Library and downtown courthouses for genealogical research for her professional genealogy business. He operated his practice out the 2nd floor, including holding meetings on cases with his support group Environmental Litigation Associates.⁷⁸ He was asked to prepare a policy statement of groundwater management going into the 21st Century.⁷⁹

⁷³ <https://aipg-tx.org/officers/>

⁷⁴ <https://i2mconsulting.com/i2ms-chief-geologist-steps-down-as-chair-of-the-emd-uranium-nuclear-ree-committee-after-17-years/>

⁷⁵ <https://www.i2mconsultants.com/downloads/corp/AAPG-EMDExCom2010-2011.pdf>

⁷⁶ <https://i2massociates.com/downloads/DepartingMessageEMDPresidentJune2011.pdf>

⁷⁷ <https://i2mconsulting.com/michael-d-campbell-pg-ph-curriculum-vitae/>

⁷⁸ <https://www.ela-iet.com/ELAPrincipals.pdf>

⁷⁹ <https://www.ela-iet.com/ietsep2000X.pdf>



David H., Jessica B., Mary C., Jennifer C., & He at SLC

Jessie graduated from Westfield High School and began college at the University of Houston. In 2001, Jenny graduated from Sarah Lawrence College. Mary, David H., Jessie, Grandma (Maxine) and he traveled to New York for the graduation ceremony and dinners. After graduation, Jenny began work as a teacher for *Teach for America* in New Jersey. She and her friend Brian, who was still in graduate school, working on his Ph.D. in philosophy, moved to Jersey City.

And then there was the 9/11 in 2001. He was on a plane out of Houston heading for Oklahoma City with an associate when over Dallas, the plane took a sharp dive during which the pilot came on the overhead saying that the FAA had just grounded all planes in the U.S. and they were to land as soon as possible. There had just been a suicide attack on one of the Twin Towers in NYC by a hi-jacked domestic airliner loaded with people. They were on the ground in only a few minutes. As he debarked and arrived in the passenger lounge, he noticed people clustered around a big-screen TV. He walked up to the group and saw one of the Towers with smoke everywhere. Just then, he saw the second airliner crash into the second tower like a knife through butter, and then smoke and flames. After a few minutes, he called his client in Oklahoma City to advise what had happened, if she didn't already know. She said that a

limousine would pick them up at a certain point at the Dallas airport and drive them to Oklahoma City. After an hour or so, sure enough, a large, black limousine rolled up to the designated spot and a fellow dressed in grey with a matching driver's hat got out and approached them. They identified themselves to the driver and off they went to Oklahoma City. There was no one on the road except for the occasional truck. When one and then another passed them going at least 80 mph, they blew thier horns in



staccato sequence and waved. After the second truck blew by, he asked the driver why they were blowing their horns so. He responded that he thought the truckers were under the impression that they were some kind of governmental personnel on government business because of the 9/11 attack. In a few hours they arrived at OK City and met with the client and were back on schedule for the following day's sampling event witnessed by a plethora of opposing expert witnesses.

Jenny was living just across the Hudson River in New Jersey teaching at a school for young people. She had a difficult job keeping them calm. Some of the childrens' parents were missing as a result of the attack. People came to the classrooms and took those children into special care. Jenny's boyfriend Brian was scheduled to be at the Towers' subway when they collapsed. Fortunately, he had overslept and missed his train. A few days after the Twin Towers Attack and after experiencing the 9/11 tragedy firsthand, Jenny decided she wanted to move back to Houston for a while. After he returned from the Oklahoma, he and Mary drove the Ford Expedition to New Jersey and retrieved her and all her belongings.

Brian (her boyfriend) stayed in NY to finish his degree and then decided to go on a tour of Uzbekistan, Kazakhstan. Back home in Houston, Jenny worked at the *Houston Children's Museum* and at *Urban Harvest*, while serving as a professional puppet director and performer, producing her own shows, as well as working with *Bobbindoctrin* and *Basil Twist* in the *Houston Symphony* production.

In 2002, Dr. David H. became a Board-Certified Radiologist and began his Fellowship training in Cross- sectional Imaging at the Johns Hopkins Hospital, Baltimore, MD.



In 2003, Jessie did her 6-months abroad January- June in Florence, Italy, at the *Institute of Fine and Liberal Arts at Palazzo Rucellai* focusing on Italian Studies.⁸⁰ Jenny, David H., and Mary traveled to Italy to visit Jessie and toured Florence, Rome, and Paris.

Also in 2003, Dr. David H. was on the partner track as a Board-Certified Radiologist at Hollywood Radiology in Florida. He moved to Miami Beach.

In 2004, Jessie graduated from University of Houston with a B.A. degree in Italian Studies, *Magna Cum Laude*. She was very pleased, and she should have been. He was inducted to Lancaster High School Hall of Fame⁸¹ and was elected a Fellow of the Geological Society of America.⁸² Maxine was a proud mother.



In 2005, Mary submitted her portfolio for Certified Genealogist, which was accepted by the Board for Certification of Genealogists.⁸³ She began working part-time as a Board-certified professional genealogist and founded her consulting business *Finding Forefathers*.⁸⁴ For a while, Mary worked as one of *Ancestry.com's* expert genealogists,⁸⁵ and then worked for private clients. She disagreed vehemently with his Center-Left politics and conducted genealogical research for many Republicans and Democrats as well. She once said, "There should be no politics in genealogy."



David C. visited his son, Logan, in California that year.

In 2006, Jessie spent a summer at the *Earthwatch Institute*,⁸⁶ at the Field School for the *Deia Archaeological Museum and Research Center* in Deia, Mallorca, Spain.⁸⁷ Julianne was in residence and arranged the employment. Jessie's responsibilities were excavating, cataloging, and classifying artifacts from the prehistoric site of Ferrandel, Oleza, and the Chalcolithic period. Also that year, Jenny performed in *Basil Twist's* production of *Hansel and Gretel* at the Houston Grand Opera, Houston. Her performance definitely caught the attention of the audience.

⁸⁰ https://www.amerispan.com/pdf_files/asa/FlorenceCourses.pdf

⁸¹ <https://lhs59.org/HallFame.html>

⁸² <https://lhs59.org/special2004e.html>

⁸³ <https://www.bgc certification.org/>

⁸⁴ <https://findingforefathers.com/>

⁸⁵ <https://genealogybargains.com/are-you-ready-to-become-an-ancestry-com-expert/>

⁸⁶ https://en.wikipedia.org/wiki/Earthwatch_Institute

⁸⁷ <https://www.studyabroad.com/institutions/deia-archaeological-museum-research-centre/damarc-summer-course-278526>

Anecdotes of a Lifetime

During the early 2000s, he joined his Lancaster guys on numerous golfing trips, for example^{87A, 87B}

^{87A} In 2005 to Alabama: <https://www.LHS59.org/special2005a.html> and

^{87B} In 2006 to Pinehurst in North Carolina: <https://www.LHS59.org/special2009b.html>

Also in 2006, a local TV station caught up with him on the golf course asking about his opinion concerning underground coal mining in the U.S.



In 2007, Mary and he again traveled to Acapulco, Mexico, and stayed at Las Brisas, for their 30-year wedding anniversary. Jenny achieved her Texas Certification as a teacher and began work as a theatre teacher at West Briar Middle School. Also in 2007, he and David C. were recognized for their 10 years of supporting the Association of Environmental & Engineering Geologists, Texas Chapter.



In 2008, Jessie accepted a full-time job at HRA Gray & Pape in May as Logistics Coordinator/ Archaeology Crew Chief.⁸⁸ She became a Technical Editor there in 2013. She also underwent training and became a certified scuba diver.

In 2009, Dr. Feigin died in August.⁸⁹ and Mary left Baylor the next year after the current textbook edition was completed. Also, Jenny and her boyfriend Brian moved to NYC when he was accepted to graduate school in the Department of Philosophy at

SUNY Stonybrook. Jenny continued to work as a professional puppet director and performer and as a theatre teaching artist. They lived in Queens.

Campbell Family on the Left⁹⁰ and Bludau Family on the Right



On October 24th of 2009, Jessie married Charles Bludau at his mother's farm in the hill country near Hallettsville, TX. And in 2011, Jessie and Charlie bought their first house in Briar Forest neighborhood of Houston. Charles had graduated with a bachelor's degree in anthropology from the Texas State University. He was working for *HGA Gray Pape* in Houston when he made an important

⁸⁸ <https://www.graypape.com/our-company/>

⁸⁹ <https://www.contemporarypediatrics.com/view/dr-ralph-d-feigin-renowned-pediatrician-dies-70>

⁹⁰ <https://www.i2massociates.com/downloads/jessica-wedding2009.pdf>

discovery in 2015.⁹¹ He currently works for *Horizon Environmental Consultants* on projects all over the southern U.S.

In 2011, Mary and he went to Australia, visited Sydney, and took a ferry ride to Manly where Julianne was born and where he and his family lived in the 1960s. They went on to Adelaide as part of a consulting assignment investigating a uranium property in South Australia. While he was in meetings or in the field, Mary took tours of museums, natural preserves, and wineries in the area. She loved the area and the wine.

In 2012, Grandson Charles Henry Bludau was born on July 2 to Jessie and Charlie at Women's Hospital, Houston. Mary began daycare for baby Charlie full-time while his parents were working.

In late 2013, Ohio State played Michigan State for the conference title. Mary and he had made arrangements for a weekend stay at the Houstonian, an upscale hotel in Houston. Knowing he was recording the Saturday game to watch on Sunday after they returned home, that Sunday morning they were on their way to breakfast in the elevator when someone noticed his Ohio State shirt, and just as the door was opening, the person said, "Too bad Ohio State lost." As an instant reaction, he said very loudly, "Ah shit!" He looked up and there were many people waiting for the elevator as it opened reacting with mouths agape after this outburst. Mary burst out laughing, but was embarrassed as she whisked him away toward the restaurant. There was no point in watching the game when they returned home. He just erased it and took a nap instead.

And then in 2015 grandson Michael James Bludau was born October 5 to Jessie and Charlie at Memorial Hermann Hospital, Houston. Mary also began daycare for baby Michael full-time while parents were working. Jessie and Charlie moved to Cinco Ranch in Katy, TX in July 2018. They moved there for the outstanding schools and for a larger house. Mary and he moved there in September. Mary, he, and Nancy W. wanted to be near them and to have a one-story home. The two-flights of stairs at the townhouse intown had become unmanageable for Nancy. Their new house has 12-ft ceilings and higher in some rooms, open-layout, rooms for two offices, an extra-large garage area for his laboratory and for his third-level library of files and reports, a beautiful pool and spa partially surrounded by five palm trees and Mary's new garden, plus an open sky (no wires). The new neighbors were about 50-50 Blue vs Red political stations. The Texas freeze a few years later killed many of the palm trees and most of the plants in the garden, all of which were eventually replaced. They have a healthy American Elm tree growing up nicely in the far corner of their property that David C. had transplanted earlier.

In May/June, 2018, Mary and son, Dr. David H., travelled to Scotland and Northern Ireland. Another dream trip of a lifetime, she said! Later that year, Nancy, Mary's sister, was formally diagnosed with Alzheimer's disease by a Baylor College of Medicine neurologist. A fact that some 99% of Down Syndrome people confront.



⁹¹ <https://i2massociates.com/downloads/CharlesBludau2015HoustonChronicle.pdf>

Anecdotes of a Lifetime

For a number of years, he continued to play golf with his LHS guys, usually on the courses of North Carolina or South Carolina. The 2013 photo marked the last year they were all together. Phil H., (light-blue shirt) died suddenly in 2015 watching the basketball tournament.⁹² He was the Founder and Director of the Hazelton Alabama Golf Trust to which they were all proud members.

Back Row: Dick E., Dennis S., Phil H., David (Deacon) S.
Front Row: Joe C., Jon N., Tom H., and He.

Phil and he bought two trophies in Birmingham, Alabama, one for circulation with the yearly winner and one for back-up in case someone broke or lost it.



Dennis S. (dark-blue shirt) died in early 2021 as a result of a fall on the ice followed by a massive stroke a while later, and Jon N. (red shirt) died in late 2021 from a long-term illness.⁹³ He (black shirt) is on the far right in the photo. But someone asked him how his guys turned out with such auspicious beginnings in high school. Here is their accounting:

(Left to right in above photo):

- **Joe C.** graduated from the Ohio Northern University and the University of Nevada, receiving a Bachelor's Degree, Juris Doctor Degree, and Master's Degree in Judicial Studies, Business Managerial Economics and Law. He served as a judge for 34 years beginning in the Fairfield County Municipal Court, Common Pleas Court of Fairfield County and then the Ohio Court of Claims. Prior to those years, he was in the general practice of law and was also the City Prosecutor. He is a retired Captain in the U. S. Navy Reserve JAGC serving as a trial lawyer and as a General Courts Martial Judge. Later, he was an active judge, an officer and board member of the Ohio Judicial Conference as well as a member of the Ohio Common Pleas Judges Association. He has also served as a faculty member at the Ohio Judicial College and The National Judicial College. He has received numerous community service awards and professional leadership awards. In all, his legal career spanned over 47 years. He remains very active in his local church and other Christian organizations. He remains in the general practice of law limiting his practice to personal injury, probating estates, mediation and general legal consultation.⁹⁴ Joe was inducted into the LHS Hall of Fame in 2002.¹⁰⁶
- **Jon N.** graduated from Yale University and then graduated from the Ohio State University College of Medicine in 1967. He completed his residency in General Surgery under Dr. Robert Zollinger at the Ohio State University Hospital in 1972 and, thereafter, served in the U.S. Air Force in Minot ND from 1972 – 1975. He was then certified by The American Board of Surgery. He served as a general surgeon at Fairfield Medical Center for many years. Later in his career, he worked as a medical expert witness for the State of Ohio for disability hearings and on associated cases.⁹⁵
- **Tom H.** began his college experience as a mechanical engineering major at the University of Cincinnati. After two years he transferred to the Ohio State University and changed his major to industrial management. Upon graduation, he accepted a position with *Anchor Hocking Glass*

⁹² <https://lhs59.org/special2015a.html>

⁹³ <https://lhs59.org/specialnews.htm>, scroll down

⁹⁴ <https://www.clarklaw1.com/joseph-t-clark-ret/>

⁹⁵ <https://www.dignitymemorial.com/obituaries/lancaster-oh/dr-jonathan-nusbaum-10359388>

Anecdotes of a Lifetime

Corporation as a Process Control Engineer, with a concentration on the Hartford 28 machines. In 1966, he enlisted in The United States Army under a program designed to complete officer's candidate school with an officer's commission as a Second Lieutenant. He served with The Satellite Communications Agency for two years followed by a year's assignment with The First Signal Group in Phu Bai Vietnam. He was the owner/manager of a school photography company for 29 years, selling his company and retiring at age 58. Tom served as a director of *The Fairfield Federal Savings and Loan Association* for 22 years until mandatory retirement age. He has served in various capacities with numerous charitable and Christian organizations and churches.

- **MDC**¹⁰⁶

..... Back Row:

- **Dick E.** graduated from the Ohio State University with a major in marketing. He spent most of his business career as a very successful salesman for Anchor Hocking, Lancaster Colony, and more than 25 years as an independent manufacturer's representative. Over the years, he enjoyed working and supporting *Habitat for Humanity*, *Big Brothers*, *Food Pantry* and *Meals on Wheels*.
- **Dennis S.** attended the University of Cincinnati in the early 1960s, and in the mid-1960s to early 1970s, he served in the U.S. Air Force in the Special Investigations Branch based in Texas. He then graduated from the University of Houston with his Bachelor's Degree in the mid-1970s. In the early 1980s he received his M.S. Degree from the University of Eastern Kentucky, and later graduated from the University of Kentucky where he received a Ph.D. in Sports Psychology. Over the ensuing years, Dennis became a popular consulting psychologist in the Lexington area and taught at the University of Kentucky in their sports department for many years working with the 1992 SEC Championship men's tennis team, the 1993 Peach Bowl football team, and the 1996 NCAA Championship basketball team. In 1998, he consulted with the Cincinnati Bengals professional football team management. Over the ensuing years, Dennis collaborated with pro golfers. Pro-Golfer Kenny Perry rewarded Dennis with a new Mercedes Benz as a bonus for his excellent work. He was in private practice for decades serving the local community, the sports community, as well as the legal community, where he served as a psychology expert witness in many cases.⁹⁶ Dennis was inducted into the LHS Hall of Fame in 2000.¹⁰⁶
- **Phil H.** graduated in 1963 from the Ohio State University majoring in marketing. He went to work for a few years for Anchor Hocking Glass Corporation's Advertising Department in Lancaster, Ohio. In 1965, the Alabama state troopers beat and gassed civil-rights leader John Lewis and some 600 marchers (Phil H. had anticipated this trouble and was one of the marchers) on the Edmund Pettus Bridge in Selma, Alabama. He decided to attend the Pittsburgh Theological Seminary, and with continuing biblical studies, he received his Master's and Doctorate degrees. He was ordained as a Presbyterian minister in 1967 and served as Youth Minister at Havenwood Presbyterian Church in Baltimore, MD that year. He then became Pastor at the First Presbyterian Church of Bluffton, IN, from 1969 to 1985, where he was recognized as Indiana's Outstanding Young Religious Leader in 1975, and then served as Senior Pastor for the Orchard Lake Community Church (Presbyterian) in suburban Detroit from 1985 to 1994. There, he helped to establish a drug-abuse program, assisted families of alcoholics, led community service through soup kitchens, promoted housing for the homeless, and was recognized by the Michigan Legislature with the *Michigan Minuteman Award*. Phil served as Senior Pastor, Worthington Presbyterian Church, Worthington, Ohio from 1994 until his 2007 retirement. Then, with the time available during his world travels, he became the Founder

⁹⁶ Scroll down to March, 2021: <https://lhs59.org/specialnews.htm>

Anecdotes of a Lifetime

of the "Rev. Dr. Philip Hazelton AIDS/HIV Center" in South Africa. As indicated, he was also the Founder and Director of the "Hazelton Alabama Golf Trust."⁹⁷ In the late 1980s, Phil and his cousin, David Contosta, began collaborating on a book about growing up in Lancaster, Ohio. Somewhere along the way, they paused their writings when they both became too busy. A few years after Phil's sudden death in 2015,⁹⁸ David Contosta finished the manuscript with the theme of every town in America-kind of growing up in the 1950s, titled: *An American Childhood*, which is now available on Amazon.com,⁹⁹ and which contains an additional biographic review of the contributions by Phil H. His other books are *The High Places* and *Tuesday Faces*, and are also available on Amazon.com..¹⁰⁰

- **David S. (The Deacon)** graduated from University of Cincinnati with a business/marketing degree, joining Corning Glass Works and for the next 20 years had a variety of management positions located in West Virginia, Massachusetts, Long Island, NY, Pennsylvania, and Corning, NY. The position in Corning was in charge of the manufacturing operation that produced catalytic converters, a product developed by Corning Research & Development, placed in exhaust pipes of cars to reduce carbon dioxide fumes. In 1987, he retired from Corning and moved to Wilmington, NC to start a new phase of his life owning and operating a real-estate business with his wife of 50 years. They lived where they chose, and controlled their own destiny. They opened a Century 21 real estate office and his 3 sons eventually joined the business. In addition to real estate, he and his family formed a property management business, *Cams, Community Association*, a software company that developed software to manage communities, a mortgage company, and a building division for apartment projects. Notable activities over the years: President, Wilmington Board of Realtors MLS; President, Cape Fear Rotary Club; Wilmington Chamber of Commerce, Board Member and Treasurer; Board Member, Chamber Foundation, and Trustee, *Wrightsville Methodist Church*..¹⁰¹
- Note: **Chuck A.** died in 2000,¹⁰² **Roger G.** died 2017,¹⁰³ and **Mike P.** died in 2018..¹⁰⁴

His high-school class of 1959 was rather special.¹⁰⁵ Over the years they racked up six members who were inducted in the LHS Hall of Fame. The highest number of all the years the award was given by LHS, until the class of 1957 appeared out of nowhere.¹⁰⁵ Steve Miller was a shoe-in.⁹⁹¹⁰⁶ He was very bright and became a well-known radiologist at Massachusetts General Hospital in Boston. During early high school, he played chess with Steve M. when he was bed-ridden with an illness, he recalled, but he never beat him, almost sometimes, but then he thought Steve M. was laying off. He was inducted into the LHS Hall of Fame in 1995..¹⁰⁶

Elaine A. received her Ph.D. from Colorado State University in education management. She soon served as the president of the Owens Community College for a number of the growth years,¹⁰⁷ and served

⁹⁷ <https://lhs59.org/special2015a.html>

⁹⁸ <https://www.legacy.com/us/obituaries/dispatch/name/philip-hazelton-obituary?id=8295007>

⁹⁹ https://www.amazon.com/dp/0578352605?psc=1&smid=ATVPDKIKX0DER&ref=chk_typ_imgToDp&asin=0578352605&revisionId=&format=4&depth=1

¹⁰⁰ <https://www.amazon.com/High-Places-Philip-M-Hazelton/dp/078801661X>

¹⁰¹ <https://www.wilmingtonforrent.com/about>

¹⁰² Chuck died in 2000 with Phil H. at his bedside. Scroll down to year 2000: <https://lhs59.org/specialnews-archives.htm>

¹⁰³ <https://www.legacy.com/us/obituaries/lancastereaglegazette/name/roger-graybill-obituary?id=18044801>

¹⁰⁴ <https://www.dignitymemorial.com/obituaries/columbus-oh/michael-preston-10683981>

¹⁰⁵ <https://lhs59.org/LHS59HoF2020.pdf>

¹⁰⁶ <https://lhs59.org/HallFame.html>

¹⁰⁷ <https://lhs59.org/images/NR0477C.jpg>

other schools and consulted for many other small colleges.¹⁰¹¹⁰⁸ She was inducted into the LHS Hall of Fame in 2000.¹⁰⁶

Tom G. received his Ph.D. in pharmacology from the Ohio Northern University. He was inducted to the LHS Hall of Fame in 1998.¹⁰⁶ Other members also distinguished themselves. As a few examples, Mike P. became a well-known civil-rights activist in Columbus. Nelson E. and Roger G. graduated from the Ohio State School of Optometry. Nancy C. served as Principal for schools in upper Michigan. Nancy S. served as a high-school counselor for many years in Colorado. And then there were a plethora of nurses and teachers that came out of the LHS59 class. To be sure, there are many others in the class who have made significant contributions in their lives. For additional information, see the website of the LHS Class of 1959: www.lhs59.org.



But in 2020, the Covid-19 Pandemic began with the first lock-down in March. He recalled that he had never felt such fear in his life for all Americans and the world, to the ever damnation of many Republicans and their Idiot President for ignoring the Pandemic that led to hundreds of thousands of unnecessary deaths, consisting mostly of Republicans and lower-income people.



Also, during this period, Magnolia Allen contacted Mary about their DNA match on AncestryDNA.com and they began a conversation in which she mentioned that her dad's birth date was November 25, 1968, in New Orleans. Mary had finally found the son that was adopted out in 1968. When DNA testing for genealogy had become available, she had submitted DNA samples to all genealogy-testing companies in hopes that one day she would find him. That set-in motion the reuniting of Mary and James David Allen (David A.) with his biological family, which was delayed for only a time by the Pandemic restrictions.

Also in 2020, Jenny received her Masters of Social Work from the Silberman School of Social Work, where she focused on clinical therapy. She became fully licensed soon after and began work as a Social Worker for Heights & Hills in Brooklyn, NY, in the Caregiver counseling program. She runs a caregiver therapy group there and counsels caregivers one-on-one as a licensed psychiatric social worker.

In October of 2020, Nancy was moved to Sundance Memory Care in October. She had declined to the point that she could not transfer from bed to chair without assistance. She was no longer able to be lifted and outside help could not be brought in because of the Pandemic.

Then in May of 2021 as the pandemic began to lift, Mary, Jenny, and Jessie drove to New Orleans in May to meet David A. and his wife Sonya. It was a joyous and emotional time. David A. is a professional biologist for the State of Mississippi and a member of *The Deltamatics* rock band.¹⁰⁹

In 2022, Jenny began taking clients as a clinical social worker, providing one-on-one and group therapy.

¹⁰⁸ <https://lhs59.org/images/PDFS/annualreport05.pdf>

¹⁰⁹ <https://musicrising.tulane.edu/watch/video/the-porch-sessions-the-deltamatics-part-3-blacksnake/>

To catch up with his professional activities, in 2004, the pace of his activities began to increase substantially. He was elected a *Fellow* in the Geological Society of America¹¹⁰ and presented the leadoff paper in April at a major conference held in Chicago on geosciences in environmental litigation.¹¹¹

Also in 2004, he was appointed Chairman of the Energy Minerals Division Uranium (Nuclear & REE) Committee and made a presentation to HGS and began reporting on their investigations of the Houston area's shallow faulting systems at South-Central Geological Society of America (GSA) and Association of



Engineering Geologists (AEG) Growth Fault Symposium in College Station at Texas A&M, all in the same year that he was inducted into the Lancaster High School Distinguished Hall of Fame this year.^{112, 113}

He, Ted F. (of previous C,F&B), and Bill H. (of his DuPont Staff in early 1990s)

But his business partner and friend, Dr. Ted H. Foss, died, another life cut short by tobacco use.¹¹⁴ In other areas, son, David, and he were invited to submit a paper on crisis management of groundwater in the 21st Century for a Chinese magazine.¹¹⁵ He began to work again with Rick B. at ERM and in preparing a three-part paper on geoscience and litigation.^{116, 117, 118} Over the years that followed, he worked with and for Rick B. on numerous ERM projects, and stepped in to assist Rick while he spent time with his wife, Georgia, who had contracted a terrible brain disease that after numerous operations, eventually caused her death. Rick and Georgia had experienced a few years before, the loss of a son to a rare type of virus. He enjoyed working with Rick because he was a very good environmental engineer, who also wanted to be a geologist.

He first met Rick B. while he was in graduate school at Rice University in the 1970s. Rick, at the time, was an undergraduate majoring in environmental engineering. He attended his seminars in hydrogeology given in the Geology Department and later undertook graduate school at the nearby University of Texas Health Science Center. He became an outstanding expert witness over the years on environmental engineering issues.

Just before the State of Texas had implemented a Texas licensing program for professional geologists, he recalled that someone from his previous DuPont staff telephoned and asked if he had observed the list of the new P.G. licensing applicants that was being circulated by the state. He looked on the state website to see the name, Tom S., applying for a license as a Texas Professional Geologist. He called the state board

¹¹⁰ Elected Fellow, <https://lhs59.org/special2004e.html>

¹¹¹ Chicago Conference, <https://mdcampbell.com/ChicagoPaper2004R.pdf>

¹¹² <https://lhs59.org/HallFame.html>

¹¹³ <https://www.lancaster.k12.oh.us/1/Content2/756>

¹¹⁴ Ted Foss Memorial, <https://www.ela-iet.com/Fossmem.pdf>

¹¹⁵ <https://www.ela-iet.com/ChinaPaper0304R2r5.pdf>

¹¹⁶ <https://mdcampbell.com/ChicagoPaper2004R.pdf>

¹¹⁷ <https://www.mdcampbell.com/7251HdaubertIIMDC140206.pdf>

¹¹⁸ <https://www.mdcampbell.com/7251HdaubertIIIMDC140206.pdf>

and explained to them the reasons for his objection to that application. Tom S. was almost disqualified for attempted fraud, but somehow he ended up being approved as a Texas Professional Soil Scientist. At least he did not get away with another attempt to pervert the system. He would have disqualified him if he had been on the Board for that bogus attempt at misrepresentation.



Sometime later, he and son, David C. had been supporting a professional group that had not done well over the previous few years. They were maintaining a chapter website for the group. In an attempt to revitalize the professional chapter, he contacted the last known treasurer of the group and inquired if there were any residual funds in the chapter's bank account. After some obfuscations, he asked that the bank records be sent from Austin to Houston for analysis. The previous treasurer was found to have "borrowed" approximately \$40,000 from the chapter's bank account. His newly reconstituted group reported the infraction to the State Board. The Board suspended the ex-Treasurer's license to practice geology and required him to pay the sum back at a rate of at least \$600/month. Over the years since, he rarely paid more than \$200.00/month and sometimes less than that. The previous treasurer was fortunate that the State did not press fraud charges. The AIPG booted him out and withdrew his certification. The



AIPG-TX treasurer that followed him took hold of the accounts of the chapter, but after a few years fell prey to an Internet scam requesting about \$2,000 be sent to another account. He was replaced with a geologist/attorney member of AIPG to manage the chapter's accounting.

In 2005, he began to report to the EMD and general public on the conditions in uranium exploration and on the need for nuclear-power development to offset climate issues by reducing the burning of fossil fuels. These reports and the papers cited below can be viewed in Chapter 15.¹¹⁹ He also began to build a team of senior multidisciplinary consultants as part of his new company, M.D. Campbell & Associates, LP. Shown at left are two of them, Dick W., a microbiologist, and Bill H., a chemist, from his previous DuPont team, both of whom later became outstanding high-school teachers in the Houston area.



His family also had to deal with Hurricane Rita in 2005. Once it began heading for the Houston area, they decided to evacuate early and head for Austin where Mary's brother, Jimmy W. lived. They departed in the AM and headed to Austin, but others in Houston had the same idea. By the time they reached Highway 99, which led to I-10 West, the freeways were jammed. He drove the Ford Expedition fully loaded with gasoline. He carried Mary, Mary's sister, Nancy, and Aunt Nadine (who they had retrieved from Freeport, Texas at the coast the evening before). On Route 99, vehicles were moving north at a crawl with frequent stops. After about 4 hours on this freeway, they decided to get off and get some refreshments and

¹¹⁹ <https://i2mconsulting.com/michael-d-campbell-pg-ph-curriculum-vitae/#pubs>

bathroom breaks. They was a church nearby with no cars in front so someone went in to find a bathroom. David C. had been bumper-to-bumper in his Dodge RAM truck behind them with Jennifer and Jessica. He was also carrying two Jerry cans full of gasoline in the back of the truck.

They were invited by the Rector to rest a while, which they did for about 3 hours, although the Hurricane was bearing down on them. After a while they resumed the slow procession. He had difficulty getting back on the freeway. No one was in the mood to let them in until he saw a slight opening and crowded into the traffic. So did David behind them. That caused the car behind them to blow their horn in anger. He sensed people were beginning to teeter on the edge of civility. They finally reached I-10 West but the traffic was even slower, only a few feet per hour. As they moved slowly along within a full freeway going west, he noticed the east bound lanes were nearly empty with only an occasional car going east into the storm. The state couldn't figure out how to open all lanes to the west.

As it was getting dark, he also noticed people were running out of gas or their vehicles were over-heating and dying on the road. The dead car would be pushed out of the lane and to the side of the freeway. People were lining up along the white line as vehicles that were still functioning moved slowly by and by only a few inches with looks of helplessness on their faces. There were many single young ladies by themselves in the line next to all manner of people. He saw some young fellows taking special notice of David's large gasoline cans sitting in the back of his truck.

When it was dark, the ladies had to relieve themselves and pulled through the standing line and stopped and headed for the bushes. The gas stations they had been passing were all dark, overrun with people, and out of gasoline. David C. wisely did not stop for obvious reasons. Twenty hours had come and gone and they were still on I-10 crawling toward Austin and San Antonio. The radio announcements indicated Rita's eyewall had made landfall and was veering to the east somewhat but was still heading for eastern sections of Houston. They pressed onward.

More people in front of them were running out of gas and drifting off the freeway lanes. Some vehicles were overheating but moving on no matter. The faces of the people standing along the side of the road were beginning to look frantic. Civil society was about to crash. He was deciding what he would do if someone tried to stop them or try to get climb in or on. He decided that he would try to avoid that but if someone broke a window, he had a weapon, an aluminum rod about a foot long. That would do the trick. David had a weapon. He also decided that if they tried to help a vulnerable young lady who appeared to be by herself, that would likely have caused a local panic in their car and they could not risk that. David was carrying much of their luggage in his open truck. What would he do if people tried to climb into his truck and then, seeing the Jerry cans, grab them.

Hours passed and it was getting late with people still elbow to elbow standing along the white line of the freeway. Even more vehicles were gliding off the freeway into the darkness. Then, he realized there was no one in front of them. He and David increased speed and after a while they were by themselves on the freeway. They then stopped, leaving their engines on, and got out and looked back down the freeway. No one was coming. David got a Jerry can and poured the rest of the gasoline into the Ford Expedition; he and David C. took leaks into the dark and so did the ladies. As he resumed, he wondered whether society was breaking behind them, but they moved on. No one was coming.

They came to the Austin turn and were on their way at freeway speeds. About 20 miles before Austin, he noticed at the higher speed that the Expedition's engine was missing, likely a few cylinders had been burned from the heat of low speeds, he figured. They made it to Austin city limits and then to Jimmy's

house. Jimmy came out to meet them and they were thankful for the outstanding technology in the Expedition and in David's Dodge Ram truck. The trip required 26 hours. They had a good sleep that night. They were exhausted from the stress.

The next morning, he and Mary drove the Expedition to a nearby Ford dealership and service facility to see about the engine. Sure enough, the back two spark plugs of the eight-cylinder engine had melted and fused to the engine block and needed to be removed and re-threaded. This took most of the day and cost a few hundred dollars. The next day it was good as new. They drove back to Houston as if it were a Sunday afternoon. No traffic, no damage that they could see. As they arrived back at their three-story townhouse, the only difference was the amount of leaves that were covering everything. The trees were all in decent shape in their neighborhood at least. Later, their next-door neighbor said that the storm blew a lot but caused very little damage. Rita had veered even more to the east, but Lake Charles was hit hard.



In 2007, he began working with Jeff K. again on technical papers and for Jeff K.'s company, the Pacific Environmental Remediation Corp. (PERC) on a Weyerhaeuser-DuPont remediation site. A few years later, he began to provide technical support for the hydrogeological monitoring at the Tacoma Superfund Site in Washington State. Also in 2007, he was elected a Fellow in the Society of Economic Geologists. In 2007, he was awarded the Hazelton Alabama Golf Trust Trophy.¹²⁰

Drilling uranium deposits to calculate reserves.



In 2008, he visited the Mestena Uranium Mine in south Texas and subsequently prepared a NI 43-101 report for potential buyers/stock market.¹²¹ He was also made a Registered Member of the Society of Mining & Exploration, and in 2008, he was licensed in Alaska as Professional Geologist (P.G.).

Hurricane Ike also came their way in 2008. It was to come close but at lessor winds than Rita. The bedroom outer door of the townhouse would not shut tight and he had to lean against it for a few hours. The odd thing about Ike was that it carried a constant green hue to the sky with the higher winds and odd sounds of static in the air. Fine-quartz particles were apparently colliding in dry air with high-wind velocities causing static sounds and color. The power was lost for a few days, but they had a generator that kept the neighborhood cell phones and theirs charged until the power was restored.

¹²⁰ <https://lhs59.org/special2007b.html>

¹²¹ <https://mdcampbell.com/MestenaUranium43-101Draft111908C.pdf>

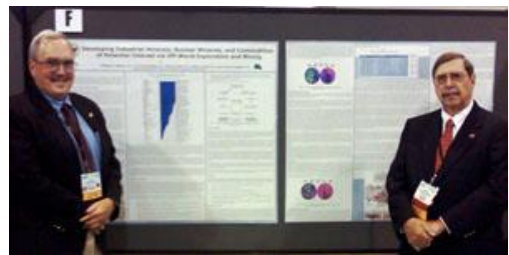


In 2009, Jeff and he flew to Brisbane, via Sydney and Vancouver, then by helicopter to the Adavale Basin in southern Queensland for a site inspection followed by a report of findings on the potential for in-situ potash recovery. They prepared a report to the client. Jeff K. on right; He is on the left in photo.¹²²

Also in 2009, he, Jeff K., Henry W., R.I. Rackley, and Bruce H. submitted a paper to the AIPG's *The Professional Geologist* on the nature and extent of uranium reserves, resources, and their environmental development in the U.S. and overseas.

In 2010, he and Henry W. gave a presentation to the HGS on a review of uranium recovery realities in the U.S. Bill A. and he

published a brief article on the intriguing implications of lunar exploration, followed by article in the AAPG Explorer that there is some good news for nuclear power expansion all around the world. He was re-certified as Professional Hydrogeologist by the American Institute of Hydrology. Also, he and Bruce H. presented a summary of the uranium resources in the U.S. and the world at an AAPG conference in Houston.



Conference Presentation on Uranium & Nuclear Power
(Bruce H.....and.....He)



In late 2009, Jeff K. was in a serious car accident through no fault of his own. He was in a coma for more than a week, but through pure will of spirit and outstanding medical help in Seattle, he finally recovered. After months of physical therapy, he was once again fully functional. His healed bones only ache a little when it rains, Jeff told him.

This incident was the first time he experienced the potential loss of a dear friend and he felt the stab of real grief, but as Jeff began to recover, the grief that he and all of Jeff's many friends and family were feeling also began to fade away. Jeff and his family members resumed their many charitable activities.

¹²² <https://www.i2mconsultants.com/downloads/mdcampbell/AusPotash43-101-070809.pdf>

In 2010, he was elected President of the Energy Minerals Division of the AAPG.¹²³ The Annual Conference of meeting of officers and commodity chairs are shown in the photo.



Some months later, He and Rick B. teamed up in earnest in 2010 within I2M Associates, LLC for a while. With input from Tom L., who had been setting up a project with companies in China, he, Rick B., Tom L., and others began to put together a major project involving hundreds of millions of dollars to instruct the personnel of Chinese companies on how to conduct appropriate environmental investigations remediation activities on Chinese projects in China and elsewhere. This was a project like that conducted in the mid-1990s with the *Institute of Environmental Technology*, only at 10 times the scale, and was being redesigned to train Chinese employees at facilities in the Houston area.

Chinese representatives came to Houston for meetings and the project progressed until one of the principals showed signs of unreliability and he backed out of the project and it was dissolved. Other attempts were made to work together but conflict developed, and of June 1, 2018, the group that previously operated under I2M Associates, LLC separated into two independent corporate entities with different objectives, one of geoscience and mining services as I2M Consulting, LLC (retaining the Internet domain of I2MAssociates.com) and the other covering engineering services, as I2M Associates, LLC. This diversification allowed the principals involved to better focus on their fields of expertise in serving their clients.



In 2011, Mary and he again travelled to Acapulco and to Las Brisas to get away from it all and for some together-time. For a while, a hurricane was heading in their direction but it veered out to sea. They dined out most nights, of course, and he had buttered steaks, shrimp, and buttered everything. The night before they were scheduled to return to Houston, he awoke in the middle of the night with a pain in his abdomen at the spot Ted F. had previously identified as related to gall-bladder issues, which Ted had experienced a few years earlier.



He decided to make a deal with his gall bladder that if it would quiet down that night and allow him to get back to Houston so that he didn't have to experience a hospital in Mexico, although that would have been

¹²³ <https://i2mconsultants.com/downloads/mdcampbell/downloads/AAPG-EMDExCom2010-2011.pdf>

quite acceptable no doubt, he would have his Houston doctors look into any issues that were likely developing within his gall bladder. He made it back and he and the gall bladder had no complaints, until a few months later.

The family had rented a beautiful, large octagon house on the beach southwest of Galveston for the week. Almost the whole Campbell clan was present for his 70th birthday celebration, but he soon developed serious pains and other unpleasant issues. Mary called his doctor and they arranged a sonic scan of the gall bladder area at the Medical Center, which was subsequently interpreted as showing signs of cholecystitis, which was not good. The chief surgeon at Baylor scheduled the laparoscopic surgery the following Monday, but on Friday, his nurse called to say the surgeon's mother had died, and he had to attend her memorial back east. That meant postponing the surgery to the next Monday. There was only minor pain.

The next Monday came, and he went into what was expected to be a normal laparoscopic surgery procedure. When the doctors took the first look with the camera through the belly-button area, the doctors found a gall bladder that had turned gangrenous and was beginning to come apart. If that happened, the gangrene would infect other organs and tissues and would quickly cause septicemia and likely death in a few hours. The doctors had to abandon the laparoscopic protocol and rapidly open up his abdomen and insert a bed below the failing gall bladder. Seconds after they held the bed below, it split and fragments with all the fluids and segments were caught by the surgical bed below and removed and the remaining gall-bladder stem repaired and closed with permanent titanium clamps. After the surgery was completed, the Chief Surgeon told Mary that they were very lucky to have gotten to it before it came apart. The gall bladder had lasted as long as it could, according to its agreement with him in Acapulco a few months earlier, he mused.

He had awakened from the surgery a few hours later with a very painful sore throat. When he complained to the nurse, she told them that the anesthesiologists had had a very difficult time in intubating him (inserting the airline down his trachea) because he had a bend near the opening of his trachea. They finally had to use a flexible hose as opposed to a rigid pipe. Next time, they will make sure the doctors know that he is difficult to intubate. He was recovering at home a week or so later when he developed an infection along the far end of the 14-inch incision. They went back to the hospital, and a surgeon, a beautiful young lady, cut out the area of about the diameter of a 50-cent coin. She stuffed the hole with antiseptic tape, and then advised Mary how to do it every evening. Mary was delighted, but she toughed through the nursing the next few weeks until it healed, leaving only a dimple in his right side. And that was it. He recovered.



After a few weeks, he had fully recovered from the surgery and decided to substitute at a Conference in Houston for the president of Hyperion, who had taken ill, and presented his summary information on their small modular reactor they were building based on Los Alamos research.

Also, he, David C., Dr. Tom Sutton, and Kev D. traveled to [Queensland again](https://igmining.com/brilliant-brumby/) a few weeks later to visit the Brilliant project¹²⁴ and prepared a favorable NI 43-101 report.

¹²⁴ <https://igmining.com/brilliant-brumby/>

After he returned to the U.S., he gave an EMD presidential address to the Ohio Geological Society annual meeting, during which Dr. Jay Lehr, his professor at OSU, joined him in the discussions..¹²⁵

A few months later, he and Jeff K. completed the Iron Glen Project NI 43-101 Report on the base- and precious-metal potential for Iron Glen Mining Pty Ltd in northeast Queensland, Australia. David C. worked in Townsville for six months to outline the mine permitting documents.



And finally, that year, he and Mike W. completed a paper on uranium and nuclear minerals for EMD and an international journal..¹²⁶

In 2011, he was recognized by the AAPG and Dr. Scott Tinker, President, for serving as a councilor on the AAPG Advisory Council representing the AAPG Energy Minerals Division as its President..¹²⁷ More recently, he was recognized in 2018 by the Energy Minerals President, Edith Wilson, as one of the future architects of the future energy policy..¹²⁸

Then in 2012, he and Jeff K. completed the reports on the Wishbone II Project, Northeast Queensland, Australia, and the White Mountain Project, Northeast Queensland, Australia in the form of Competent Persons documents for investor groups in London. In the field photo, he is leaning on Dr. Simon Beams, a prominent geological consultant in Australia, who led Terra Search Pty Ltd. for many years. The London client is at the right in the photo.



After he returned to the U.S., he was soon engaged to visit the U. S. DOE Paducah Gaseous Diffusion Plant in Kentucky to conduct a technical assessment of the groundwater flow relative to the current water-policy boundary surrounding the plant..¹²⁹

In 2013, he and Jeff K., Henry W., Bruce H., Jim C., and David C., began the preparation of Chapter 9 on nuclear power and associated environmental issues in the transition of exploration and mining on Earth to the development of off-world natural resources in the 21st century for the *EMD Memoir 101, Energy Resources for Human Settlement in the Solar System and Earth's Future in Space*..¹³⁰

He and Henry W. made another presentation to the HGS on the hydrogeologic risks in the groundwater supply of Harris County, Texas, such as Radioactive Constituents, Natural Gas, and Growth Faults, and his EMD UCOM team prepared the 2013 Review of uranium & nuclear power conditions in the U.S. and the

¹²⁵ <https://www.i2mconsultants.com/downloads/corp/OGSPresentationApril21-2011.pdf>

¹²⁶ <https://i2mconsulting.com/uranium-and-nuclear-minerals-in-journal-of-natural-resources-research/>

¹²⁷ <https://www.i2mconsultants.com/downloads/corp/DepartingMessageEMDPresidentJune2011.pdf>

¹²⁸ <https://www.i2massociates.com/downloads/EMDArticle-Wilson%202021.jpg>

¹²⁹ <https://i2massociates.com/downloads/OakRidge-5194-TR-01-OPGDPWaterPolicyWhitePaper-FINAL.pdf>

¹³⁰ <https://i2massociates.com/downloads/Memoir101-CHAPTER09Rev.pdf>

world. Also in 2013, he was elected as a *European Geologist*,¹³¹ and a *Fellow and Chartered Geologist*¹³² in the Geological Society of London, the world's oldest geological society via Royal Charter of 1825.

Another paper was completed for the AIPG's *The Professional Geologist* titled "Coal, but Not for Burning." He also produced the article on "Notoriety Notwithstanding, Nuclear Revival is Underway," which was reproduced from the original article on, "A perspective on Nuclear Power, Uranium, and Post-Fukushima Revival." Also, he and his team finally published the report on growth faulting and subsidence in the Houston, Texas, area.¹³³ This was updated in a paper in 2018.¹³⁴ Also, he was made a *Fellow* in the Australian Institute of Geoscientists.¹³⁵



He continued to provide consulting services to industry and the government in the U.S. and overseas and served the legal community as an experienced expert and consulting witness on more than 40 cases in the fields of mining, environmental hydrogeology, and engineering geology. One case that caused particular problems was a contract dispute with unusual circumstances that included him hiring the geological services of a local firm operated by a trusted consultant in Oklahoma (Tom A.) for the purpose of conducting the field work and overseeing the construction of two monitoring wells and for other tasks.

He was engaged as an expert witness in 2001 to investigate the likely impact of a commercial injection-well activity operated since the early 1980s and to conduct investigations involving the installation and monthly sampling of monitoring wells and nearby streams. He was asked to develop opinions on the likely source, nature, and circumstances surrounding the occurrence of brine containing anomalous chlorides, metals, and microbiological agents possibly originating from a brine and drilling-fluid disposal facility implicated as a possible cause of death of 20 calves and other fauna and flora within the area of influence of the stream draining the facility. He asked his client-attorney why she didn't hire an expert witness in Oklahoma and she responded, "All the expert witnesses in Oklahoma are crooked." He disagreed with her about that statement, but she held firm opinions and appeared to be under that impression based on her experience in Oklahoma.

The local consultant he had engaged (Tom A.'s group), implemented the field investigations and provided supervision of the drilling, installation, and sampling of the monitoring wells. His expert report was then drafted on the basis of the data provided and presented as a preliminary version because the opposing expert had not yet completed his expert report for his review. He entered into a three-day deposition that was never concluded but was to be continued at a later date subject to his review of the opposing expert witness's late report and after the completion of his "preliminary" report during which any minor errors were to be corrected. He went into the deposition being owed approximately \$38,000.00 of uncontested, unpaid invoices, although he was unconcerned because the client-attorney had always paid invoices over the past four years of activities in the case.

¹³¹ <https://i2massociates.com/downloads/EurGeol-October-2013.pdf>

¹³² <https://i2massociates.com/downloads/GSLChartered.pdf>

¹³³ <https://ela-iet.com/HouFaultGuideDecember2014.pdf>

¹³⁴ <https://www.i2massociates.com/downloads/JGG-1-015.pdf>

¹³⁵ https://i2massociates.com/downloads/Cert_5953_5577.pdf

After the third day of the deposition, it was suspended, but not ended. The opposing expert had just submitted his report that day and he did not have the opportunity to review and respond to the expert's opinions. His client-attorney asked him to opine on the data available to date in any event, but afterwards she expressed dissatisfaction with the opinions expressed during the deposition, most of which were stated to be preliminary opinions. He had never been involved in a case where the attorney knew so little about how to manage an expert witness.

He also recounted that he had served as an expert witness in many cases and that each case had its own backstory, some sad, some with happy outcomes, but only one that created issues for him to confront head-on. But he became embroiled in this multi-year case nonetheless in which his client-attorney assumed during a deposition that he was a "hired gun," which he clearly was not, as he testified fairly and squarely against many company attorneys and their experts over the many years of that project. But as his client-attorney turned against him, she brought a suit and he had to defend his preliminary report and the consulting contractors for their activities in the field during the investigations in Oklahoma. The eventual trial verdict was not in his favor, but the ruling was overturned by the Oklahoma Appeals Court three years later in his favor on the basis of the errors committed by the trial judge, who was being considered at the same time for a seat on the Supreme Court of Oklahoma.

To his surprise, a few months later, the client-attorney then appealed (or was invited to do so?) to the OK Supreme Court. Just after this, his attorney was curiously appointed to the bench as a municipal judge in Oklahoma City. It wasn't that his attorney wasn't qualified (he was), but it was the timing of this appointment that was curious because this left him without counsel to respond to the *certiorari* appeal to the OK Supreme Court. The history and outcome of the case was described in some detail in his *pro se* response to his previous client-attorney's *certiorari* appeal.¹³⁶

A few months later, this classic fuzz-ball litigation battle continued only because of the two factors that were driving her claims:

- 1) She was under the impression, although she never asked him, that he carried professional insurance (He did not because he and his company had no exposed assets), and
- 2) Without the initial engagement agreement containing the indemnification clause, the said attorney could bring litigation against him for whatever reason, justified or not.

The latter factor was the single most critical issue where he apparently failed to ensure that the indemnification was in force before the case was even begun to protect him against overly aggressive attorneys. If that signed letter had been retained, the fur-ball to follow would never have occurred because there would have been no basis for a suit with his indemnification in force.

Nevertheless, she had hired an ex-prosecutor for the City of Oklahoma (on the basis that he carried insurance, which would have insured a healthy payday for his efforts in the case), to lead their case against him. On the basis that he hired a local firm that performed certain functions that came under superficial criticism, he had to defend their activities as well in the litigation, although professionally acceptable, but vulnerable to criticism. He had asked his associate, Tom A., to assist in the case years after his initial involvement, but Tom A. had in the meantime worked as an expert witness for the same attorney and a fur-ball disagreement had also erupted between Tom A. and her. Tom asked that he never ask him again

¹³⁶ <http://www.mdcampbell.com/CampbellRequestforReHearingOK3-31-2014Rev.pdf>

to work with “that woman,” and he agreed. That was the reason a few years later that he did not subpoena Tom A. to testify in the trial regarding Tom’s group’s activities on the subject project. Years later, he called Tom a couple of times, but he would not return his call. He was hoping to obtain some compensation for defending Tom’s company actions in the project, although there were no serious infractions in his opinion. In any event, he kept his word with Tom. A few years later, he was informed that Tom A. had died in 2018.¹³⁷ A good friend, now gone too soon.

But after only two months, the OK Supreme Court reversed the OK Court of Civil Appeals findings in her favor. The judge in the underlying case had just been confirmed to the OK Supreme Court while this case was being considered by the Supreme Court and she recused herself. She was one of the few woman to serve on the OK Supreme Court, and it would appear that the Chief Justice, who provided the overly hostile opinions against him, while ignoring the central elements of the appeal, appeared to be more concerned with the rush to protect the reputation of the new Supreme Court Justice than to afford justice for the expert witness from Texas as initially ruled by the OK Civil Appeals Court. There were two lingering questions:

- 1) Did the Chief Justice encourage his former client-attorney to file (or have discussions about filing) the *certiorari* appeal?, and
- 2) Did the Chief Justice cause the municipal judgeship to be offered to his attorney to limit (or eliminate) his criticism of the new Justice’s performance in his trial and to handicap him in his response to the *certiorari* appeal?

After it was over, his trial attorney (Steve T.) told him that the likely primary motive for her attacking him was to get some portion of the professional insurance money (\$1 to 2 million) often carried by professionals outside Texas. When they found out that he did not carry such insurance, she, her prosecutor, and her supporting attorneys, reportedly began to attack each other for not checking this before they initiated the suit against him.

In the past, he had only the highest regard for the previous attorneys he had worked with; even the opposing attorneys reflected a certain class. But the learned lesson was that it was his fault for not making sure that the indemnification agreement had been executed and on file at the outset of the case. He learned the hard way that he had to walk the talk.^{138, 139, 140} Without financial contributions coming from the OK consulting group that he had defended, he moved on while considering that this was his first exposure to suspicious actions in a high court and wondered at the time whether he should press the matter with the ACLU to push back on actions exhibited by the Chief Justice.



There was a back-story that occurred prior to his deposition in Oklahoma City mentioned above. A couple of weeks before, he was playing golf with his son, David C., in the Houston area with one of David’s associates who worked for an environmental consulting firm. She brought her son to form a foursome.

¹³⁷ Alexander Obituary, <https://obituaries.stwnewspress.com/obituary/thomas-alexander-1028835616>

¹³⁸ <https://mdcampbell.com/ChicagoPaper2004R.pdf>

¹³⁹ <https://www.mdcampbell.com/7251HdaubertIIMDC140206.pdf>

¹⁴⁰ <https://www.mdcampbell.com/7251HdaubertIIIMDC140206.pdf>

Her son had just begun to play golf and was getting rather accomplished; however, during one hole, he hit a ball into the deep rough and went into the woods to find the wayward golf ball. David and he drove on down the fairway in their golf cart, took their shots to the green and drove onto and around the back of the green. Their balls were on the green, so they were waiting for her son to catch up. They saw him off in the distance taking a shot at the green from about 180 yards. It was a very high shot and he lost it in the sky. He was holding a golf club in each hand when he heard her son yell out from up the fairway "Fore." He couldn't place his arms over his head because he was holding the clubs. David and he both hunched up, but that was no help. The ball came down from near vertical and hit him on top of his head. He instantly crumpled, but then got back to his feet, holding the top of his head that hurt like hell, he recalled. He was wearing a white golf shirt and within seconds he felt warm fluid flowing over his ears and down his neck and soon the shirt was soaked with blood. He quickly asked David to have a look and he said, "Oh Dad, there is blood flowing out of one spot. We need to get you to the clubhouse and some help." David asked his lady friend to call 911 and get an ambulance to meet them at the clubhouse. She made the call and off they went, crossing fairways, heading directly to the clubhouse.

As they pulled up, the clubhouse personnel came out with towels and water. The paramedics arrived a few minutes later and took him into their vehicle, sat him down, and assessed his condition. His blood pressure was 210/190, he recalled, and they gave him a drink of something that quickly brought the BP down. They cleaned the spot that was leaking blood and told him that the head is filled with many blood vessels so they weren't surprised to see all the blood. They didn't think the bone had been cracked, but they weren't sure and suggested that he contact his doctor to arrange x-rays or an MRI to examine the area further.

That was it for golf that day. The golf course manager told him he had free golf for the rest of the year. He told him that it was his fault for getting that far in front of his foursome members, but the offer was reconfirmed. He has never returned to that course. However, he also never got that far ahead again. That day, when he arrived home, he called his doctor. He had x-rays and an MRI the next day. The results indicated no crack in the skull, but did show a slight surface depression where the golf ball struck, but this would likely rebound, his doctor said. The doctor told him that after looking at the paramedic's report he didn't like the very high BP he had experienced, which may have caused other issues. His doctor cautioned him to monitor anything out of the ordinary, but he had no idea what that meant.

A couple of weeks later, feeling fine, off he went to the deposition in Oklahoma City. Once it began he was feeling calm and ready as usual, he remembered. His opposition across the long table consisted of about seven attorneys and their experts. The questions posed by them were generally complex, and many were compound questions within questions, but he had encountered that many times before. He answered, although the other experts were constantly whispering loud enough to be distracting. He halted the proceedings and had a private meeting with his client-attorney. He said, "Aren't you going to object to the distractions they are causing?" She didn't seem to realize the issue. When they returned to the deposition, she asked for silence among the other experts and their attorneys while he was speaking.

Their questions continued over almost three days, but he noticed that his client-attorney was of little help in defending the harassment that became a problem when he stated his opinion and would have no further comment, asked and answered. If asked again, his attorneys in the past would usually blow up at the opposing attorney for harassing the witness, but she did nothing. He noticed in the middle of one day, she looked like she was going to explode. He saw only a few issues that needed clarification. The rest of

what happened has been captured in his *pro se* report cited above. Although she was very disappointed, he felt badly for her, but only offered as an explanation that he might have done a little better.

It wasn't until seven months later in Houston that he finally received a copy of his deposition transcript (which was odd it took that long) when he discovered that aside from a few issues that he noted at the time that involved him not remembering a few crucial details, he realized that his testimony was generally sound and defensible, contrary to his client-attorney's reaction at the time.

Later in Houston, he discussed the matter with Mary, and she encouraged him to ask his doctor if he thought his memory might have been impaired by the golf-ball incident. He did and the response was "quite possibly." He asked his doctor to write a letter to his new trial attorney to confirm a likely reason for his uncharacteristic lack of good memory in case he could use that at trial, should the subject of his memory come up. He didn't need it because his new attorney thought the trial would easily go their way, so it didn't matter aside from his lingering concerns.



This golfing incident brought back the time when he and his guys were playing golf in South Carolina one summer. He had hit into the rough and had to retrieve the ball and fell behind his foursome. He laid out and motioned to his guys down the fairway that he was about to hit his ball. He did and connected well with the ball and it took off like a rocket. But it had a bit of slice on it and headed for the Deacon's cart where he was sitting. He yelled "Fore" and the Deacon covered his head and ducked but the ball smacked him hard in the lower back. Deacon jumped out of his cart smarting and holding his back yelling the usual things. He thought he might have killed the Deacon. He drove up quickly and apologized and the Deacon understood, saying they probably shouldn't have been that far ahead of him. When he returned to Houston, he went to the liquor store and bought a very expensive bottle of Russian vodka and sent it to the Deacon with his condolences. Apparently, the Deacon carried a big, nasty bruise for months. He hoped the vodka would take the sting away. The next year they were golfing he asked if the vodka helped. The Deacon said, "It did. Thanks." And that was that. The Deacon lived on.



In the early 2000s, he had been performing multiple professional functions. He was leading the investigation into the growth faulting present in the Houston area causing hazards in building foundations, pipeline crossings, bridge-support structures, etc. He provided a series of lectures to dinner meetings of the Houston Geological Society's Environmental/Engineering Group and participated in the AAPG's Energy Minerals' Committee on Uranium (Nuclear & Rare Earth Elements) serving as Chairman preparing two major reports each year, and while publishing articles on associated subjects. He was asked to remain Chairman for more than 17 years.

In 2005, Jimmy Royds (from Conoco days) called him one day and asked him if he was up for a new venture and, if so, asked him to come to San Francisco to discuss the new venture. Jimmy had joined a Fortune 100 energy company as President and CEO and wanted him to set up and lead a mining group for mineral exploration around the world. They discussed salary and office location. When Jimmy indicated his office would be in one of the tall buildings in San Francisco, he pushed back on that idea indicating that he would

be uncomfortable in such an earthquake-prone area and would prefer a two-story office building for his new group. Jimmy understood and agreed. He would, however, be required to attend Monday staff meetings. He agreed. All was set and Mary was beginning to think about where they could live in the San Francisco area. The next evening, Jimmy's secretary, Jane, who had worked for Jimmy for 25 years, called in tears indicating that Jimmy had just had a massive stroke and died a few hours earlier. That was a very difficult phone call. Had Jimmy not passed, his new venture would no doubt have been interesting. He was missed.

In early 2010, after dealing with the litigation fuzz ball in Oklahoma for a number of years and after some 17 years operating a private practice via M. D. Campbell and Associates, L.P., in a father-and-son team, he was invited to join the management group of I2M Associates, LLC as Vice President and Chief Geologist / Hydrogeologist based in Seattle with his office in Houston, Texas. He accepted and was pleased to be working again with Jeff K., who owned and controlled I2M, was with him earlier in the NWMI gold mine project in Nevada. The new group expanded into international mining investigations (including precious and base metals, uranium and other mineral project assessments, reserves studies, and environmental, forensic, and environmental compliance investigations). His senior management group provided independent evaluations for industry and associated investors.



In 2014, after having some success with Y-DNA testing in her Wiley DNA Project, Mary persuaded him to join the Campbell DNA Project at Family Tree DNA (FTDNA) to see which branch of the Campbells he matched. The Campbell Project is a very large one with hundreds of participants and it seemed likely that she would find a match to help further her research. He took the 37-marker Y-DNA test at FTDNA in May of 2006. When the results arrived a few weeks later, instead of a list of matching Campbell men, she saw a lengthy list of closely matching men with the surname of Gossett. No Campbells at all. It was apparent that there had been what is referred to in genetic genealogy as an NPE (non-paternal event) at some time in the past that caused a break in the paternal line. She retested the Y-DNA at another company, *Ethnoancestry*, to confirm that there hadn't been some mix-up at the lab at FTDNA. The results were the same.

The next task was to determine when the break in the Campbell paternal line occurred and with whom. She assumed that many generations back an unofficial adoption or illegitimacy took place and went unreported in the records. She joined him to the Gossett DNA Project under an anonymous name "Anon-1" and the project administrators collaborated with her to try to determine when and where the break took place. Project participants are divided into various lines of descent from different paternal ancestors based on analysis and comparison of the patterns of mutation. His closest matches were descendants of the John Gossett of Pennsylvania line, which has many descendants in Ohio, and she focused her efforts on examining the records of that lineage to see if there were any relationships between Campbells and Gossetts back in time. Were they neighbors, in-laws, or business associates? Did they live in any of the same areas at the same period of time? Nothing really seemed to fit.

Then, in August of 2008, she received notice from FTDNA of a new 37/37 perfect match to a man called G. Charles Gossett. She was told by the Gossett project administrators that this person was a reluctant participant who had been recruited by a female relative and that G. Charles Gossett was a pseudonym

standing for “Grandson of Charles Gossett.” A little digging on the internet revealed that the female relative was Kim H., who maintained the excellent ‘Family of Gossett family history’ website.¹⁴¹

Mary wrote to Kim and she disclosed that it was her cousin’s DNA that matched him but that he wished to remain anonymous. He had recently learned some disturbing news about his brother’s paternity and was understandably hesitant to venture into DNA testing but was persuaded by her to take the test under a pseudonym. Mary replied that the break in the line probably occurred way back in history and as long as none of her cousin’s close relatives were in Chillicothe, Ohio, in late 1940, then she could resume her search for the break in the paternal line in the historical records of Pennsylvania and Ohio. That’s when the jaws began hitting the floor. Kim sent information showing that her cousin, whose name was Darrell A. Gossett, was the son of Arthur E. Gossett who was almost certainly living in Chillicothe, Ohio, in late 1940. He had lived there in the late 1930s and early 1940s with his older sister, Juanita, and her husband, Alfred Jones, and he was still living there in 1942 when he joined the army. It began to look like the break in the line could have occurred in very recent history indeed.

Kim sent photos and told as much as she knew about Arthur’s history. Mary learned that he had been born 25 February 1920 (two months before Maxine), that both of his parents and two of his brothers had died in 1930 when he was only ten years old, and that he had lived in Chillicothe with his sister during much of his late childhood. Mary saw strong resemblances between some members of the Gossett family and him, but she agreed to keep the matter private to protect the reputation of everyone concerned. Although Mary wanted to solve the mystery, she did not feel that it would be right to reveal Maxine’s identity. Maintaining her privacy was of primary concern, so it remained a secret.

Kim put Mary in touch with her Aunt Jean, who, being only twelve years younger than Arthur grew up with him in Chillicothe. Jean told Mary a little more about Arthur’s life and personality, including the facts that he was briefly married in 1941 to a girl named Lulu and that he joined the Army in early 1942. His enlistment record confirmed the information that he was married and living in Ross County, Ohio, when he enlisted in February of 1942. They divorced sometime during the War, and in 1946 he married Catherine “Kitty” F. in Springfield, Ohio, where they made their home for the rest of their lives. Kitty also had been previously married. Arthur completed only two years of high school and worked as a truck driver in his early years. Eventually he became a machinist at D & H Manufacturing, a very good job he held until his retirement in 1982. Arthur and Kitty had two children, Darrell and Dale. Art died of cancer on 26 September 1995 in Springfield. Kitty and Dale are also deceased.

Wanting additional confirmation of the DNA connection, Mary consulted with FTDNA about siblingship testing for he and Darrell, but they pointed out that without the father or another brother to compare to, the test would not be helpful. They suggested that upgrading to 67 Y-DNA markers would be more informative. She then upgraded the Y-DNA test to 67 markers to make sure that the match with Darrell would hold up. It came back with a 2-marker difference, which didn’t rule out a very close relationship, but made it less certain. Mary brought this discrepancy to the attention of FTDNA and they promptly rescored the test. The results came back as matching on 67/67 markers, a perfect match. FTDNA apologized for their error, and Mary faced the fact that Darrell “Grandson of Charles Gossett” and he shared a very close biological relationship. At that point she decided to leave well enough alone and not follow the story further in order to protect Maxine. They chose not to reveal her identity to the Gossett family. There the matter lay until summer of 2011, when he became seriously ill with a gangrenous gall

¹⁴¹ https://www.ancestry.com/search/?name=Charles_Gossett

bladder and had a close brush with death. He decided at that point that he wanted to know the truth about his biological family and especially to know the missing side of his medical history.

They decided to tell Maxine what the DNA testing had revealed in hopes that she would share with him the true story of his birth and allow him to discover his medical history. The day came when she was gently advised of Mary's findings. Her reaction was a complete denial. She was adamant that all three of her children were fathered by Clarence Campbell. She claimed never to have heard of Arthur "Art" Gossett or anyone named Gossett from Chillicothe. In the meantime, Mary found a genealogy of the Gossett family.¹⁴²

When it was suggested that additional DNA testing by his brother Steve C. could resolve the question once and for all, she said that she did not believe in DNA and did not want to have anything to do with it. "Leave it alone," she said. He tried to broach the subject a few more times, but Maxine refused to discuss it further except to repeat her denials.

In 2012, the autosomal DNA (atDNA) test became available, a test that looks for matches on all lines in the family tree, not just paternal (Y-DNA) or maternal (mtDNA) lines. Family Tree DNA told Mary that this test could further confirm the biological relationship indicated by the 67/67 match on the YDNA test. With Maxine being so adamant in her denials, Mary and he decided to go ahead and take the testing a step further to make sure that the DNA evidence was solid. He, Darrell (as G. Charles Gossett,) and her took the autosomal test, called the Family Finder test at FTDNA. This test suggests the most likely range of possible relationships based on amount of shared DNA across all 22 chromosomes and the X chromosome. When the results arrived, his list of matches placed G. Charles Gossett (Darrell) at number one and the female Gossett cousin, Kim H., at number two as his closest genetic relatives out of 623 matches overall. FTDNA provided the SNP travels map for his group,¹⁴³ as well as his DNA origins.¹⁴⁴

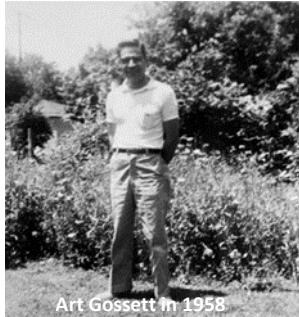
His FTDNA Family Finder page showed that Darrell and he shared 2208.41 centimorgans (cMs) of DNA, indicating a very close relationship that could be full siblings, half siblings, grandparents/grandchild, aunt/uncle, or niece/nephew. The only one of those relationships that is possible in this case is that of half siblings. Kim H. shares 378.74 centimorgans with him, indicating a relationship of first, second, or third cousin. As the daughter of his first cousin, Bob J., the son of Juanita and Alfred J., she would be a first cousin once removed, which fits perfectly with the amount of DNA shared.

With the DNA evidence piling up and conflicting so starkly with Maxine's story, Mary began to take a second look at Maxine's genealogy and accumulate records to confirm or disprove it. Maxine had stated in her genealogy program and elsewhere that she was married to Clarence Campbell on 19 January 1940. Mary wrote to both the Ross County and the Fairfield County, Ohio, probate courts seeking a copy of their marriage license. The copy sent by the latter gave a date of 19 January 1941, not 1940. Since he was born full term on 8 August 1941, Maxine was obviously pregnant when she married Clarence in January of that year.

¹⁴² <https://www.seekingmyroots.com/members/files/G002792.pdf>

¹⁴³ <https://i2massociates.com/downloads/GossettDNATravel.pdf>

¹⁴⁴ <https://i2massociates.com/downloads/MDCDNACountries.pdf>



The 1940 U.S. Census was then consulted. If Maxine's account of a January 1940 marriage date were true, the census would show Maxine and Clarence living together as a married couple on census day, which was April 1 in 1940, almost three months after their purported wedding day. Instead, the record showed Maxine living at home with her mother and brother in Chillicothe on census day. She was listed as single, 19, and working as a stitcher at the shoe factory. Her sister, Carolyn, lived next door with her husband, Wilbur Borland. An examination of the Chillicothe City Directories showed that Arthur's home on S. Sugar Street where he lived in 1936 with his sister Juanita Gossett J. and her husband Alfred was just around the corner from 394 E. 4th, where Maxine's family lived until early 1940 when they moved to E. Second Street.



Julianne, Baby Charles, Jessica, Steve C.,
Maxine (in the middle showing rather pale), Mary and Jennifer.
He was sitting on the top stairs with Nancy to his left.



Maxine's high school yearbooks of 1937 and 1938 were checked for a mention of Arthur Gossett, but he was not found there. Arthur's army enlistment record stated that he only had two years of high school, which explained why he wasn't in the Chillicothe High School yearbooks of 1937 and 1938. He had left school to work as a truck driver, which was also the occupation of his brother-in-law, Alfred J., who most likely helped Arthur get a job. With no parents and no money, Mary concluded that Arthur did not have the luxury of finishing his education, not even high school. In summary, the combination of the Y-DNA, atDNA, and genealogical evidence from the 1941 marriage record, 1940 census record, and Chillicothe city directories, Mary concluded that the documents supported the conclusion that Arthur E. Gossett not Clarence E. Campbell was his biological father...¹⁴⁵ When this became evident, his reaction was that he always sensed something wasn't exactly right even when he was young. He and his brother, Steve C., had no physical features in common. He tanned in the summer to very dark. Steve was fair in complexion and sun-burned easily. He was much taller. He always joked with his folks that his mother must have had a milkman friend, which must have been very hard on Maxine and Clarence, who had to be in on the deception.

To be sure, his Dad, Clarence, could not have been a better dad. But his mother is gone now, and he had thanked her for keeping him; he knew why she never admitted to any such relationship. Admitting that would have embarrassed her, she thinking that he and her friends might have thought poorly of her. All she had to say was, yes, Art and she had a fling, and he was conceived. Life gets messy sometimes, then, and even now.

After Maxine's health began to fail, she announced that she had had enough of this life. He thought at the time that she didn't want to deal with the Art Gossett matter for reasons he could only guess. She decided it was time to go and just quit eating and drinking; slowly but surely she gave away the surly bonds of her

¹⁴⁵ <https://www.i2massociates.com/downloads/MichaelCampbellGossettDNASummary.pdf>

life. Before she was unresponsive, he bent over to her ear and quietly said, “Thanks for keeping me, Mom. Everything is OK.” She mumbled something like “That’s good, Son.” Maxine died a few minutes later at 94 years in early 2014 unrepentant.¹⁴⁶ The photo above of her last visit to the family in Houston a few months before her death oddly suggests that she had begun to fade.

In 2015, he, Victor A. (in Adelaide), David C., and Jeff K., conducted a review of the available data from the Hellyer Mine in central Tasmania, Australia on the precious metal resources of the Hellyer Mine Tailings for a client, Wishbone Gold, plc., London. Then, he and Jim C. prepared an EMD report on energy competition in the uranium, thorium, and rare earth industries in the U.S. and the world. Later in 2015, he went to Anchorage, Alaska to receive an AIPG award.¹⁴⁷

In 2016, he and David C. provided a 90-minute lecture on independent assessments of gold, silver, uranium, phosphate, potash, and rare-earth deposits in Australia, Vietnam, Texas, and Alaska for the HGS. Only Dr. H.C. Clark dozed off because he had already heard about his projects.¹⁴⁸ Then he and a team of AIPG members prepared the Guidebook to the Texas Section – AIPG Spring Field Trip, Llano Uplift Region, Central Texas on the economic geology resources of the Llano Uplift region and the historical impacts to the region’s growth. Concurrently, he also prepared the mid-year and annual report to the EMD on uranium, nuclear-power and rare-earth conditions in the U.S. and the world.



His first wife, Jerrie, died in her sleep in late 2016. She was 71 years old when she passed. She had moved from California back to Mansfield, Ohio, where she was born. David C. and Julianne attended her funeral. Jerrie wanted to expose her children to the world, which she certainly did. Jerrie was a fine editor and made his first book better from her efforts. She left her entire estate to her children, which was significant, and which was gladly received by them after imagining that she might have left it to the Feline Society of America.



In 2017, he prepared an editorial in a new journal on publishing buried geological data for the benefit of professional geologists.¹⁴⁹ Then he, Roger L., and David C. published a paper on gold and other metals in the Cao Ram Area, Doi Bu District, Hoa Binh Region, Southwest of Hanoi, Vietnam in a technical journal.¹⁵⁰

¹⁴⁶ <https://i2massociates.com/downloads/MaxineMemorialm2014.pdf>

¹⁴⁷ <https://i2Massociates.com/downloads/MDCAIPGAward2015.pdf>

¹⁴⁸ <https://i2massociates.com/downloads/CampbellHGSPresentation2016MarchC.pdf>

¹⁴⁹ <https://i2massociates.com/downloads/ijeg-1000102.pdf>

¹⁵⁰ <https://www.i2massociates.com/downloads/JGG-1-003MDCFinal.pdf>

As part of a client investigation, to gather the data to assess the project, David C. and he made a journey in 2014 via Hong Kong to Hanoi and were met at the old Hanoi airport as they entered the terminal by two government-looking men with serious looks in dark gray suits and ushered them briskly through the crowd without having to stand in the long lines. They indicated that their baggage would be delivered to the hotel. They were led to a large black limousine. On the way to the hotel, they noticed that a new, very large airport terminal was under construction, next to the old one. As they entered Hanoi City, they were astonished by the extent of Capitalism that was clearly underway.

Shop after shop was actively advertising with large signs extolling new deals on items such as flat-screen TVs and all manner of consumer goods. A very large photo of Marilyn Monroe in a red dress adorned the side of a large building. It could be seen from miles away. Major American and European brands were advertised in neon everywhere. As they moved through the streets, Mopeds and other scooters were everywhere moving in swarms through intersections. They didn't see any accidents; they also didn't see a lot of cars. Those that were noticeable were black Mercedes and Bentleys, none of which had dents and were highly polished and clean.



When the clients arrived from London at the Metropole Hotel Hanoi, he and David C. were waiting in the bar. He already knew them from previous projects in Queensland, Australia. One was the CEO of the mining company and the other was the CFO, both of whom were fine English gentlemen. They discussed their plans for the week and then decided to have dinner. The meal was great. Afterwards, the CEO believed in walking off a heavy meal, so off they went. He was not particularly thrilled for such a walk, but the CEO wanted to discuss matters while he walked, so they did. He was scheduled for hip-replacement surgery soon after he returned from the trip. It was time. He had a noticeable limp by then, almost to the point of using a cane. Traversing the hills and steps the next few days were not easy, reminding him of his visits to Washington, D.C. with all the walking and steps.

It was great weather that evening, about 11:00 PM. He noticed the streets and nearby parks were filled with young people, groups of young ladies, some pairs holding hands, some groups of well-dressed young men, all laughing and having fun. They passed a lake in one of the parks and he could see the tail of what could only be a B-52 plane. Then he remembered that one had crashed during the Vietnam War during the bombing of Hanoi. The tail was flooded with lighting to emphasize its presence, just like many statues, but he saw no associated plaques or signs. The CEO indicated that the Metropole Hotel had a Vietnam-era bomb shelter in its basement and that they should see it when they had time.

The streets were generally clean with little trash. When the young people passed them on the sidewalks they would generally smile, and they would wave and smile back. When an older person passed by them there was no acknowledgement. The visitors were pretty obviously English people, maybe even Americans. He wondered whether the older people remembered the war as they passed the group. They came up to a street corner where a large white building was lit up like the U.S. White House, but through the large glass windows he could see Mercedes and Bentleys, maybe ten, all on display and for sale, but no crass advertising signs.

The surrounding buildings were not lighted and were dark, which made the car dealership stand out. The cost of the electricity for all the lighting must have been tremendous.

They made it back to the hotel; he was really tired and his hip was hurting. He was trying to play it down with the CEO and CFO as only a minor irritation. But morning came after a restful sleep in a very comfortable bed, and breakfast was served in their suites. The eggs and bacon were outstanding. David C. was enjoying the trip and said that this was very different from the last time he was on a world trip with his mother, Jerrie, and sister, Julianne. A Five Star hotel does make a real difference.

They met the CEO and CFO in the lobby and were introduced to the rest of the entourage. There were Vietnamese financial advisors and Vietnam government people, two geology professors from Hanoi University, and two promoters from Australia who had made the connections possible on behalf of the client. A well-dressed, pleasant Vietnamese lady of about 40 years in age introduced herself in clear English. A fellow dressed in a dark-grey suit was with her but she did not introduce him. He was obviously her guard. He noticed that the man was always looking around and was carrying a gun that he saw when he bent down to pick up a newspaper from a stack in the hotel newsstand earlier. He only spoke to her, never to any of the team. The university professors apologized for not being able to join them in the field. That was the week of final exams and they said they had to manage those activities. They did join them again for their final meeting in the hotel and listened to his preliminary findings.

David and he and the rest of the field party boarded a large, new van with very large windows and they were off to visit the gold and silver properties and associated working mines being offered to his client. His job was to determine if the existing operations merited expansion and further investment. That, of course, depended on whether there was a realistic likelihood that the gold and silver reserve base could support such expansion and whether the processing plant could be rehabilitated at a reasonable cost. The price of gold had gone past \$1,000/oz, which opened



improved economic possibilities. As they moved into the traffic that first morning, they were quickly surrounded by swarms of Mopeds and scooters. Many were ridden by young ladies on their way to work perched on their scooters with short-skirts, expensive-looking shoes, and flowing blouses and open coats, all with their knees tightly pressed together. Many had masks, some didn't. Many times, one of them would wave as she saw them in the big side windows of the van. They, of course, would wave back. After a while, they emerged from city traffic onto a new four-lane freeway with only a few trucks, cars, and motorbikes passing from the opposite direction. He thought that this should get them where they were going pretty quickly now.

After about 10 minutes of high speed, however, the driver began slowing down. Then they felt a major bump, and then another, after which the driver returned to the higher speed. This sequence happened six or seven times until they came to a village and the freeway disappeared behind them. The reason for the bumps in the freeway, as explained by their interpreter after getting the information from the driver, was related to crossing drainage culverts that had been installed by a separate government department. The freeway construction crews had yet to smooth over the bumps. If an unaware tourist driving a rental car assumed that the freeway was clear, the first bump would have been a rude awakening, and could have even caused a serious accident - the difference in elevation was that significant - as they experienced in the van.

The village they encountered was bustling; shops were open and filled with domestic goods, and a few red and yellow signs of government assurances that things would be better in the bright future ahead. This was consistent with the signs dotted around Hanoi, all focusing on bringing services to the people, like electricity, rural water, roads, etc.

They drove on two-way, improved dirt roads between rice paddies laid out in the distance partly obscured by the mist of the morning. An occasional water buffalo could be seen grazing in the fields. As they moved into the foreground of the ridges, isolated houses built on the high-side of the road became visible, many



built adjacent to the dirt road. As they passed the homes, he could see directly at floor level into the homes and noticed how clean and tidy the interiors were. Almost without exception, on the wall hung a large flat-screen TV, with a small satellite dish on the roof aimed skyward. The TV was showing CNN in no less than about 50% of the homes. Sometimes the children played on the patio in front of the open door. In every instance, they were dressed in bright colored clothing with squeaky clean faces. When they saw the van they would jump up and wave. If their nearby parents were young, they too would wave with big smiles. If the parental unit was grandma, however, she would scurry the children inside with a scowl. These instances were additional indications to him that the older folks had not forgotten the Vietnam War.

They eventually arrived at their first site and they all got out and headed up a trail toward an operation he could see near the ridge off in the distance. His hip was beginning to ache. The boss-lady had been staying close to him as they walked. She asked about his family and he asked about hers. She was a very warm person. She asked about how he got the limp and he told her that it was arthritis and he was scheduled for hip-replacement surgery when he returned from the trip.

In a few minutes, he saw her talking to one of the local Vietnamese teenager boys and only after a few minutes the boy arrived with a red scooter that was to cart him up and down the hills from the mines. She was clearly in control and thoughtful. While on flat ground, he walked with the group



talking mostly with her with the scooter being pushed along in the rear. After a while, she disappeared into the thicket of high-standing reeds, as did her guard. He thought she had gone to relieve her bladder, but they could hear chopping and slashing sounds.



She reappeared with another walking stick and came up to him and rather formally presented it to him and said, "Michael, you might not know that Hồ Chí Minh walked these same hills with sticks like this." He received the stick with both hands and said in reply, "If it was good enough for Hồ Chí Minh, it is certainly good enough for me," and bowed slightly, at which time the gathered team broke out into polite applause with smiles all around. She seemed to be

pleased with his reply. They finally reached the first mine. It was a portal to an adit of working underground gold mining operations that were called artisanal mining operations by the government. There was a small electrical generator that powered the lighting in the adit and the pumps that powered

the small hydraulic-hammers being used at the working face of the mine some 5,000 feet into an adit below the ridge. The produced ore was being blasted and broken up and then wheeled by cart back through the adit to an ore pile in front of the portal. There were about six people working, four men and two women. The men were managing the heavy carts and jack-hammers and the women were sorting the ore (highly mineralized rock) from waste rock, all of which seemed to be an efficient operation. He inspected the roof stability in the mine a few yards into the adit and it appeared to be well constructed and safe. He had read Vietnamese reports about roof failures in such mines earlier. The mine's adit construction fit the size of the Vietnamese workers. For example, he could not stand up inside the mine's adit. The width was barely wide enough to pass one cart full of ore and two mine workers passing one another was not easy.

He decided to send David into the mine to retrieve ore samples and to take photos of the mineralization at the advancing face of the mine. David disappeared into the mine. After about an hour, he was beginning to get concerned, but the mining fellows had kept coming and going into and out of the working face so there was no reason for concern. David finally emerged soaking wet with sweat but with full sample bags. David instantly announced that he was applying for danger pay. To his surprise to him, David reported that the adit extended about a mile to the working face and it was very hot with a low roof all the way. David said he was able to get good photos and many ore samples.



They visited 3 or 4 other similar operations with comparable results during their visit. By mid-day, David was noticeably fatigued and he was pressing his water intake to avoid dehydration. But it was time for a scheduled luncheon put on by the mine operators in a village nearby. They walked to a village built on the side of the rolling hills. Everything was neat and clean; a well-behaved dog would appear once in a while and then be shooed off by one of the women. They walked into what appeared to be a meeting room, but the room was set up like a banquet. A long table piled with all sorts of Vietnamese dishes were spread out along the table. They were shown to their seating, with the mine owners and CEO at the head of the table, and he and David sat next to them. The Vietnamese lady in charge introduced in English and in Vietnamese everyone around the table, which was quite an assemblage for leaders of the villages from around the immediate area had been invited and were present. She knew all their names. She introduced him and David as experts from Houston, Texas who were conducting independent investigations of the gold mining operations with a view to possibly expanding the scale of the various mining functions. She then introduced the CEO and CFO and explained a bit about their company. When she finished, she nodded to the CEO, which signaled to him to say something about being pleased with the teams reception and about the wonderful meal before them. When he finished, everyone applauded politely and then they began to eat. When the bowls of various dishes were passed around, he sampled some bowls but not others, for a variety of reasons that he did not explain, especially about the rice dishes. The fish dishes were incredible as were the pan baguette. After a few minutes, one of the serving ladies appeared with a large plate of French fries and sat it down in front of him and smiled. He thanked her. Everyone was smiling at him for reasons he was not aware. He took a portion and quickly passed the plate of fries down the line. They were good.

They spent the next few days traveling to other mining sites; some were in operation and some were idle and very old adits. They returned to the hotel after each day in the field. This meant a good shower and meals of his choice.



One day they were taken to a huge, newly excavated pit that exposed mineralization along a major fault zone. The mineralization there was different than that in the underground mines. For a discussion of these differences, see the cited paper below.¹⁴⁵ The remarkable aspect about the big pit was how vertical the walls to the pit were. When they arrived at the pit, they all were going to climb down into the pit but he warned the people that in doing so would be a clear safety hazard. The Vietnamese went on down in any event, his team did not.



David was able to get some good photos of the mineralization and structural conditions. He also was able to get some good samples of the mineralization and even a great sample showing slickensides from the fault zone. David took a photo of the entourage. He was at the far right with the brown wide-brimmed hat.

For the final few days of the visit, the team was taken around to the local geological survey offices to see the available reports and maps. Some of the reports were in Russian, but most were in French and the more recent were in English. David and he were impressed by how the government was certainly putting out the effort to develop their natural resources. The two offices they visited were newly built, large, impressive looking three-story buildings. They walked into the foyers which led to the elevators, but they had not been installed. They turned to climb the stairs, but the handrails had not been installed. The lighting was nonexistent in the hallways, but there were lights in the offices. But the most surprising of all



were the bathrooms. They had men's rooms and women's rooms. The sinks were there with running water, but none of the toilets had been installed and the line of holes were flushed with buckets of water that sat around in the stalls. The place reeked of waste products. After his first trip to the toilet, he figured the building was still under construction. But when he asked when the construction was to be completed, one of the Vietnamese geologists said privately that that the construction had stopped about 5 years previously because there were no longer funds

available to complete the construction. The young geologist indicated that he had heard that funding may

be available soon. Later, he carefully asked his new friend, the lady leader, about the matter and she said, "We are doing all we can until we get overseas investments coming into Vietnam." To him, all things became clear. He and his client represented the "overseas investments," hence the treatment they were receiving, of course.

The last day in the field was spent inspecting the processing plant. But as they drove into the area, the road to the processing plant was blocked by big rocks. A group of Vietnamese ladies had gathered in front of the big rocks and their facial expressions indicated that they were not happy. The chief lady, the CEO, and the interpreters all got off the van and went to discuss the concerns of the women. When they returned to the van, it seemed that environmental concerns had also reached Vietnam as well. The ladies indicated to the chief lady that they believed that their children were getting sick because the processing plant had contaminated the groundwater from their dug water wells. The wells, located next to the creek, were dug into the sediment only a few feet below the water table. The chief lady took notes of their discussion and satisfied them enough that they rolled over the big rocks so the van could pass on to the entrance of the processing plant facility down the road. The chief lady was noticeably irritated but did not discuss the subject with him, and he didn't ask about it either.

As they entered the facility, it was clearly abandoned. No one was present, and it looked like someone had just flipped an off-switch and walked away a few months before. The flotation tanks were still full, and when the main power to the facility was switched on, they began working with pumps surging and motors moving gears that moved conveyor belts. Although all the appropriate equipment was present, such as the primary and secondary crushers, flotation cells, and filter presses, a smelting room, and a laboratory. Taken together, they were well used and needed maintenance. All the seals in the motors were nearly gone, but with some replacement of motors and wiring enhancements, he was thinking that



the plant could be a viable operation again. The layout reminded him of the NWMI project in Nevada of the 1980s where they had refurbished an older gold processing operation. David and he took photos of serial numbers on plates of the motors and of the equipment in general.

They then had a look at the tailings pond area outside the plant only to discover that there was no water present in the pond. David walked to the far rim and

found where the tailings pond had breached directly into an adjacent creek that was dry at the time of their visit. David noticed that there was a pile of sediment in the creek bed across from the breached side of the tailings pond. They decided that both areas needed to be sampled, with a focus on the tailings-pond sediment and the sediment pile in the creek.



David and their Vietnamese assistants obtained the suitable samples by digging trenches into the sediment piles. On their way back to the main road they followed the subject creek to where it entered the rice paddies and took two samples of the water. The next day they had a formal meeting at the hotel with the mine owners, the chief lady, the CEO and CFO, and others that had been invited. He provided his preliminary impressions, which were generally positive with caveats concerning the need for drilling and additional sampling and for additional review of the readiness of processing plant and on the potential impact of the breached tailings pond.



For the last evening, the company and government hosted a dinner. The next day was moving day. They packed all the samples up but soon ran out of sample bags so David used monogrammed, cloth napkins tied tightly and numbered. The napkins were provided by the maids at the hotel. When finished they had two heavy cardboard boxes ready to be shipped to Houston. That night a banquet was held in the hotel in their honor for having completed the visits to the mines, pit, and processing plant. The next morning, they assembled for the last time for the group photograph of the team. They said their goodbyes to the client and the team and were taken to the airport for their flight to Hong Kong.

As soon as David got on board the plane, he commented that he was experiencing a major runny nose. He said that light-colored fluid was pouring out of his nose and he was using up napkins fast. He felt David's forehead but there was no fever. They landed at the new Hong Kong airport, and when walking toward their gate for their flight to LAX in the U.S., a young and very polite Chinese lady appeared and asked to measure their temperatures with a forehead device, to which they both agreed of course. She seemed satisfied and they walked on.

When it was time for their flight, they boarded and settled into their business-class accommodations on an Air China flight. As he took a deep breath, his nose too began to leak profusely. David noticed his minor affliction and took solace that he wasn't the only one with an overly active sinus system. This delayed reaction must have been a result of the pale-orange smoke in the air they had been breathing in Vietnam over the past weeks. The flight back to LAX was restful. David and he had nice chats, mostly about the mineralization they had witnessed in the mines and the tailing pond problem, but they slept most of the way.



When they arrived in Houston, he sorted, rebagged, and sent the samples off to be analyzed at the various laboratories. Selected samples were sent to Salt Lake City to have thin sections cut from rock samples and prepared for his microscopy analysis. He and David were not surprised by the laboratory results. Both the tailings and the creek samples contained elevated concentrations of arsenic, cadmium, mercury, and lead. He reported his findings to the CEO and he encouraged them to publish a paper on their finding in the hopes that the government would conduct further investigations that might address the concerns of the Vietnamese mothers living around the processing plant next to the creek.¹⁵¹

¹⁵¹ <https://i2massociates.com/downloads/JGG-1-003MDCFfinal.pdf>



Mt. Pleasant, Lancaster, Ohio

In 2017, he, David C., Roger L., and Glenn C., published a paper in an international journal on the anatomy of a case of elevated chloride in the shallow Black Hand Sandstone providing rural drinking-water supplies in North-Central Ohio, near Wooster, Ohio with emphasis on the hydrogeological and hydrochemical characterization by major and minor elements, and $\delta^2\text{H}$, $\delta^{18}\text{O}$, $\delta^{13}\text{C}$ and tritium.¹⁵² As an interesting side-note, the Black Hand Sandstone also makes up Mt. Pleasant, a landmark in Lancaster, Ohio, some 90 miles

to the south of the project site in Wooster.¹⁵³ This is the largest and best known “mountain,” also called Standing Stone by the natives in Ohio, now part of Rising Park, a glacial erosional remnant of the resistant Mississippian Black Hand Sandstone.

Murphy¹⁵⁴ reported that the historic Wyandot Tarhe Town (or Crane Town) stood at the foot of this “standing stone,” at the juncture of two major Native American trails. It was used as a landmark, if not gathering places, by prehistoric natives; but there remains a considerable question as to the actual amount of prehistoric human activity associated with this geologic feature, despite the frequent 19th Century legends to the effect that Native Americans frequently held councils at or on top of it, and even had maidens dancing atop in order to lure pioneers to their death.



It is also the site of the fictional encounter of early frontier scouts with the Wyandots and the rescue of Forest Rose, eponymous heroine of the much reprinted novel by Emerson Bennett. This site of habitation grew in size to become Lancaster, Ohio. During the Civil War, the Lancaster population had strong Confederate sympathies, but none-the-less other people were inclined to operate an “underground railroad” without their knowledge to deliver slaves to freedom in the North. The town produced one of the most important generals of the war against the insurrection, General William Tecumseh Sherman.¹⁵⁵ Over the years since, the town was populated in the late 1800s and early 1900s by many German immigrants as well as others from around Europe.

¹⁵² <https://www.i2massociates.com/downloads/JGG-1-006.pdf>

¹⁵³ <https://lhs59.org/Today.htm> and YouTube: <https://www.youtube.com/watch?v=kTtj-129ig0>

¹⁵⁴ <https://core.ac.uk/download/pdf/159605258.pdf>

¹⁵⁵ <https://lhs59.org/Today.htm#Places>



He spent many hours during the latter 1950s with his guys in high school having a few beers on top of Mt. Pleasant, until one night, Chuck A. slipped and almost fell to certain death, possibly

taking someone else with him as well whoever attempted to keep Chuck A. from falling. They never drank on the mountain again, but some of them did take dates to the mountain to see the stars. But just off of Highway 37 on the far side of Rising Park was Jon N.'s home. The guys would often gather there because Jon N. had a large color TV for watching football games and special events. One evening the butter event occurred (where he consumed four sticks of real butter), but later that same year, they almost lost the Deacon.

The guys had been drinking a little, but the Deacon had brought a bottle of Ripple wine with him that he had quickly consumed. None of the rest of them asked the Deacon for a sip. After a while, someone asked, "Where's the Deacon?," and they all began to look for him, knowing that he was pretty wasted by then. Either he or Dennis looked around Jon's driveway and then saw the Deacon standing and singing something in the middle of Highway #37 curve in front of Jon's house. Some of them rushed out onto the highway to grab the Deacon and drag him if necessary back into Jon's driveway. No more than 30 seconds later, an oversized truck came barreling around the curve and then down the highway onto High Street next to Mt. Pleasant. The guys led the Deacon back into Jon's house still singing and stumbling. They tucked him in on Jon's comfortable leather couch, covered him with a blanket, and resumed watching the TV program. The Deacon lived on that night ... only by pure luck and by the vigilance of his friends.



His Wooster project also had interesting back stories. One dealt with the opposing expert in the case from Kent State University using the data in his expert report in a presentation the professor made at a national geological society meeting with neither approval nor attribution for the source of the data used. He publicly chastized the professor after his presentation. The second matter was with the public relations stunts that were perpetrated during the case, where "Ban the Brine" bumper stickers began to show up around the town of Wooster, Ohio, where the trial was to be held, if the case went to trial.



It didn't, primarily because most of the damage was likely caused by one or more of the subject homes using excessive salt in their soft-water treatment systems and then dumping the heavily saline fluid into their septic tank systems and leach fields, which ultimately reached the shallow groundwater aquifer, and which was then also drawn on by water wells of adjacent neighbors. Highway ice removal also played a role in increasing the salinity of the groundwater in the immediate area.



In 2016, the Campbell family went to San Diego to participate in Julianne's wedding to Brian L. It was a grand affair. Julianne was a beautiful bride. The wedding took place in the historic old San Diego. While there, he made contact with Larry M. (from his California days of the early 1960s). They spent the next afternoon at a local bar catching up. Larry met Mary and his daughters, but Larry's wife and daughters were visiting relatives in northern California. He brought photos; they were very attractive ladies. He said Brenda T. (his friend from California days) married a wealthy film producer. Since graduating from San Diego State University in the mid-

1960s with a marketing degree, Larry had built up a network of printing shops around Southern California. He had just sold his business to the FedEx group for a healthy sum and was preparing to take his wife, daughters and their husbands and children on an extended tour of the world. Bonnie T. married a minister in her hometown in Iowa, Larry said.



By Christmas of 2017, Julianne L. and husband Brian L. were making the Christmas rounds in Southern California. Also in 2017, he and Henry W., and David C. published an update in an international journal on the nuclear power and uranium markets, ownership and Uranium One (of the Russian Government) and other ownership of uranium resources in the world.¹⁵⁶ He also prepared the mid-year and annual report to the EMD on uranium, nuclear power and rare-earth conditions in the U.S. and the world.

The family assembled in 2018, including (back l to r) Julianne, David C., Jennifer, David H., Charlie B. (Jessica's husband), (front l to r) Nancy (Mary's sister) Charles B. (Grandson), He, Mary, Michael B. (Grandson), and Jessica.

In 2018, he, Henry W. and David C. published a paper in another international journal on confronting media and other bias against uranium exploration and mining, nuclear power, and associated environmental issues.¹⁵⁷



¹⁵⁶ <https://www.i2massociates.com/downloads/JGG-1-009.pdf>

¹⁵⁷ <https://www.i2massociates.com/downloads/JGG-1-012.pdf>



Also, He and Henry W. presented GeoDayz 2018 lectures on project management practices, protocol, and case histories at the conference in Nacogdoches, Texas (photo). He also published an editorial entitled, "The Russians are Coming ... Again, The Conflict of Politics, Natural Resources and the American Political and Economic System" in an international journal. Also in 2018, he, Ruffin R., Roger L., David C. and Henry W., Jeff K., and Steve C. published a paper on the

characterization of the occurrence of uranium, thorium, rare earths, and other metals in basement rocks as a source for new uranium roll-front district in the Tertiary sediments in the McCarthy Marsh and Death Valley and associated metallogenic areas in the Eastern Seward Peninsula, Alaska in an international journal.¹⁵⁸ The photo includes his brother, Steve C., his son, David C. and him standing on the north rim of Death Valley, Seward Peninsula, Alaska.



Also in 2018, he and David C. published a paper based on his thesis with the title of "*Paleoenvironmental Implications of Selected Siderite Zones in the Upper Atoka Formation, Arkoma Basin, Oklahoma-Arkansas, A Look Back and Current Views on Siderite Genesis in a Sedimentary Environment*" in an international journal.¹⁵⁹ He also prepared the annual report to the EMD on uranium, nuclear power and rare-earth conditions in the U.S. and the world, and published a paper on the value of industry data to future geologists.¹⁶⁰

In 2019 and 2020, he prepared the annual reports to the EMD on uranium, nuclear power and rare-earth conditions in the U.S. and the world. Also in 2020, he and the EMD team prepared the report, "Beyond Hydrocarbons ... The Rest of the Story," as an update to the 2020 Conference Presentation, "Uranium and Nuclear Power are on the Move ... Again !".¹⁶¹

In 2020, he, Robert G., Steve S., and Jim C. published the report and a *YouTube* video on, "Sources of Rare-Earth Elements in the U.S. and the World," for *The First AAPG-Energy Minerals Division Virtual Conference*.¹⁶² Also in 2020, he and the EMD team published a report and a *YouTube* video on, "Uranium & Nuclear Power are on the Move!" also for *The First AAPG-Energy Minerals Division Virtual Conference*. Also in 2020, Steve S., Steve H., and he published a report and *YouTube* video on, "Recognizing Uranium Source Rocks in the Sedimentary Environments of Nebraska, North & South Dakotas" for *The First AAPG-Energy Minerals Division Virtual Conference*.

In 2021, he published a *YouTube* video on, "A New Meteor Crater, Old Uranium, Thorium & REE Mineralization, & A New Roll-Front Uranium District ... All in Eastern Seward Peninsula, Alaska?",¹⁶³ which

¹⁵⁸ <https://www.i2massociates.com/downloads/JGG-2-023.pdf>

¹⁵⁹ <https://i2massociates.com/downloads/ijeg-1000103.pdf>

¹⁶⁰ <https://i2massociates.com/downloads/ijeg-1000102MDCREV.pdf>

¹⁶¹ <https://i2mconsulting.com/beyond-hydrocarbons-the-rest-of-the-story/>

¹⁶² <https://i2massociates.com/downloads/REE-EMDPresentation8-31-20.pdf>

¹⁶³ A PDF of the video: <https://i2massociates.com/downloads/Campbell2021IMAGE.pdf>

was a 23-min summary on the title subjects during the *IMAGE 21 International Conference for Applied Geoscience & Energy* in Denver. Also in 2021, he was mentioned and cited in an article “Net-Zero Emissions by 2050? ... Not Without Nuclear,” by Heather Saucier, in AAPG’s *The Explorer Magazine*, in May.¹⁶⁴

Also in 2021, he participated in a panel discussion on, “The U.S. Uranium and REE Supply Chains, A Brief Discussion,” for the *AAPG Webinar, Pivoting 2021, Energy Industry Supply Chains*.¹⁶⁵ And 2021, he prepared his final annual report to the EMD on uranium, nuclear power and rare earth conditions in the U.S. and the world. He stepped down as the Chair of the committee after serving for 17 years. He also received the AAPG Energy Minerals Division’s 2021 *Distinguished Service Award*.¹⁶⁶

As the effects of the Pandemic were decreasing as many people began taking their vaccines and associated boosters, the Campbell-Wiley family came together in 2021 for Thanksgiving, including the addition of the new family from Mississippi. ID’s for 2021 group photo:

Back Row: (Left to right): Jessica, David A., Charlie B., David C., MDC (He), Jimmy W., Mark W.; Michael B., David H. Front Row: (Left to right): Claire W., Sonya A., Charles B., Mary C., Gus W., Randi W., Ben W., Jennifer C.



David C. (a professional geologist and software engineer),
David H. (a MD & radiologist),
and David A. (a professional biologist)



Professions not to be overlooked in the Campbell-Wiley family, there was:

Jimmy W. (a plasma physicist), and ex-wife, Kay (a licensed veterinarian).

Claire W. (a pet sitter); Charlie & Jessica B. (archaeologists),

Mark W. (a geophysicist), Randi W. (a registered nurse),

Mary C. (a certified genealogist), and Jennifer C. (a licensed psychiatric social worker).

Julianne L. (a licensed teacher) and Brian L. (a financial advisor) and his daughter, Hannah, presently at Tufts University majoring in mechanical engineering. She is also an accomplished equestrian.¹⁶⁷

Post-Thanksgiving Note: Jessie B. and Michael B., and Ben and Gus W. came down with a variant of COVID. Jessie took monoclonal antibodies, but the little guys exhibited minimal symptoms. All tested negative in a week or so. The Pandemic was not over, just managed better.

Then in mid-2022, the Campbell-Wiley family and number of cats expanded even further when Dru, her son, Ian, and her four cats moved from California to Houston to be with David C. and his six cats. Also of note, Jennifer C. joined her boyfriend of many years at one of his big events in NYC. Andrew Rieger, who

¹⁶⁴ <https://i2massociates.com/downloads/ExplorerMay1U-Nuc-2021.pdf>

¹⁶⁵ <https://i2massociates.com/downloads/U-REESupplyChains2021.pdf>

¹⁶⁶ News Item: <https://i2mconsulting.com/new-uranium-district-in-the-seward-peninsula-unusual-rees-and-possible-new-impact-crater/>

¹⁶⁷ <https://theplacetojump.com/press-releases/hannah-loly-leaps-to-victory-in-25000-blenheim-june-classic-ii-grand-prix/>

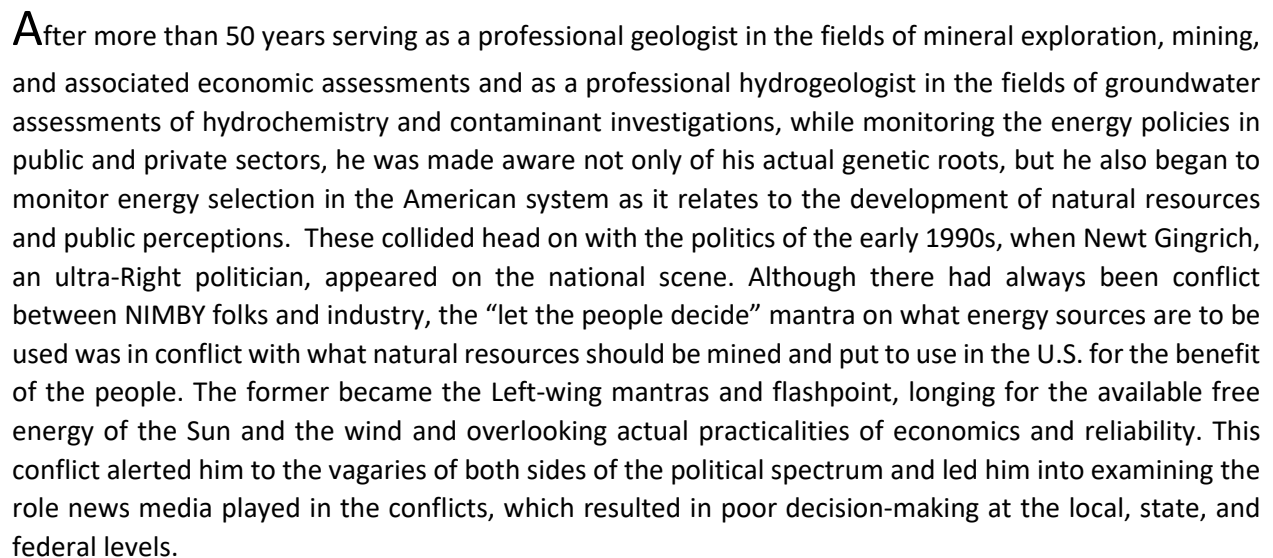
teaches in the Terry College of Business at the University of Georgia in Athens, GA , a bonafide rock star with his band, *Elf Power*¹⁶⁸). By all accounts, the concert in NYC was a rousing success. He and his group have published 25 albums to date.

But with all the successes of the members of the Campbell and Wiley families over the years, like many families in the U.S., they sense the dark clouds currently hanging over the American politics in 2022, now that certain frailties have been revealed in the American Democratic Republic, and in the many citizens who once supported it.



¹⁶⁸ https://en.wikipedia.org/wiki/Elf_Power

2016, Viruses of the Mind and Body



Page 399

renewables. Nuclear power, the only climate-friendly, big-industry, grid-scale energy source available, was essentially ignored or blocked out by the naïve Left, basing their views on an unfounded fear of radiation perpetuated by ignorant/paid senators and representatives and by the wind and solar industry lobbyists as well as the federal government. This conflict set the Left apart from the Right and from many of those in the center of politics.

Social media clearly exacerbated the conflict and also spread misinformation, especially coming from the Far-Right, who consolidated their ignorant base with incessant misinformation and concerns, which meant trouble was ahead for the voting public and for the American democracy in general. He concluded that the value of the middle and lower working class of voters has declined in the eyes of many Republican industry board of directors and owners because computerized machines have taken over many industrial job functions previously operated by workers of the lower economic class, while artificial intelligence (AI) within the computers will overtake many of the job functions of the middle class as well, and soon because it is economic, making many jobs obsolete. For many older citizens, they likely recall the powerful TV episodes of *Twilight Zone* of the 1950s on the obsolete man.¹⁶⁹ This appears to be playing out now.

But the Ohio State football program did reasonably well during 2016, only losing to Penn State, but beating Michigan. By all accounts that was a successful season.

And then in the 2016 elections, two of the American wheels fell off Democracy when the Left stayed home, and the Right lied its way past their ignorant voters into the White House and Congress. As 2017 and 2018 saw the developing storm, he responded for the first time publicly by releasing an editorial to address what he had observed by then. He concluded that there were times in history when democratic people did not speak up or take action when the politics of the day were severely out of step with the majority of the populace. The Germans, Italians, and the Japanese once had an opportunity to stop the damage to their countries before it happened. More recently, the Russian people have been experiencing an increasingly fascist struggle. Communism has clearly morphed into Fascism. They thought their leaders knew what they were saying and were caught off guard by what they were doing, to the shame of all parties involved. He indicated that Americans are living through a similar pre-period in history that because of the widespread news media accounts that at least allowed citizens to observe, listen, and assess what was true and what was untrue, what was false and what were outright, barefaced lies.

There was also a time before the 1990s when politicians were severely criticized and punished for proven bare-faced lying. Taking a page out of the IP book, lying became acceptable among the Republicans as long as the lies were aimed at the non-Republicans. Critical thinking and common sense appears to have been lost in a small minority of Americans, creating a new reality for them by a circus of misrepresentations, lies, and exaggerations from non-recalcitrant Republicans via their "Truth Box," otherwise known as *FoxNews*. The right-wing news media outlets copied and corralled the revenue captured by their broadcast industry, which is driven by grifting the ignorant minority of the U.S. population.

The opposing, so-called Liberal news media are more than happy to point these failings out in detail, albeit ad nauseam, but he hasn't noticed lying or even misinformation from these cable or network news organizations, oddly enough. Overzealousness, perhaps, but not the type of misinformation or obvious lies that he has observed coming from *FoxNews* far too often. During the past few years, he has gained a

¹⁶⁹ <https://www.imdb.com/title/tt0734667/>

new respect for the “Liberal” news media and has been reminded of the need for their presence in America to present the news of a multi-racial, multi-cultural society. But as time passes, the political right, consisting of a minority of white Europeans would be expected to lean increasingly toward Fascism to protect their imagined right to dominate the society. The Democrats have become the enemy, another page out of the Trump, Putin, and Hitler political fascist playbook. Cut the news, cut the education, pretend to be religious, cut communications, cut all sources of truth. But intelligent citizens should be able to judge the danger in such activities. Why have some have not been able to do this? Something has changed!

Long-held secrets are finally emerging in the Far Right of the Republican Party as a result of pressure from a demagogue who has been saying aloud what that minority have been thinking privately for years, perhaps even by their families for generations.

These secrets have been hiding greed (manifested in the perceived right to accumulate excessive capital and limit spending in supporting the middle- and lower-income classes of Americans) and obscuring prejudice below a thick skin of religious righteousness that perhaps has been present in their polite Republican families since even before the Civil War. If history is to be the guide, there was once a time when Overseers of the day (‘republicans,” but once called Democrats of the South) also held greed and prejudice as their righteous family banner, even to the extent of combining both by selling of human beings at the highest price. Even the current Capitalism exhibits a form of slavery where the rich (those who own the companies (i.e., the cotton fields) pay humans to do the owners’ work (i.e., to pick the cotton), but at a rate that hasn’t risen much since the 1990s. And the income difference between the 1-to-10%ers and the middle- and lower-income wage earners in the U.S. continues to widen. But the ignorant “wannabe” Republicans want revenge for their own past failings, a position similar to what Southerners once held regarding their perceived right to own black and brown people, otherwise known as slaves.

After many years of professional experience traveling throughout the U.S. and around the world, he had been encouraged by those people he respected through the years to stay involved with the culture around him, and that meant staying up with the politics of the day, especially if it related to his profession.^{170, 171} He has done so for more than five decades. But the adage that independent scientists should avoid speaking out on politics for fear of damaging their reputations is both irrelevant and illogical, now that it has been established beyond a reasonable doubt that a cult of Republican politicians have emerged who are corrupt and seriously flawed. In this document, he finds it necessary to speak out on some of the current political issues related to energy selection.^{172, 173} His Far-Right friends and politicians are laying low these days not wanting to appear to be in league with the traitors who planned, supported, or participated in the January 6, 2021, insurrection at the Capitol. Some just want tax relief and have no interest in funding social programs for those who need/deserve help. When taken down to its core meaning, this is code for supporting white supremacy and bedamning the blacks, the browns, the reds, the yellows, and soon even the half whites.

¹⁷⁰ <https://i2massociates.com/downloads/JJWRogersMarch2009.pdf>

¹⁷¹ <https://www.i2massociates.com/downloads/JGG-1-009.pdf>

¹⁷² <https://i2massociates.com/downloads/UCOM-Issues2020ShortSlides.pdf>

¹⁷³ <https://i2massociates.com/downloads/BEYONDHYDROCARBONS-2020ExpandedIIRev.pdf>

His Far-Left friends want all of it, and for the most part, they, and all citizens, deserve universal health care, education, employment, and the power that eliminating the Electoral College (EC) would provide. But, they have no basis for untenable energy-source selections. The point here is that there are no central positions at present holding perspectives of possible compromise by either political party. There are only a few conservative Democrats and liberal Republicans, and only a few of the latter who he considers deserve his respect.

But it appears now that “socialist” technology has evolved in Facebook, etc., and has backed citizens into opposing corners, beginning a few years before the 2016 presidential elections, with some help provided by those who hold the wealth via Wall Street, Koch Brothers, and the other 1 to 10%ers in the U.S., combined with serious interference with the American social intercourse (via Facebook, Twitter, etc.) during and before the election by the Russians, etc. They used the existing systems to further divide Americans. But multiple parties other than Democrat or Republican are clearly not workable either. Thanks to 3rd-parties positions represented by Bernie Sanders (who might as well be leading the Independent Party because many of his supporters did not vote or voted for 3rd-party candidates in the 2016 elections), the Green Party, the Libertarian Party, and others of the past that promoted such outliers as Ross Perot, and let’s not forget, Ralph Nader. They absorbed those millions of popular votes that just might have changed reality by swaying the Electoral College voters away from confirming the Idiot President, as did P. T. Barnum and other pretenders, such as Rush Limbaugh and Glen Beck, who pandered to the vulnerable, while demeaning the minorities in America by inflaming the ignorant.

To press a point, the Electoral College members similarly serve as the overseers of the so-called American Democracy, but they actually represent the old American Republic, a two-tiered system of the 1 to 10 %ers and the rest of America. The former EC voting group, being those with the money and influence, supersede those who have much less of both but who also cast the popular votes. He has concluded that this is clearly a system requiring change. The Founding Fathers were fearful of what an unbridled democracy could bring on in a society, taking their clues from the French Revolution, hoping to limit such an impact. But in present day interpretation, this resulted in tyranny by the minority, not the majority.

There appears to be a strong psychological aspect to all of the issues under discussion here. He doesn’t deal in any detail with what’s impacting some Americans today because he is not qualified to do so, but he has some ideas, as do many psychologists (who have written articles¹⁷⁴, books¹⁷⁵ and Google¹⁷⁶ is even overflowing with warnings about the issues, has an uncomfortable ring of truth revealing the Republican psyche as well). He can now identify those individuals who have been clearly affected by a particularly severe political meme and a lack of critical thinking,¹⁷⁷ and it should be clear to all. But, on a broader scale, such polarization can eventually lead to conflict, and if protracted, this can, and has, resulted in civil war or revolution, depending on what side of the Earth you live.

It appears that the issues underlying the American Civil War were never really resolved, just driven underground and gentrified in the far Right who still carry a white supremacist meme that has recently broken through again and which is being amplified by the idiot former president and his 30-35% block while continuing to divide the country. Another American Civil War may have to settle these racial matters

¹⁷⁴ <https://www.psychologytoday.com/us/blog/the-time-cure/201801/the-trump-effect-update>

¹⁷⁵ <https://www.rollingstone.com/politics/politics-features/trumps-mental-health-is-pathological-narcissism-the-key-to-trumps-behavior-126354/>

¹⁷⁶ <https://www.google.com/search?q=psychological+aspects+of+Trump&oeq=psychological+aspects+of+Trump&aqs=chrome..69j57j11910j0j4&sourceid=chrome&ie=UTF-8>

¹⁷⁷ Dangerous Mental Errors by Bloom: <https://sahilbloom.substack.com/p/dangerous-mental-errors-part-i?s=>

as the U.S. becomes browner by the day. The meme will have to be broken if America is to avoid Civil War II. Most spiritual leaders have also been affected, as have many self-serving businessmen, but only a few women. An education has even lost its effect on some, but those under-educated are the most susceptible to such severe memes, as in Germany in the latter 1930s.¹⁷⁸ So, this is not the time to be politically correct by remaining silent, and it is the time to find the way to break the memes currently afflicting millions of Americans and their representatives in the U.S. Congress. Even Congress reflects the two-tiered system, i.e., the U.S. House of Representatives (the people) and the U.S. Senate (the overseers), making up the American Republic.

From the perspective of a senior geoscientist and older American citizen, he also has considered the available information on the external forces that have helped to create some of the prevailing political memes (such as: racial, anti-Hillary, anti-Democrat, anti-immigrant, anti-Jew, etc.) in the first place and how those memes may have “anticipated” the impact of their infection on the American people. This, of course, involves Russia and its current fascist dictator and the impact of his activities on the United States and all that is involved today, from leading up to and during the 2016 election, the economic history of yesteryears and yesterdays to even how all that impacts the natural resources that are needed today and in the future. It is clear that Vladimir Putin has led Russia back into a failed Communist state, brought about by bullying his top-10% oligarchs, just like the good old days of the former Soviet Union. Putin doesn’t even try to hide his dictatorship behind the political system once called Communism; now it is his fascist power over the Oligarchy that is keeping him as leader of the Russian mafia.

A one-time KGB Colonel, Putin apparently decided a few years ago that he doesn’t want to create a new world-class state out of the old Russia that would contribute to the world’s development without conflict inside Russia, but rather use conflict outside Russia to further his objectives. This Russian leader employs such measures (in many instances fomented by Russian operatives) to distract and lie to his people about the domestic issues of political struggles and/or economic failures caused by greedy oligarchs refusing to invest in Russia first to make “Russia great again.” Some leaders apparently are driven to prevail at any cost, and, as has been known for decades, that concentrated political power tends to corrupt, as evidenced throughout the world today and throughout history. One would think that Putin could put away enough American dollars in the far reaches of the world’s banks for the rainy day when he steps down or is run off by his own oligarchs (or worse), or, even vanquished by the people of Russia through another revolution. The former could be pleasant and uneventful, but the latter could be dangerous for him and his oligarchs when Putin decides to restore the Russian Empire by invading Ukraine, Poland, Finland, or other small countries. The latter could be dangerous to the world, should Putin lose sight of reality.

The conditions in the U.S., when the Idiot President was in office, were beginning to look a lot like a failing state as well, with the polarization, attacks on the media and those imbedded by the IP in the intelligence and justice systems, and by encouraging disparate distribution of wealth, a dictator as president playing to his “brown shirts” in the form of the *Proud Boys*, *Oath-Keepers*, etc. for their support should the IP need them for a coup, and even the U.S. Supreme Court becoming politically corrupt, all of which was laying a foundation for revolution. The good days have departed for now. Putin has invaded Ukraine and the IP attempted an armed coup. The former is ongoing but NATO is stepping up, but the latter failed, although another coup may be building for the 2024 elections using state governments to further corrupt the

¹⁷⁸ <https://en.wikipedia.org/wiki/Meme>

systems, unless the U.S. Justice System steps down hard on the seditious conspirators and their leader, the IP, and on those in the states attempting to rig the coming elections.

During the days of the Clinton Presidency, Russia and the U.S. had finally begun to cooperate on a range of cultural, scientific, and economic matters. The U.S. invited Russian women and their babies to immigrate to the U.S. He actually thought a new era of American-Russian cooperation had begun. The Russians and NASA were cooperating on the International Space Station and other interests. He developed new relationships with Russian geologists who were working on mineral deposits in far-eastern Russia across from the Seward Peninsula where he and his team were working in similar geological conditions. He also even assumed that governments may be sharing secrets (which tend to bond nations into a system of common-interests and stable relations) as suggested by an open-microphone incident with President Obama.¹⁷⁹ Putin and previous Russian Presidents even invited Exxon, Conoco-Phillips, Valero, and other American oil and gas companies to help the Russians explore their vast areas of prospective land using the new American geological and geophysical insights, providing technological developments made recently in the U.S., e.g., in gas shales by hydrofracking and horizontal well completion techniques,¹⁸⁰ and in uranium roll-front deposits by in-situ recovery techniques developed in the U.S.¹⁸¹; some companies have had great success for their world stockholders, but also offered the advancements for Russia's internal benefit by having a product(s) to consume within Russia as well as to sell on the world's markets.

Improvements in technology helped Russia begin to undertake more ambitious oil and gas, and mining projects with environmental controls built in so as to avoid the technological and environmental disasters that occurred in the Russian Siberian oil fields that operated decades ago during the era of the Soviet Union.¹⁸² Many such fields are still wastelands of dead oil and residual tars on the frozen landscapes resulting from blow-outs, poor operation and maintenance, and rusted-out pipelines, especially in the hostile areas of frozen and thawing tundra of Siberia. Russia is now even moving into the Arctic region to explore for oil and gas and mining with one of the first ship-borne nuclear power plants to supply electricity in these Arctic projects. It is only a matter of time before they will also move into Antarctica with the same objectives.¹⁸³

That is not to say that the U.S. didn't have similar environmental issues over the past 75 years. U.S. environmental regulations, however, improved environmental awareness by the oil and gas companies in the U.S. and they began to clean-up the sites and the associated contaminated groundwater below.¹⁸⁴ Somewhere along the timeline, as the Clintons were building good relationships with Putin and his supporting Oligarchs, the Russian train went off the tracks. From a U.S. perspective, he remembers when, unexpectedly, Hilary Clinton began to talk about getting shocking news about Russia's activities that Putin was changing the rules.¹⁸⁵ Many observers suggested his motives were to give Putin's people someone to fear for the purpose of distracting from the growing economic woes in Russia, mostly driven by the Putin and the oligarchs draining the Russian economy into their own pockets by transferring billions and billions

¹⁷⁹ <https://www.nytimes.com/2012/03/27/us/politics/obama-caught-on-microphone-telling-medvedev-of-flexibility.html>

¹⁸⁰ <https://www.forbes.com/sites/kenrapoza/2017/08/29/when-russia-finally-hops-on-shale-bandwagon-opec-is-finished/?sh=34a201481af0>

¹⁸¹ https://www.i2massociates.com/downloads/IAEAINSITU-P1741_web.pdf

¹⁸² <https://www.seattletimes.com/nation-world/constant-oil-spills-devastate-russia/>

¹⁸³ https://web.i2massociates.com/resource_detail.php?resource_id=8548

¹⁸⁴ <https://www.smithsonianmag.com/science-nature/oil-spill-cleanup-illusion-180959783/>

¹⁸⁵ <https://time.com/4422723/putin-russia-hillary-clinton/>

of rubles from Russian operations into the world banks to enrich themselves and to use in investments outside Russia, such as in the U.S., Japan, etc.



The natural tendency for Capitalism in the U.S. and elsewhere is that of accumulating profits by the richest 1% to 10% citizens since “Reagonomics”¹⁸⁶ and the disproven trickledown economic policy was introduced (and accepted outright at first by most Americans more than 25 years ago). It has now become clear to many U.S. citizens that a once financially healthy middle-class has been drained over the past 20 years by the American Oligarchs (pleasant people as some may be) and by associated corporations, churches, and even so-called non-profit corporations. Few of these pay the taxes they could and should pay into the existing social programs designed by FDR and his colleagues to assist the middle- and lower-income groups in the U.S to counteract the impact of rampant, albeit very successful, Capitalism, that by its nature encourages greed. Only a few companies have yet to adapt to employee-owned corporations where management has caps in salaries and benefits and lower management and other employees receive meaningful paychecks according to their contributions to improve the public’s well-being. But neither pure Capitalism¹⁸⁷ nor Marxism¹⁸⁸ are applicable in today’s economic conditions. The American system requires an overhaul. Just how many years it will take for the American system to adjust is uncertain today, but the current political conditions in the U.S. could easily precipitate an explosion of changes that would extinguish the current abundance.

Capitalism also fosters self-protection. Marxism was not allowed to be even considered. He was part of a group who interrupted the business of Ohio State in the 1960s when the Administration refused to allow a lecture by of one of the few professors in American universities who had studied Marxism, Professor Richard D. Wolff, an Ohio-born, Yale-Harvard- Stanford educated man of good intentions.¹⁸⁹

Any changes in Capitalism would not be unlike those of the FDR days when he vaccinated Capitalism with a healthy dose of Socialist-leaning programs funded by the U. S. government, such as Social Security, etc. These tempered the rampant economic depression brought on by runaway Capitalism of the late 1930s, which was inherited from earlier advances during the “Gilded Age,”¹⁹⁰ that witnessed the arrival of the Rockefellers, Andrew Carnegie, John Pierpont Morgan, and others who built gigantic fortunes, while rampant poverty prevailed in the U.S. There was only a small segment of “middle” income earners at the time. As unions grew and strikes began to break out, the Socialist party, the Communist party, and even the Nazi party were quite active in the American and European labor unions for a while. There was serious unrest all around the country and the world; FDR was informed that he had to either modify the American economic system or foster a 2nd American Civil War. Facing the threats from Germany and Japan, FDR was able to convince the American “1 percent to 10 percenters” (many of whom called the German war, “Franklin’s war”) to support his social changes in return for fighting WW2 in two parts of the world.

¹⁸⁶ <https://www.google.com/search?q=Reagonomics&oq=Reagonomics&aqs=chrome..69i57.1833j0j15&sourceid=chrome&ie=UTF-8>

¹⁸⁷ <https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780198744283.001.0001/acprof-9780198744283-chapter-2>

¹⁸⁸ <https://www.patreon.com/economicupdate/posts>

¹⁸⁹ <https://www.rdwolff.com/about>

¹⁹⁰ https://en.wikipedia.org/wiki/Gilded_Age

More money was to be made by fighting the wars than it would cost to implement the reforms. In the initial stages of WW1, American capitalists (DuPont in particular) sold explosives to both England and Germany. FDR's New Deal resulted in taxing the "1% to 10%'ers" at a rate of 95% above a certain level of their income, but many of these programs were considered as Socialist and even Fascist by the "Republicans" of that day. Then, FDR convinced the industrial leaders that it was time to retool their industries toward production of planes, armaments, and munitions to support the war effort, beyond lend-lease, which allowed those participating industries to become very financially successful in the process of winning the war and preparing for the "Cold War" and any skirmishes in the years ahead. These taxes paid for it all ... for a while.

Republicans of the recent past have since looked back in attempts to unravel FDR's reputation,¹⁹¹ probably sensing that a new round of financial vaccinations may be on the horizon, primarily because of the runaway national debt of more than \$25 trillion created solely by the new "conservative" Republican tax cuts. But out of the earlier post-war political unrest sprang Senator Joseph McCarthy's search for Communists (and Marxists) hiding under the beds in the U.S. (in Hollywood no less). When U.S. Government efforts then cleared the table in the 1950s, and ending in the 1960s in the assassinations of JFK, MLK, and RFK as extremists of unknown roots disappeared back underground into the darkness, and as the "Republican" and "Democrat" capitalists of the day came to power in the U.S. By the early 1970s, the Fascist John Birch Society was making inroads into the fabric of the American society for a while until they too disappeared back into the darkness. By 2016, the IP was unleashed and protected by many Republicans as their very own Fascist clown.



Americans and Russians have been memed very differently and isolated to the extreme to the extent that local propaganda excludes or corrodes the ideas of the other. This is based on each of their local histories, on the economic hardships of the system each country tried to develop, and on the political system that evolved out of those struggles. But one country's system has finally proven to be too restrictive for their people, so they threw out their leaders when the Berlin Wall came down. However, the deep state of Russian oligarchs remained intact but embraced a form of Capitalism that operated not unlike the American and Italian organized crime syndicates. After Glasnost, the "1 to 10 percenters" began to regain the political system until a KGB-trained strongman finally broke through using the tried-and-true methods learned during the time of the Soviet Union and from the internationalized crime syndicates of today.

Putin has been in power to one extent or another for some 18 years but notice that his term as "President" has been extended with each election from 4 years to 6 years. His grab of parts of Ukraine, the continuing bombing and attempt to invade the rest of Ukraine, and his threats to strike with nuclear weapons if NATO comes to the aid of Ukraine, and his long-term interference in the American political elections by hacking the social and industrial Internet systems along with negative, divisive propaganda techniques applied to the American social media to affect the American elections of 2016, makes Putin the Number 1 terrorist in the world today. Although Putin, no doubt, didn't think his initial meddling would work, he and his minions have succeeded in screwing up the American political system for the time being, with the help of corrupt Republicans, and now likely believes the U. S. systems are still vulnerable. But the U.S. Congress

¹⁹¹ <https://i2massociates.com/downloads/CampbellJustNotforBurning-July19-2014Col.pdf>

and U.S. Justice Department are also now beginning to expose the damages caused by the hacking of the American systems, of the IP in person, and by the dozens of crimes and cover-ups by Republican Congressmen and a few notable, unhinged women groveling at the feet of the IP that will likely be revealed and prosecuted eventually.

The similarity between the IP and Putin is astounding. Both have their state television, the former in *FoxNews*, the latter in RT Television (Outside Russia) and Pravda (inside Russia). Both believe that as a President they have unlimited power. Both are paranoid about losing their grip on perceived control. They both court dictators around the world. They try to control their courts and justice system and intimidate their state and federal investigators according to their needs. They both use their political positions to enhance their already substantial wealth and those of their families and friends. But only in the U.S. will the IP and his associates be held accountable one day by the justice system and repentant U.S. Supreme Court.

The IP will be redressed eventually, but, in the meantime, he has from the beginning been blaming foreigners, immigrants, religious sects, political rivals, Democrats, and the free press (cue the first amendment here) for his lack of success in the eyes of that very free liberal press. The IP administration moved a few items forward, however, in space and off-world activities toward the Moon and beyond,¹⁹² and in supporting nuclear power plants and associated waste management programs, but this effort had been mixed with support from the coal workers only because of the political base involved, clearly rejecting concerns for damage to the climate from such burning.¹⁹³ This leaves much to rectify in other areas, such as infrastructure, health care, border issues, etc., and other things Presidents have done in the past because those issues are challenging and difficult.



After the political reckoning and restoration, there must be other ways to bring both Putin and Kim Jong Un (of North Korea), and Iran for that matter, into solidarity with the rest of the world. They have much to offer their people and the world at large. Russia and the U.S. worked well together during the Clinton years. They both decided to reduce their nuclear weapon stockpiles. Russia not too long ago sold the U.S. their nuclear warheads,¹⁹⁴ which were downrated as fuel for use in U.S. nuclear power plants. Unfortunately, the program ended in 2013 (about the time Putin went off the rails), perhaps marking the beginning of his movement into the Crimea and new tensions in Ukraine, the beginning of computer and Internet hacking originating in Russia, and even more recently in Russia moving aggressively into the “Russian Arctic,”¹⁹⁵ as mentioned previously.

But social problems always spin out of economic hardship of the middle and lower wage earners in any country. Even with the country’s wealth leaving Russia beyond Putin’s control, Putin is still believed to be the richest man in the world; the #1 Oligarch in Russia, even when compared to the 1 percenters in the U.S. and UK. In spite of this, the Russian economy is degrading even though it is based on selling natural

¹⁹² <https://i2massociates.com/downloads/Memoir101-T0fC2016.pdf>

¹⁹³ <https://i2mconsulting.com/coal-just-not-for-burning-article-released/>

¹⁹⁴ <https://www.npr.org/2013/12/11/250007526/megatons-to-megawatts-russian-warheads-fuel-u-s-power-plants>

¹⁹⁵ https://web.i2massociates.com/search_resource.php?search_value=Russia+Arctic&sort=relevance#page=1

gas to Europe and elsewhere,¹⁹⁶ and in selling other natural resources such as uranium to the U.S. utilities after processing.¹⁹⁷ Once again, one would think that Putin would want to join the rest of the world rather than just trying to spread influence by providing the financing for the construction of Russian nuclear power plants for a few countries. Soon, Russia, with the U.S. sanctions in place, will not be able to afford to back up their promises to these countries, and, if in operation, the power plant requirements likely will drive them to China, U.S., France, or India to support the safe operation and maintenance of their new power plants.¹⁹⁸ The fact that Putin has recently threatened to ban Valero, Conoco-Phillips, and Exxon from helping them¹⁹⁹ and also has legislation poised in the Russian Duma to ban sales of yellowcake uranium to the U.S.,²⁰⁰ further illustrates Putin's penchant for shooting himself in the foot and damaging the Russian economy even further.²⁰¹

There might be an increase in the price of yellowcake should Putin press the ban,²⁰² which would support the expansion of the American uranium industry in Texas, Wyoming, Utah, Colorado, South Dakota, and in Alaska (and their projects in Canada, Australia, Peru, and anywhere countries try to remain friends of the U.S.). The American mining companies are waiting for support from the U.S. Congress to protect a clearly strategic industry in the U.S. and to provide fuel for the needs of the 21st Century, e.g., rare earths, and other strategic materials (as defined by the U.S. Geological Survey) and secure uranium fuel for the 93 nuclear reactors that currently produce about 20% of the electricity in the U.S. and 30% of the climate-friendly sources of energy.

But the U.S. political scene needs to clear-up. Putin's time has come and he will be gone soon, if not by poor health, than by bullet, by poison, etc., while the U.S. must shore up systems against the next time Russia tries to once again tamper with the American elections. Although these threats may come from both Russia and China now, it is not the first time that the U.S. has confronted two foes at one time if necessary. This time the signs will be monitored closely, and the U.S. will be ready to counter punch both Russia and China on all fronts, cyber and economic now that the U.S. has been reminded once again that Democracy wherever it exists is inherently prone to such interference. Its strength rests on the shoulders of its citizens and their right to fairly elect a president, senator, or congressmen and women who have the American people in mind, not just those who have accumulated wealth and power.

He has concluded that there are two Americas now, one is called by some an American Republic (with a two-tiered electoral system), while others consider it an American Democracy. In actuality, it is a Socialist Republic (with all the "socialist" programs that have been installed since WW2, i.e., Social Security, Medicare, etc.) designed to meet the needs of all citizens. Over the years, America has been evolving, although some of its citizens refuse to admit that change is underway, like it or not. If not, let's see how far they get as traitors. But the IP wouldn't just become an American embarrassment in the eyes of most Americans but also with most of the rest of the world. The IP would also be responsible for the deaths of hundreds of thousands of Americans by underreacting to the beginning of the virus COVID-19 in early 2020. By early 2021, vaccines were becoming available, but most Republicans refused to get vaccinated

¹⁹⁶ <https://oilprice.com/Geopolitics/International/Russias-Grip-On-European-Gas-Markets-Is-Tightening.html>

¹⁹⁷ <https://www.i2massociates.com/downloads/JGG-1-009.pdf>

¹⁹⁸ <https://www.i2massociates.com/downloads/NoticeofWithdrawnLink.pdf>

¹⁹⁹ <https://www.forbes.com/sites/kenrapoza/2017/09/26/russia-gazprom-exxon-platts-big-oil/#1ddad918579b>

²⁰⁰ https://web.i2massociates.com/resource_detail.php?resource_id=7645

²⁰¹ <https://time.com/5204733/russia-election-2018-putin-fourth-term/>

²⁰² https://web.i2massociates.com/search_resource.php?search_value=Uranium+price+increase#page=1

on political grounds. Many also refused to wear masks on the basis of their claimed civil right not to wear such masks. These people must exist in a separate reality, as they wish, but their accumulating power is now encroaching on the solid majority of American citizens.

Although Americans should determine policy matters, their votes to elect should be based on their confidence that their well-educated candidate will decide on congressional policy matters based on the most up-to-date information available from sources that have been validated for accuracy. On matters related to technical issues, such as energy selection, the candidate should be expected to make his (her) assessment of the information and consider all relevant information from industry, university and government agencies, and even from lobbyists, from all points of view, and then make a decision on what is best for the people he (she) represents. This process should exclude payoffs for votes from interested parties that are so prevalent today, which makes the process corrupt. Further, the candidate should stand for the people's interest based on his (her) conclusion, not in pandering to their constituents just to stay in office. The American people need leadership and confidence in their leaders that they will do what is best for them, especially in energy selection. Like it or not, Mr. and Mrs. America are generally not qualified to make these kinds of decisions.

He (the author, to be clear) found it difficult not to conclude that many of these people were not just ignorant or stupid, but conflicted and/or corrupt as well, and part of the pathetic 25% who had nothing to lose but their lives. But he found that there were other plausible causes of such behavior. The long-term exposure to lies and misinformation by Republican congressional Representatives and Senators and broadcast via the media, by *FoxNews* and other far-right media, have inflicted an infectious meme, a virus of the mind, on this group of susceptible Americans. It would seem that the only way to break such a meme was to pay those infected to only watch CNN and MSNBC for a period of time, which, after a while, they just might realize that they were not aware of the truth of the matters involved and reality reasoning might begin to function again in their minds, the meme having been expunged from some of those who made the effort. This would perhaps go a long way to easing concerns about the developing multicultural society that is being built in America and in the world for that matter.

This may be the only way out of the current divide. It could be as simple as that, but is probably not. For example, claims that the Putin's war (and not President Biden's policies) is impacting the economics within the U.S. is shown by a collection of plots on the new production of oil and gas from the Gulf Coast area and by the prices of gasoline, gold, and natural gas.²⁰³

He recounts that his views may be opposed by some, but he never considered himself a Liberal, although he did support many Liberal ideologies such as "equal under the law," and government spending to support the less fortunate and to facilitate improving lives through education. He considered himself a Centrist, balancing, but not omitting support of those in need, while being against the accumulation of great wealth without paying a fair share to support government programs.

²⁰³ <https://i2massociates.com/downloads/NatGasOilProduction-Gasoline-Gold-NaturalGasPrices.pdf>

Chapter Fourteen

2022, Conclusions and Reflections



His Office of 2022

He was pleased that the cringe-worthy Idiot President (IP) was soundly defeated in 2020, but with the power memes still in effect in what was once called the Republican Party, the IP led a fascist coup in early 2021 designed to reject the 2020 election results by interrupting the transfer of power. That failed. Joe Biden became the President and most Americans, and most of the rest of the world, were relieved. Variants of the COVID-19 virus have come and gone and vaccine boosters, like the flu vaccines, have become a way of life. The U.S. Congress and the U.S. Department of Justice are moving slowly to hold those responsible for leading, abetting, and/or participating in the seditious conspiracy against the United States.²⁰⁴

Unlike China and India, the United States population is expected to continue to grow throughout the century with no foreseeable decline. By 2067, the U.S. population is expected to surpass 400 million people.²⁰⁵ The population growth in the United States is mainly attributed to high rates of immigration, which have decreased since 2016, and the natural increase (the difference between births and deaths). The cost of living and level of education and other factors reveal the potential reasons for the divisions in the U.S..²⁰⁶

Just when justice was beginning to emerge in the U.S. and the world, Vladimir Putin led the Russian country to commit unprovoked aggression by invading Ukraine, and Putin was threatening everyone with

²⁰⁴ <https://www.lawfareblog.com/seditious-conspiracy-real-domestic-terrorism-statute>

²⁰⁵ <https://worldpopulationreview.com/countries/united-states-population>

²⁰⁶ <https://www.federalreserve.gov/publications/files/2022-report-economic-well-being-us-households-202305.pdf>

nuclear strikes.²⁰⁷ Unless the Russian people, led by the lesser oligarchs, rid themselves of their homegrown dictator, not only will the Russian people pay the price, but the people of Europe and the U.S. could as well if Putin pushes the buttons on his nuclear arsenal.

Now that the IP, America's own homegrown pretend dictator, has been rejected by a majority of Americans, the future elections will test once again the strength of the American democracy, and whether it can eliminate the fascist rumblings still heard around the U.S. and once and for all send those politicians and their financial supporters still struggling with the power-hungry meme back into hiding in the darkness of back rooms where such traitors ruminate.

As he has reflected on his life, it has been punctuated by quite a few incidents that in isolation have emerged as anecdotes locked in his memory and recorded for as long as he lasts and this document remains in existence, either in paper or digital form. He could not ever have imagined that he and his family and friends would have had to deal with the issues of the past few years. It only took the IP to open Pandora's Box unleashing the perversions of religious memes of the mind that were quickly replicated by social media revealing racist motivations combined with white-power aspirations of even many polite Republicans, if the truths were confronted. The IP also allowed a nasty virus to spread and be perpetrated upon the American people where more than 1 million citizens died. Most of these were Republicans who had consumed the Kool-Aid sold by FoxNews and who elected and turned loose the fascist idiots who facilitated the arrival of the IP. One day, he will be finally recognized by those religious zealots as befitting their expectations of the antichrist.

The "why" of all this strangeness has bothered him the most. Even his brother, Steve C., has been affected by the memes, but he witnessed the development of them over the years while he sensed that his brother's susceptibility to religious memes was subsequently growing into traitorous memes that were soon to appear. His sister and he shunned him because he joined the mob and participated in the insurrection at the Capital and then, expressing gleeful satisfaction, posted a photo of himself on the Capital steps on *Facebook*. Knowing he was being affected as a supporter of the IP could be excused as ignorance, but in combining the IP with religious furor, this was the sign that the meme was turning psychotic and traitorous. This was unacceptable to him and his sister and the rest of the family. He has realized that only those people who have had prolonged exposure to *FoxNews* have become susceptible to political memes. If also combined with religious memes coming from the Far-Right, their impact has now exposed them for what they are seditious memes.

But the rest of the family have been well-fortified over the years with good educations that included teaching the benefits of critical thinking as the best defense against harmful memes. He is also aware that serious threats to the psyche can break through the educational defenses, such as in accidents where people were seriously hurt or in war when orders have to be followed for the protection of others, or when excessive drug or alcohol use weakens and sometimes demolishes all defenses against religious and political memes that can turn not only irrational, but can become unhooked from reality, as with the power memes currently controlling many Republican politicians. He trusts that sanity will prevail soon after the voters have spoken.

But Ohio State lost to M in 2021 for the first time in almost a decade. They ended the season with a 11-2 record, losing to Oregon and M, but beat Utah in the Rose Bowl.

²⁰⁷ <https://www.bbc.com/news/world-europe-56720589>

These professional Memoirs have covered his activities over more than 55 years as a professional geologist and hydrogeologist. Through the years, he and his wife of more than 45 years, Mary Margaret, raised and supported five children, two sons and three daughters, all of whom are now college graduates with one or more degrees. As his life nears its end, his only lasting legacy will be his children. He considers himself to have been very fortunate to have been a part of formulating at least four children as far as he knows. Marking this moment, he could not be prouder to have contributed his genes to help David C., Julianne, Jennifer, and Jessica to come into this world as humans.

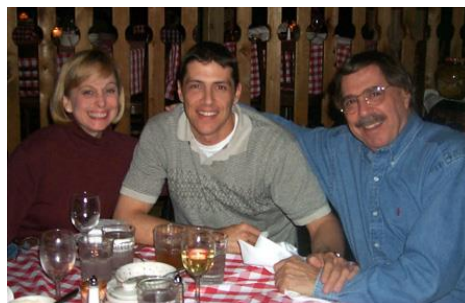
David C. and Julianne C. did not have a childhood he would have preferred, but their mother (Jerrie) had many great qualities to pass on to them, she having also come from a difficult childhood. David graduated from Texas A&M University with a bachelor's degree in geology and a biology minor.²⁰⁸ David C. has had a strong interest in the oceans of the world for many years, as well as scuba diving, and a dedication to raise awareness of the



threats to marine life and to the climate. The not-so-long-term impact on the climate most rational people see now as real, is clearly the result of burning fossil fuels to create the energy humans must have.²⁰⁹

Julianne's perseverance in pursuing her education through her master's degrees and beyond fueled her interest in teaching and provided her with the satisfaction of helping young ones better understand their

young lives in preparation for growing into adults. Her commitment to helping her mother throughout most of her life provided her with the strength in character and outlook she will always have. She obtained her Bachelor of Arts Liberal Studies from Antioch University, Santa Barbara, CA in 1992, a Master of Arts in Organizational Management (Arts Management) from Antioch University, Santa Barbara, CA in 1998, and a Master's degree in Science Elementary Education from N. Southeastern University, Miami, FL. in 2001. She also has accumulated multiple teaching credentials and certifications.²¹⁰ She has always enjoyed pottery and now owns and operates *Loly Lutti Pottery Camp*.²¹¹



²⁰⁸ <https://www.marinebio.org/marinebio/>

²⁰⁹ <https://www.marinebio.org/>

²¹⁰ <https://i2massociates.com/downloads/ArtProductionProducerJLoly.pdf>

²¹¹ <https://www.lolylutti.com/>

David H., Mary's son, had to experience a broken marriage too, but she made that as smooth as possible, because both parents were reasonable and kind people. He was with the new family as it was formed, in on the ground floor so to speak, so he had to feel part of the bigger family. Inheriting good genes from his genetic parents and a stable environment in his new family, he thrived though high school (without damage playing middle linebacker for a prominent Houston high school football team), and through college at the University of Texas at Austin, majoring in chemistry, especially with his Uncle Jimmy and Aunt Kay nearby. He buzzed through medical school and scored highly in the testing that subsequently opened the door to specialization at Johns Hopkins and private practice in radiology near Miami. It should be noted here for the record that David H.'s name was changed when he was about 8 years old. He said that there were getting to be too many Davids in the family. He was asked what name would he prefer. He said, "I like grapes," and henceforth he was given the sign to fix the name for all time: "Grape." Then, when he graduated, his name would be changed to Grapus Magnus, and then when he was licensed as a doctor, David H.'s name became Dr. Grapus Magnus, for his use only within the family, of course.



In looking back, Jennifer was mature when she was six years old. She was articulate at a very young age. She was drawn to music and made effective use of Mary's grand piano. She had many admiring girlfriends and interesting boyfriends. She played the lead in a number of high school productions and events, and was recruited by eastern colleges, one of which she accepted, Sarah Lawrence College,²¹² where in 2001, she received a Bachelor of Arts Liberal Studies degree. In 2007, Jenny achieved certification as a teacher in Texas and began teaching theatre at West Briar Middle School. In 2020, she received a Master's degree in social work from the Silberman School of Social Work, Hunter College, New York²¹³ and has been licensed as a Master Psychiatric Social Worker and maintains an active consulting practice as a therapist in NYC.



Jessie shined brightly in her education and had no interest in going far away from her home, graduating in fine arts history from University of Houston in Italian, and Art History, graduating *magna cum laude*.²¹⁴ She later pursued archaeology instead of geology. If it had not been for an overbearing female assistant professor of geology at the University of Houston, she would have likely majored in geology as well. She also had the mind of an engineer and geologist, being able to calculate, fix or find nearly everything she was asked, for the benefit of her two young sons and now her aging parents.

He looked forward to his expanded family which included Mary's new-found son, David A., his wife, and his family of daughters. Future Thanksgivings / Christmas holidays will no doubt be joyous, noisy affairs, with grandsons, Charlie B., and Michael B., plus Mark and Randi, and their sons, Gus and Ben, and David C., plus Mary's brother Jimmy and his daughter Claire and her husband, Jackie. The new arrivals from

²¹² <https://www.sarahlawrence.edu/>

²¹³ <https://sssw.hunter.cuny.edu/>

²¹⁴ <https://www.uh.edu/about/>

California, Dru, and son Ian, will add to the holidays and will ensure David C. attends. And maybe one day soon there will be a holiday when Julianne and her husband Brian will come from San Diego, and Carolyn, his sister, will come from Phoenix to complete the clan portrait, as clouded as the DNA may be for future genealogists.



Looking back, he progressed through the professional ranks from staff positions to senior management positions as Principal and Corporate Consultant status in geology and hydrogeology with environmental and engineering consulting companies, mining companies and the chemical industry. Over the years, he encountered corporate aberrations and prejudices in the U.S., but fought through them with the assistance of a number of associates. He has been listed since the early 1970s in various editions of *Who's Who in the South*, *Who's Who in America*, *American Men and Women in Science*, and *Who's Who in Technology*.

In short, he was licensed as a Professional Geologist in the States of Texas, Wyoming, Alaska, Mississippi, and Washington; was licensed as a Professional Hydrogeologist in the State of Washington; and held national professional certifications in geology and hydrogeology. He has gained a wide range of interdisciplinary experience in business spanning some 55 years (by the year 2022), many of which involved mining and environmental issues surrounding oil and gas exploration, production, and distribution. He has published widely with numerous associates, including three technical books, hundreds of technical papers, and reports, two chapters in other books, and has served on numerous technical society committees and on the editorial boards of a number of old and new scientific journals. After years of investigations, he has taken positions supporting the expansion of nuclear power in the U.S. and the world, especially the coming SMRs.²¹⁵ He also strongly supports developing critical minerals in the U.S., such as rare earths and other commodities.²¹⁶

Looking back on a more personal level, he acknowledged that he has been exceedingly fortunate throughout his life. To begin, Maxine chose to keep him and to find a suitable father. She did an excellent job of that. Through her arduous work and dedication, she earned the respect of many of her friends and associates from her early days around Nowata (Delaware), Oklahoma to Chillicothe, in Columbus, and finally in Lancaster, Ohio. Her efforts and encouragement in music and sports and science formed the foundation for his later life. The friendships he developed in grade school and high school in the 1940s and 1950s persisting through the decades also encouraged him to pursue his goals, whether consciously or unconsciously, through college in California and Ohio, with the financial help, encouragement, and employment of industry leaders in Lancaster and even political leaders in Columbus. His Lancaster High School guys remained the core of his personal friendships, inheriting the collective sense of humor and mutual respect. Although he has many friends and associates in Houston and around the world, they are not the same, as valued as they may be. The people in Ohio are his people and some of them have escaped the current madness, but far too many have fallen into seditious perspectives that have combined both religious and racist memes remaining well-concealed until the IP opened the door.

²¹⁵ <https://www.world-nuclear-news.org/Uranium-Fuel>

²¹⁶ <https://i2massociates.com/downloads/REE-EMDPresentation8-31-20.pdf>

Over the years, his sister, Carolyn, has been a constant source of encouragement and support to her big brother. Her efforts to maintain a family and a professional nursing career came easy to her, until her husband, Dr. Dan, developed complications in an otherwise normal bypass surgery resulting in a crippling disability, which persisted for many years. She recovered from that period and began to play golf and pickleball again and continued performing as chief nurse in the operating rooms of New Mexico. Her two sons (Jared and Josh) and daughter (Caity) survived that turmoil, but Josh had a challenge ahead of him.



In the spring of 2018, Josh was still in the Army preparing for more flying when he was in a motorcycle accident severely damaging his leg. After 15 surgeries and reconstructions and rehab, Josh proceeded to approve of an amputation because his mangled leg was not healing properly. After replacement of the lower leg and foot, plus having months of rehab, he returned to his active lifestyle. Flying for the U.S. Army was no longer in his future. During his surgeries and rehabs, Carolyn retired after many years as Surgical Services Director at the Heart Hospital of New Mexico to look after Josh in the Army hospital in San Antonio, Texas.

Prior to the accident, Josh met Coleen Seamands (also an Army Captain, a psychologist) while in San Antonio. They had an ongoing, long-distance relationship and became engaged a year later and married in 2020 in an old San Antonio Mission, with a simple, small, but elegantly beautiful ceremony.



Josh was accepted into an MBA program at Vanderbilt University, in Nashville, and will have his last year in graduate school in 2022. He was considering an internship. In the meantime, in April, 2022, their family expanded with the arrival of Daniel Thomas Martin in Colorado Springs, where Colleen was completing her duty station assignment. Carolyn became a grandmother, again.

In 2018, Caity, in her last year at the University of Texas at Austin, met Dwight Dumais, who was an accomplished diver for the UT swim team. They subsequently became engaged, and upon her graduation, they moved to Tucson where Dwight had been hired in his first collegiate job at the University of Arizona



as a diving coach. She became the Director of the Outdoor Education for the Girls Scouts of Southern Arizona, where she spends her summers in the cool Ponderosa pines at the camp on Mt. Lemmon teaching young women of her love of the outdoors. In 2020 and 2021, Dwight coached his most talented divers to the Olympics in Tokyo, winning bronze and silver metals. Later, he went on to Budapest for the world competition and his divers won bronze metals. In 2021, after all the Olympic excitement, Caity and Dwight set their wedding

date for January, 2022. They were married on a beautiful mountain top, near Sedona's "Marry-go-Round Rock" in a small and intimate affair among pandemic concerns. Carolyn reported that, "It was a truly beautiful wedding venue and the first where she wore "chic" hiking attire and boots to literally climb up the mountain a few miles to the amazing wedding site." This was Caity's ideal wedding with a breathtaking back-drop view at dusk.

His brother Steve, not counting his current loss to fascist ideologies, has always been of major support to his older brother and his projects. For example, Steve designed and printed the C,F&B brochure (when it was a challenging task in the 1980s); he managed the Alaska project field teams in the 1970s (and Helen, the chief Native American contact). Steve and Doug L., (Yes, his pilot in Tanzania and elsewhere) helped to raise the funding for the Alaska and Utah uranium exploration projects of the 1970s and 1980s and managed major claim-staking programs for the Alaska and Utah projects, having installed a record number of claims with clever, efficient, and legal claim-staking methods. His abilities to rehabilitate Italian and English sport cars were also quite an accomplishment.



Steve's interest in roses also developed and persisted through the years. He grew roses in many varieties and a few hybrids in his backyard, dedicated garden. He became a member of the American Rose Society and was appointed Director of the Buckeye Rose Society.²¹⁷

One could not have had a better brother, and his recent failures in critical thinking do not detract from his accomplishments over the years. It remains to be seen if his daughter, Michelle, has succumbed to the meme like her father and mother. She too has fared quite well over the years with a degree from Ohio University in communications. She went to work for the ABC Network in NYC decades ago and is now a producer on popular TV shows. She received an Emmy for her work in 2012. She clearly has her father's genes because Steve was once well known appearing on a CBS TV station in Greensboro, NC. But he is expected to recover soon when he realizes that he and many others have been sucked in by the proverbial anti-Christ of their religion, the Idiot Ex-President. One thing is for sure, Maxine would have taken Steve to the woodshed if she had been around.



But, on the whole, if it weren't for the professional leadership by supervisors that guided him over the years while working for companies such as Anchor Hocking, Diamond Power and Diamond Electronics in Lancaster, Ohio, and for Conoco (and Robert Arrington and Rossi Grasso) in Australia (and Jimmy Royds in the U.S.), and for Teton Exploration, Div. United Nuclear Corporations (and Ruffin I. Rackley and Bruce Rubin) in Casper, Wyoming, and by: Dr. Jay H. Lehr; by Dr. Frank H. T. Rhodes; by Dr. Walter Sweet; by Dr. John J.W. Rogers; by Dr. H. C. Clark; by Henry Keplinger; by Dr. Ted H. Foss; by Dr. William H. Tonking; plus other long-term associates, such as: Dr. Kevin T. Biddle; Dr. Charles C. Wielchowsky; Dr. Charles Weisenberg; Jeffrey D. King; Dr. George R. Gray; Richard Bost; Henry Wise; Dr. Roger Lee; Dr. James Conca,

²¹⁷ <https://buckeyeroses.org/resources/2018Bulletin%20SummerC.pdf>

and a host of others, he would not have been able to have accomplished what he has over the years, without their support.

So now he has begun to inherit the mementos of the past from his associates. A few months before Bill T.'s passing, he made a point to donate his collection of minerals, most of which were fluorescent. He also gave him his large UV lamp to him to display the samples and his mineral reports and texts, some of which included the Brown & Root reports on the Mohole project.²¹⁸ when Bill was part of management team in 1960s, plus a core sample he had obtained at the time during the drilling project in Baja California.²¹⁹



He visited Ruffin R. in Anacortes, WA, a few years ago with Jeff K., and he was in decent shape for being in his 90+ years. Ruffin said he wanted to give him a number of his cherished possessions when he had to move into a retirement facility. The items included Ruffin's two large, framed pictures of mining scenes, his golden book ends, and most of his library of books and reports. True to his upbringing, Ruffin recently produced a new kind of geologically religious text.²²⁰



He continues to advise various industrial clients or attorneys whether in the field,²²¹ in the lab, in his office or at conferences. There is still much to do and much to learn. At this writing, he also provides input to Jeff K., on his projects and on others related to groundwater



development. There is always a chance that new ventures will emerge, and that he, Jeff K., James M., Roger L., and other members of his accumulated group of associates will find themselves exploring, evaluating, and/or recommending future project investigations. He also had lunch recently with H. C. Clark, his retired geophysics professor from Rice University, and they also spoke of developing new projects. Even his professor from Ohio State and co-author of years past checked in with him recently for his current views on nuclear power and rare earths in the U.S. and elsewhere.²²²



Although he and his son, David C., and other long-term associates, have pursued major projects while maintaining their standards of living with industry projects, he has remembered a few potential projects with some melancholy. The one in early 2000s when he and Jeff K. were contacted by a world-class promoter, who was convinced that he could raise hundreds of millions of dollars for them to create a new company to pursue mining projects throughout the world, focusing especially on critical minerals and uranium. The progress was so favorable that Mary and he began to look at houses in preparation for moving to Seattle. The first tranche was

²¹⁸ https://en.wikipedia.org/wiki/Project_Mohole

²¹⁹ <https://i2massociates.com/downloads/FirstEncounteredOceanicCrustBasalt-1960.pdf>

²²⁰ <https://www.chapters.indigo.ca/en-ca/books/gods-physical-record-of-creation/9781637692578-item.html>

²²¹ <https://i2massociates.com/downloads/CampbellHGPSPresentation2016MarchC.pdf>

²²² <https://i2massociates.com/downloads/NuclearPowerFuture-WhyWait.pdf>

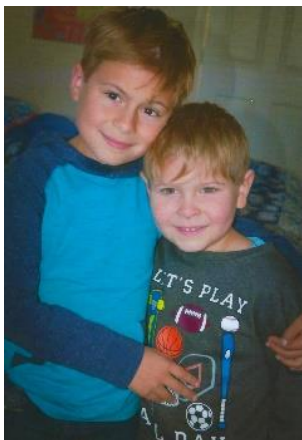
said to be on its way in the amount \$10 million, but that never materialized from China, probably just as well because of the potential political issues. They were also planning to buy a building in Seattle as an investment for the client and to house their staff on the top floor, lease out the remaining floors, and install their brand name on top in big block letters, to light up the night as I2M, standing for the new company name:

International Minerals & Mining Corporation

They waited for the money to roll in, but it never arrived. Eventually, they realized that the project was going nowhere, and probably just as well. Maybe the next project will materialize because they did have a lot to offer investors based on their collective history of project successes and capabilities as well.



And finally on the personal front, thanks go to Lesley and her hiring skills, she selected Mary W. to replace her and they became friends and then much more. And for more than 45 years she has been Mary C.; she still gets his attention as a supporting wife, a partner, an outstanding mother of four children (which became six), a successful professional genealogist, the company bookkeeper, editor, and caretaker for her sister. She had shown great tolerance over the years for his idiosyncracies. He said that he would do it all again because the years spent have been interesting and rewarding. He often apologized to her for being “too pushy” but she always said, “You can’t help it, you were drawn that way,” meaning it was genes but also the environment that made him the way he was. That was confirmed by Myers-Briggs and he learned to soften his natural instincts through the years, thanks to Maxine over the first 20 years of life and Mary C. for the last 47 years.



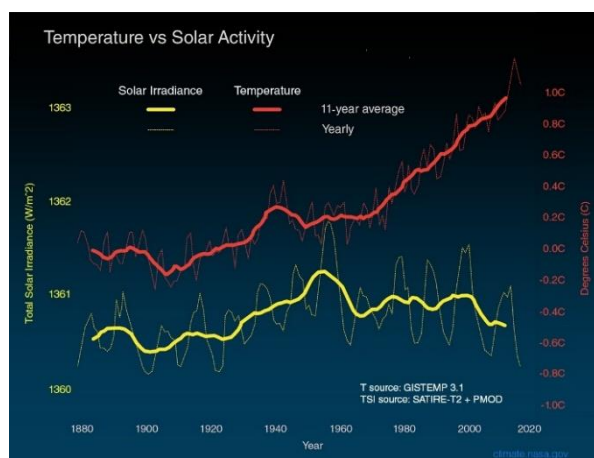
And that’s the way it was for him over the first 80 years of his life. He was convinced that there was still time to finish the items on his list, e.g., a couple more technical papers, updating his McGraw-Hill text and maybe a few more cases, with additional projects that will come along to generate more funds for his grandchildren’s college, etc.

He knows there must be solutions to America’s current political problems at home and abroad, as deeply rooted as the differences may be. In politics, he never considered himself a Liberal, although he did support many Liberal ideologies, such as government spending to support the less fortunate and to facilitate improving lives through education. He considered himself Left-Central, balancing, but not omitting support of those in need, while being against the accumulation of great wealth without paying a fair share to support government programs. Cultural conflicts can be difficult to resolve because they are deeply buried in the

human psyche.²²³ Bullies in life have to be confronted with a good fight, as he had had to deal with during high school. Bullies in politics must also be confronted as well for Fascism gnaws away at democracies little by little. Hence the importance of groups like the ACLU.



But he has observed over the past 5 years that Fascism, like the Pandemic, is still infecting Americans and appears to be getting a foothold in the 2022 American politics because the IP still has a grip on heavily memed individuals. In opposing the IP and his power hungry sycophants in Congress and in the state houses around the country, he trusts that the Center Left and Center Right will soon combine to irradiate this wave of Fascism in the U.S., or if the IP prevails, his grandsons and their generation will need to find the way to protect the American Democracy in a multicultural society without conflict with the minority in the U.S., and learn to protect the climate using the appropriate sources of energy to light up and run the country and the world.²²⁴ Climate warming has clearly begun.



Climate warming has clearly begun.

He has no doubt that Dwight Kane would have been mortified and appalled by the political conditions today in the U.S. He was a Conservative of the good kind, like many of his friends.

He also has no doubt that archaeology is demonstrating that the deep history of human beings is just beginning to be revealed. Starting with Erich von Däniken and supported by Giorgio Tsoukalos, and others, the ancient astronauts hypothesis and the likely human-extraterrestrial contact in the past (and just maybe in the present) are gaining traction.²²⁵ Understanding that many Biblical observations and writings have either misinterpreted what the authors saw or have covered up what they could not understand, *Ancient Aliens* does a generally credible job of presenting the evidence.²²⁶ As the evidence mounts, he would not be surprised to see *Breaking News* indicating that “they” have landed on the White House lawn politely offering a large, heavy book to the U. S. President entitled: *We Will Serve Mankind*.

As he can now see that his presence in this world has limits, to be realized either soon or as much as 10 years or so because one never knows, he is pleased that his path has led him to witness the many beautiful sites around the world, from the sunsets in the Outback of Australia to the vast plains of the Serengeti in Tanzania, from the many cities and small towns of Europe and Scandinavia to the Nilgiri Mountains in the Western Ghats of northwestern Tamil Nadu, India, from the jungles and villages of Sri Lanka to Hanoi and surrounding villages in northern Vietnam to the mosquitoes the size of small hummingbirds on the Seward

²²³ <https://web.i2massociates.com/category.php?id=266#page=1>

²²⁴ https://web.i2massociates.com/search_resource.php?search_value=Climate+Change#page=1

²²⁵ <https://web.i2massociates.com/category.php?id=271#page=1>

²²⁶ As an example: <https://www.youtube.com/watch?v=jMPFd8k7jGo>

Peninsula of Alaska and to the western states of the U.S. and from the uranium country of South Texas, Wyoming, Utah, New Mexico, and Alaska to the gold country of Nevada, to name a few.

He also came to know many fascinating people from all over the world, many were of diverse origins and opinions. In being exposed thusly, he has achieved a fulfilling professional life, especially as an industrial geologist. He does lament the fact that he didn't look after his personal hydration better while working in the jungles and the deserts of the world he visited during field investigations over the years. His kidneys are, understandably, not in good form after years of abuse, but he was, at least, able to walk away from nicotine addiction after his only recognizable epiphany 40 years ago. He also hasn't been much of a consumer of alcohol throughout his life, for reasons likely formed as an unconscious result of his exposure in his early years to those in his family who did consume such, but only a few to excess.

He trusts his family descendants will remember his contributions in the generations to come in this account of the major anecdotes marking his life, while hoping that his professional mementos of documented geological significance he has accumulated over the years will find suitable resting places as well, many with his grandsons and friends.

His only real concern for the future (in which he may not be present to participate) is the long-standing conflict between religion and science, which must be resolved or democracies will not survive, leading instead to chaos in society. Religion is fascist by nature (e.g., God, Jesus, Pope, etc.), while science is democratic in practice (e.g., widespread discussions, disagreements, etc.). To grapple with these issues, he recommends to the reader's attention the discussions that were held in 2012 by two prominent scientists of the time, which remain relevant today.²²⁷

He has concluded that the future depends on the resolution of the issues discussed regarding society's view of science and religion (as in the separation of church and state) in search of truth, not faith, which, although comforting to some, still erodes our progress toward enlightenment in the 21st Century and beyond.²²⁸ But his even more immediate concern was of the current rise of Fascism in America, although with the active social media and cellphones, this will not be conducted in secret as before WW2 but in plain sight, more or less.²²⁹

After looking back at his career, he, like other industrial geologists, all look to the future [by looking back in geological time](#), and that was always interesting, and still is.

XXX



²²⁷ Views of 2012: <https://www.youtube.com/watch?v=q0mIjE9K-gY>

²²⁸ Views of 2019: <https://www.youtube.com/watch?v=RKjiSu4zD5Y&t=1172s>

²²⁹ Views of 2022 on the previous Fascist movements of the 1930s and 1940s: <https://www.msnbc.com/rachel-maddow-presents-ultra>

Chapter Fifteen

Epilogue



The Worlds Beyond Lancaster, Ohio (from NASA ISS)

From my world perspective, I have written this account of my life for the purpose of leaving a record for my grandchildren and their grandchildren of the future to give them some idea about who their Grandpa was as a professional geologist, and about his family and friends, who lived during the last half of the 20th and first part of the 21st Century. In recalling the various events, I remember many of them in vivid detail, but some have been related in loosely associated terms, memory being what it is. Some have not been included because they remain confidential. Those who participated with me in segments of my life can be a witness to how close I came to the absolute truth in my accounts of my principal anecdotes. These days, the Internet allows one to provide extensive references by hyperlinks to support or expand on the subjects discussed, hence the footnotes containing comments and links to additional information. An E-Book will also be available for the reader to use such via active links.

If you, the reader, find areas that are not factually correct on important matters, let me know and I will consider whether to revise my reflections of the event in the next printing of the book and in the associated E-Book version. In the Index that follows, I trust that I have accurately identified the page(s) where some of you were mentioned. If I failed to mention you, when I should have, feel free to send me a written version of your account and we will compare memories on the matter and decide if the existing text should be changed or not. In the Index, I have not included my immediate family member names, albeit abbreviated, because it was impossible to create an acceptable balance in their coverage that would satisfy all members of the family.

I decided to write my memoirs in 3rd-person prose to avoid the appearance of being overly egocentric and all that suggests, but I would like the reader to consider me as only a humble egotist at the worst in viewing my world as a first-born son from a not-so-well-off family with great potential. On observing the world, I am aware that I still carry the baggage of those memes acquired during my childhood and as I matured into adulthood and have been able to fortify or shed only some of the logical or illogical residual memes that I still carry today regarding religion, race relations, social positions, gender relations, and politics in general. That's the way I was made and evolved, thanks to, or in spite of, my family's best intentions and of my friends' and acquaintances' of years past.

I also have recorded my anecdotes, as best as I can remember them, to illustrate how I viewed the world over the past 80 years of my life and how my current political views have also evolved now and differ significantly from many of my friends and even my brother. I wish them well, soon. They should lead our multicultural society by example, not by opposition.

Michael D. Campbell
Katy (Houston), Texas
August 1, 2022

For additional information about obtaining an E-Book of *Anecdotes*, see [\(here\)](#)

Chapter Sixteen

Acknowledgements



Watercolor of A Hill Outside of Lancaster, Ohio, Lancaster Son, Ed Kitchen¹

Now that this task is finished, I want to take this opportunity to thank my family and friends who supported my 6-month effort to assemble this text of my memoirs by providing information and by providing criticisms when I went into the weeds of nobody's business. Although I have drawn together the information from my recollections and appropriate sources, I alone am responsible for assembling and representing the information in an appropriate manner in this text, with the able assistance of Daniel Moore, who is a journalist also from Lancaster, Ohio, now based in Washington, D.C. As indicated in the Epilogue, in the event that I have made an error of fact, I am willing to consider revising the text if it can be demonstrated that my information is incorrect, based on the preliminary advice from my attorney, James Boyd. I would also like to thank H. C. Clark, Ph. D., P.G., Mary C., Jessica B. and a special thanks to Roger Lee, Ph.D., P.G. for the hours they spent editing the manuscript.

Lastly, if it weren't for the support of many people beyond my parents, such as principals, teachers, professors, supervisors, co-workers, friends, and my family, these anecdotes would have never occurred in the way they did, which allowed a young American boy in Ohio to persist to manhood taking on an incredibly interesting and demanding profession in the geosciences. I had no special privileges or advantages in family social status that comes with wealth, but what I did have was an inquiring mind and confidence instilled by a community of family, friends, and associates that encouraged me to press on, to work hard, and to find my direction in life.

Many mentors, such as my grade-school principal to the chief counselor at Camp Arrowhead, to Walter Sweet and Jay H. Lehr at the Ohio State University, through John J. W. Rogers at Rice University to Henry Keplinger and then to Ingemar Larson in Sweden, Robert Arrington and Rossi Grasso in Australia, and many confidential clients, have made my career possible. From the early days working with William, the Manager of the Parts Department of Diamond Power to the support of Ralph H. G. Matthews, CEO, of Diamond Electronics in Lancaster, Ohio, plus a plethora of others along the way, they together and separately opened the door to opportunities. I merely stepped through and continued onward sensing my path, confronting adversity only occasionally, in a career that lasted almost six decades in both the geosciences and in a rewarding family life.

Thank you, all of you.

Michael D. Campbell
Katy (Houston), Texas
August 1, 2022

Chapter Seventeen

Fields of Activities, Major Reports, Publications and Presentations



Houston Sunset in the Spring

I began to be involved in publishing while I attended the Ohio State University working for Dr. Jay H. Lehr in the Geology Department as his Research Assistant. At some point, he asked if I would like to review the growing geoscientific literature of hydrogeology and was soon appointed as the Abstract Editor for the Journal: *Ground Water*. I served in that role for a number of years. Dr. Lehr also asked me to write up an “as built” operation & maintenance report and manual for the very large groundwater modeling tank we had constructed to study groundwater flow in the 3rd dimension that offered decreased interference by the walls inherent in 2-dimensional modeling. This report was completed onboard the ship that took us to Australia. While in Australia, I was also asked by my Conoco supervisor to write the major yearly reports on Conoco’s mineral activities in NW Queensland and to give a series of lectures on hydrogeology by a professor at the University of Townsville, Queensland. There was no one else sufficiently knowledgeable on hydrogeology in the mid-1960s in that part of Australia.

After returning to the U.S., and after working for Conoco’s uranium group and Teton’s group in Casper, Wyoming, I was asked to draft numerous reports on my activities as District Geologist for Teton, and to prepare reports as part of my role as Chairman of the Wyoming Chapter of the ACLU with the group’s attorney.

As the price of uranium began to fall, layoffs began to hit the uranium industry, and I accepted the role of Director of Research for the NWWA offered by my previous professor, Dr. Lehr, who had become the Executive Director of the NWWA. We founded the NWWA Research Facility in Columbus, Ohio, which a few years later, was re-located to the Geology Department at Rice University in Houston, Texas when I was offered a Fellowship to return to graduate school.

Over the previous years, I had begun to publish short papers, then longer papers, and then finally two books, one published by McGraw-Hill and the other by the Commission on Rural Water in Washington,

Anecdotes of a Lifetime

D.C. This was facilitated and supported by Dr. Lehr, and I worked very hard to improve my writing skills, which did not come easy. That period was the beginning of my publishing on a variety of industrial topics. I used the U.S. Geological Survey's publication: "Suggestions to Authors," combined with input from members of my staff and from professional associates.

Most of my subsequent publications have focused on the practical aspects of industrial geoscience, as opposed to strictly academic subjects, which I dealt with on occasion. But as the years went by, I began to produce regular reports, papers, chapters of books for other authors, and was invited to make presentations before scientific meetings and conferences, as the opportunities presented themselves which, if they appeared to be interesting, I pursued.

The publications and presentations ranged in subject matter from mineral exploration and mining to environmental assessments, emphasizing uranium and nuclear power, geothermal exploration, coal/lignite exploration, precious metal exploration and other commodities in deposits occurring in the U.S. (and Alaska), Australia, Africa, Vietnam, Europe and elsewhere. Each report or publication listed below involved their own anecdotes, although at the time of conducting the investigations and drafting the reports they had unique impacts on me and on those around me. Some have been remembered, some forgotten no doubt.

As the Internet grew, with the help of my son, David C., we built the I2M Web Portal and I resumed preparing abstracts just as in the 1960s as I monitored the developing geoscience literature of today, but now such information is more available than in the 1960s. To date, more than 12,000 abstracts have been selected for recording in the I2M Web Portal.²³⁰ The takeaway here is that when opportunities arose, I responded! By reading and reviewing the papers and reports, I slowly learned to write, and with the encouragement from my associates, I gained the confidence to publish on subjects of interest to me, such as water well technology, uranium, rare earths, and nuclear power. This also applies to preparing *Zoom* and *YouTube* videos to reach the widest possible audience on the subjects I deemed to be important enough to undergo the trials of video publishing. *Jay Lehr died* just before publication of the memoirs.

Most of the publication listings below have Internet links now to quickly access the publications that would provide some of the details involved via the E-book version of these memoirs. The publications have been categorized below, but the full chronological list of publications has been included on the following page.

1. [*Mining and Mineral Exploration and Development Projects*](#)
2. [*Hydrogeological and Environmental Projects*](#)
3. [*Geothermal Exploration and Development Projects*](#)
4. [*Coal / Lignite Exploration and Development Projects*](#)
5. [*International Projects*](#)
6. [*Miscellaneous Projects*](#)
7. [*Publications / Papers In Preparation*](#)

Beyond generating project reports (most of which are confidential), but I have a few articles that have yet to be written on topics relating to the geosciences and natural resources, if I have the time.

²³⁰ <https://i2mconsulting.com/web-portal/>

Some publications have been listed in *Google Scholar*,

see, https://scholar.google.com/citations?hl=en&user=ZZaWuQAAAAJ&view_op=list_works&sortby=pubdate

Some publications have been listed in *ResearchGate*, <https://www.researchgate.net/profile/Michael-Campbell-30>

and some have been listed in *Academia.com* <https://independent.academia.edu/MichaelCampbell#>

For a chronological list of the publications/presentations, see:

<https://i2massociates.com/downloads/CampbellChronPubs2019.pdf>

Mining and Hydrogeological / Environmental Publications [For Publications in Preparation],

<https://i2mconsulting.com/michael-d-campbell-pg-ph-curriculum-vitae/#inprep>

Major Reports, Publications, Editorials, and Presentations

Also, for any updates, see, <https://i2mconsulting.com/michael-d-campbell-pg-ph-curriculum-vitae/#pubs>

Campbell, M. D., *et al.*, 2021, “A New Meteor Crater, Old Uranium, Thorium & REE Mineralization, & A New Roll-Front Uranium District ... All in Eastern Seward Peninsula, Alaska?, ” A 23-min summary on the title subjects during the [IMAGE 21 International Conference for Applied Geoscience & Energy](#) on September 28, 2021 Afternoon Section of Theme 9 ([Abstract](#)). The presentation was released on the [I2M YouTube Channel](#) after the conference presentation. A PDF of the presentation is available with reference links ([here](#)). The narrated version is available via the link on the first slide of the PDF version.

Campbell, M. D., *et al.*, 2021, “Uranium (Nuclear and REE) Committee Annual Report,” of the Energy Minerals Division (AAPG), presented [a summary](#) of the report to the [Energy Minerals Division](#)’s Executive Committee, Commodity Chairs, other Committee Chairs, and special guests during a special Zoom presentation during the EMD Annual Meeting on June 6, 2021. ([Full Report](#)).

Campbell, M. D., 2021, Cited in article “Net-Zero Emissions by 2050? ... Not Without Nuclear,” by Heather Saucier, in AAPG’s *The Explorer* magazine, May, ([here](#)).

Campbell, M. D., 2021, “The U.S. Uranium and REE Supply Chains, A Brief Discussion,” AAPG Webinar, Pivoting 2021, Energy Industry Supply Chains, April 14, 2021, Susan Nash, Ph.D. Moderator, PDF with YouTube Narration ([here](#)).

Campbell, M. D., *et al.*, 2020, “Beyond Hydrocarbons ... The Rest of the Story,” Update to 2020 Conference Presentation, “Uranium and Nuclear Power are on the Move ... Again !,” shown below. Details, I2M News ([here](#))

Campbell, M. D., R. W. Gregory, S. S. Sibray, and J. L. Conca, 2020, “Sources of Rare Earth Elements in the U.S. and the World,” [The First AAPG-Energy Minerals Division Virtual Conference](#), September 28 to October 2, 2020. ([Abstract](#)). Full PDF version with links ([here](#)). Details, I2M News ([here](#)).

Campbell, M. D., *et al.*, 2020, “Uranium & Nuclear Power are on the Move!” [The First AAPG-Energy Minerals Division Virtual Conference](#), September 28 to October 2, 2020. Full PDF version with links ([here](#)). Details, I2M News ([here](#)).

Sibray, S. S. D. Hallum, and M. D. Campbell, 2020, "Recognizing Uranium Source Rocks in the Sedimentary Environments of Nebraska, North & South Dakotas" [The First AAPG-Energy Minerals Division Virtual Conference](#), September 28 to October 2, 2020. ([Abstract](#)) For PDF version with links & references ([here](#)).

Campbell, M. D., *et al.*, 2020, "Uranium (Nuclear and REE) Committee Annual Report," of the Energy Minerals Division (AAPG), presented a summary of the report to the [Energy Minerals Division's](#) Executive Committee, Commodity Chairs, other Committee Chairs, and special guests during a special Zoom presentation during the EMD Annual Meeting on June 6, 2020. The Annual AAPG-EMD Conference was originally scheduled for early June, 2020 in Houston, but has been cancelled because of the increasing [spread of the coronavirus](#) in the Houston area and in the cities around Texas in general. The final UCOM Annual report is now available ([here](#)).

Campbell, M. D., *et al.*, 2019, "Uranium (Nuclear and REE) Committee Annual Report," of the Energy Minerals Division (AAPG), presented a summary of the report to the [Energy Minerals Division's](#) Executive Committee, Commodity Chairs, other Committee Chairs, and special guests during the beginning of the Annual AAPG Conference on May 18, 2019 in San Antonio, Texas. The full report is available ([here](#)).

Campbell, M. D., H. M. Wise, and J. R. Conca, 2018, "Uranium, Thorium, and Rare Earth Elements Availability and Development, Time for Recovery," A Commodity Section Review in *Unconventional Energy Resources, 2017 Review*, [Journal of Natural Resources Research](#), (PDF pp. 35-50), <https://doi.org/10.1007/s11053-018-9432-1> ([here](#)).

Campbell, M. D., and M. David Campbell, 2018, "Paleoenvironmental Implications of Selected Siderite Zones in the Upper Atoka Formation, Arkoma Basin, Oklahoma-Arkansas, A Look Back and Current Views on Siderite Genesis in a Sedimentary Environment," *Int J Earth Sci Geol*. 2018; 1(1), pp. 6-41. doi, 10.18689/ijeg-1000103 ([here](#)).

Campbell, M. D., R. I. Rackley, R. W. Lee, M. David Campbell, H. M. Wise, J. D. King, and S. E Campbell, 2018, "Characterization of the Occurrence of Uranium, Thorium, Rare Earths and Other Metals in Basement Rocks as a Source for New Uranium Roll-Front District in the Tertiary Sediments in the McCarthy Marsh and Death Valley and Associated Metallogenic Areas in the Eastern Seward Peninsula, Alaska," *Journal Geology and Geosciences*, Vol. 2(1), 2018, 65 p. ([here](#)).

Campbell, M. D., 2018, "An Editorial, The Russians are Coming ... Again, The Conflict of Politics, Natural Resources and the American Political and Economic System, Prepublication version, 5p. ([here](#)).

Wise, H. M., and M. D. Campbell, 2018, "GeoDayz Lectures, Project Management Practices, Protocol, and Case Histories," February 24 and 15, Nacogdoches, Texas, [GeoDayz Guidebook](#) (see abstract on page 13 of PDF) and ([Presentation](#))

Campbell, M. D., *et al.*, 2018, "Uranium (Nuclear and REE) Committee Annual Report," to the [Energy Minerals Division's](#) Executive Committee and Commodity Chairs for their Annual AAPG-EMD Conference on May 19, 2018 in Salt Lake City, Utah. Mr. Campbell is Chair of the UCOM and scheduled to present a summary of the UCOM report via teleconference on the 19th. The full report is now available ([here](#)).

Sammons, J. D., H. M. Wise, and M. D. Campbell, 2018, "GeoDayz Demonstrations, GeoProbe (Direct-Push) Technology and Sampling of Soils, Sediments, and Rocks," February 24 and 25, Nacogdoches, Texas, [GeoDayz Guidebook](#) (see abstract on page 20 of PDF) and ([Presentation](#))

Campbell, M. D., H. M. Wise, and M. David Campbell, 2018, "Confronting Media and other Bias against Uranium Exploration and Mining, Nuclear Power, and Associated Environmental Issues," *Journal of Geology and Geoscience*, Vol. 2, No.1, 4 p. ([here](#))

Campbell, M. D., 2017, "Uranium (Nuclear and Rare Earth) Committee of the Energy Minerals Division (AAPG) to the [Energy Minerals Division](#)'s Executive Committee and Commodity Chairs during their Mid-Year Teleconference on November 27, 2017. Mr. Campbell is Chair of the UCOM. The full report is now available ([here](#)).

Campbell, M. D., H. M. Wise, and M. David Campbell, 2017, "An Update, Nuclear Power and Uranium Markets, Ownership and Uranium One (Russian Government) and Other Ownership of Uranium Resources in the World," *Journal of Geology and Geoscience*, Vol. 1, No. 1, 3 p. ([here](#)).

Campbell, M. D., M. David Campbell, R. W. Lee, and G. Collier, 2017, "Anatomy of a Case of Elevated Chloride in the Shallow Black Hand Sandstone Providing Rural Drinking Water Supplies in North-Central Ohio, USA, Hydrogeological and Hydrochemical Characterization by Major and Minor Elements, and $\delta^2\text{H}$, $\delta^{18}\text{O}$, $\delta^{13}\text{C}$ and Tritium Isotopes," *Journal of Geology and Geoscience*, Vol. 1, No. 1, 68 p. ([here](#)).

Campbell, M. D., R. W. Lee, and M. David Campbell, 2017, "Gold and Other Metals in the Cao Ram Area, Doi Bu District, Hoa Binh Region, Southwest of Hanoi, Vietnam," *Journal of Geology and Geoscience*, Vol. 1, No. 1, 38 p. ([here](#)).

Campbell, M. D., 2017, "Editorial, Publishing Buried Geological Data for the Benefit of Professional Geologists," *Journal of Geology and Geoscience*, Vol. 1, No. 1, 2 p. ([here](#)).

Campbell, M. D., *et al.*, 2017, "Uranium (Nuclear and REE) Committee Annual Report," of the Energy Minerals Division (AAPG), at the Annual EMD (AAPG) Conference, April 1, 2017, Summary presented by Chair of the UCOM, Full report, ([here](#)).

Campbell, M. D., *et al.*, 2016, "Uranium (Nuclear and REE) Committee Mid-Year Report," of the Energy Minerals Division (AAPG), by teleconference on December 18, 2016. presented by Chair of the UCOM, Full report, ([here](#)).

Campbell, M. D., *et al.*, 2016, "Uranium (Nuclear and Rare Earth) Committee Annual Report," of the Energy Minerals Division ([AAPG](#)), presented via teleconference at the Division's June meeting in Calgary, Canada by the Chair of the [Committee on Uranium \(Nuclear and Rare Earth Minerals\)](#), Full report, ([more](#)).

Petrossian, R., R. Ryan, C. Caran, and M. D. Campbell, 2016, "Economic Geology Resources of the Llano Uplift Region and the Historical Impacts to the Region's Growth," Guidebook to the Texas Section – AIPG Spring Field Trip, Llano Uplift Region, Central Texas, May 14-15, 2016, 71 p. ([more](#)).

Campbell, M. D., and M. David Campbell, 2016, "Independent Assessments of Gold, Silver, Uranium, Phosphate, Potash, and Rare-Earth Deposits in Australia, Vietnam, Texas and Alaska," An invited 90-minute presentation during the Dinner Meeting of the Houston Geological Society's Engineering and Environmental Group in Houston, Texas. PDF of the presentation slides ([more](#)). The abstract and biography ([more](#)).

Campbell, M. D., *et al.*, 2015, "Uranium (Nuclear and Rare Earth) Committee Mid-Year Report," of the Energy Minerals Division ([AAPG](#)), presented via teleconference by the Chair of the [Committee on Uranium \(Nuclear and Rare Earth Minerals\)](#) ([more](#)).

Campbell, M. D. and J. R. Conca, 2015, “Energy Competition in the Uranium, Thorium, and Rare Earth Industries in the U.S. and the World,” in the Journal of [Natural Resources Research](#), Vol. 24, No.4, pp. 8-16, in *Unconventional Energy Resources, 2015 Review*, Internet Access November 30, 2015 via ([here](#)).

Bost, R. C., L. K. Magyar, and M. D. Campbell, 2015, “Environmental, Health, and Property Damage Issues Raised by Litigants Opposing Hydraulic Fracturing and Oil and Gas Production in Texas,” Gas Mexico Congress and Exhibition, GMC15 – 149, 8 p. ([here](#)).

Campbell, M. D., V. J. Absolon, J. D. King, and M. David Campbell, 2015, “Precious Metal Resources of the Hellyer Mine Tailings Tasmania, Australia”, by I2M Associates, LLC, for Wishbone Gold, plc., London, March 9, 15 p. ([here](#)).

Campbell, M. D., M. David Campbell, and H. M. Wise, , 2014, *Growth Faulting and Subsidence in the Houston, Texas Area*, has been completed and released after more than 10 years of research and discussions among the geological community in the Houston area ([more](#)). The Guide is consistent with the goals of the IET Sponsored Research Program ([more](#)) established in the mid-1990s to provide ongoing technical support to the graduates of the IET program and other interested professionals within the Houston Geological Society and to members of the AIPG in Texas and elsewhere.

Campbell, M. D., 2014, As Chair of the Committee on Uranium (Nuclear and Rare Earth Minerals) of the Energy Minerals Division (AAPG), and I2M’s Chief Geologist/Principal Hydrogeologist, Michael D. Campbell, P.G., P.H., presented the Committee’s 2014 Mid-Year Report by teleconference during the Division’s meeting ([more](#)).

Campbell, M. D., 2014, “Notoriety Notwithstanding, Nuclear Revival is Under Way,” ([more](#)). By invitation from the EMD President, in AAPG’s *The Explorer*, November issue, 2014. This is a summary of the original article entitled, “A Perspective on Nuclear Power, Uranium, and Post-Fukushima Revival.” ([more](#)).

Campbell, M. D., M. David Campbell, J. D. King, and H. M. Wise, 2014, “Coal, Just Not for Burning,” in the journal, *The Professional Geologist*, Jul-Aug-Sep Issue, pp. 21-25. An expanded version ([here](#)).

Campbell, M. D., M. David Campbell, and J. D. King, 2014, “A Report on the Gold and Other Metals in the Cao Ram Area, Đồi Bù District, Hòa Bình Region SW of Hanoi,” by I2M Associates, LLC for Confidential Client, May 23, 114 p. ([here](#)).

Campbell, M. D., 2013, “Uranium, Thorium, and Associated REEs of Industrial Interest,” in *Unconventional Energy Resources, 2013 Review* of the Uranium Commodity Committee Activities of the Energy Minerals Division, American Assoc. Petroleum Geologists, in [PDF](#) format (see PDF pages 44-61) prior to the release of the paper in the Journal of [Natural Resources Research](#), Vol. 23, No. 1, January Issue, Springer Publishing for the paginated journal article ([more](#)).

Campbell, M. D., 2013, “Uranium Committee Mid-Year Report,” As Chair of the [Committee on Uranium \(Nuclear and Rare Earth Minerals\)](#) of the Energy Minerals Division ([AAPG](#)), presented by teleconference at the Division’s November meeting ([more](#)).

Campbell, M. D. and H. M. Wise, 2013, “Hydrogeologic Risks in the Groundwater Supply of Harris County, Texas, Radioactive Constituents, Natural Gas, and Growth Faults,” An Invited Presentation to the Environmental and Engineering Group of the Houston Geological Society, Houston, Texas, May 8, Abstract and Biographies ([more](#)); Selected References ([more](#)); PDF Slide Presentation ([here](#)).

Campbell, M. D., J. D. King, H. M. Wise, B. Handley, J. L. Conca, and M. David Campbell, 2013, "Nuclear Power and Associated Environmental Issues in the Transition of Exploration and Mining on Earth to the Development of Off-World Natural Resources in the 21st century," in *Energy Resources for Human Settlement in the Solar System and Earth's Future in Space*, AAPG-EMD Memoir 101, (eds) W. A. Ambrose, J. F. Reilly II, and D. C. Peters, eds., pp. 163–213 ([more](#)).

Campbell, M. D., 2013, "Review of Liability and Loss Prevention in the Geological Business," An Invited Presentation to the Environmental and Engineering Group of the Houston Geological Society, Houston, Texas, March 13, see ([more](#)).

Campbell, M. D., 2012, "A Technical Assessment of the Current Water Policy Boundary at the U.S. Department of Energy, Paducah Gaseous Diffusion Plant, Paducah, Kentucky," Prepared by Oak Ridge Associated Universities and I2M Associates, LLC for the U.S. Department of Energy, 56 p. ([PDF](#)).

Campbell, M. D., and J. D. King, 2012, "Wishbone II Project, Northeast Queensland, Australia," Competent Persons Report (CPR) for Wishbone Gold, plc, Shore Capital & Corporate Limited, London, England, by I2M Associates, LLC, Houston and Seattle, July 10, 139 p ([PDF](#)). Updated 2014 ([PDF](#)) to include Wishbone III and IV.

Campbell, M. D., and J. D. King, 2012, "White Mountain Project, Northeast Queensland, Australia," Competent Persons Report (CPR) for Wishbone Gold, plc, Shore Capital & Corporate Limited, London, England, by I2M Associates, LLC, Houston and Seattle, July 10, 128 p.([PDF](#)). Updated 2014 ([PDF](#)).

King, J. D., and M. D. Campbell, 2012, "On the Need Today for Due Diligence in Small Mergers and Acquisitions for Investment in Mineral Exploration, Mining, and Brownfield Projects," an I2M White Paper ([PDF](#)).

Campbell, M. D., and M. A. Wiley, 2011, "Uranium and Nuclear Minerals," in *Unconventional Energy Resources, 2011 Review* by the Energy Minerals Division, American Assoc. Petroleum Geologists, *Journal of Natural Resources Research*, Vol. 20., No. 4, December, pp. 279-328. ([Paper](#), pp. 311-328).

Campbell, M. D., and J. D. King, 2011, Iron Glen Project, Northeast Queensland, Australia, Competent Persons Report (CPR) on the Base- and Precious-Metal Potential for Iron Glen Mining Pty Ltd., Allenby Capital Limited and [Strategic Minerals plc](#), London, England, by I2M Associates, LLC, Houston and Seattle, May 2, 199 p.([PDF](#)).

Campbell, M. D., 2011, "State of the Uranium Industry in the U.S. & the World, 2011," Invited Presentation to the Ohio Geological Society Ramada Plaza Hotel & Conference Center 4900 Sinclair Rd., Columbus, Ohio, April 21, 2011, 47 p. ([PDF](#)).

Wise, H. M., and M. D. Campbell, 2011, "State of the Uranium Industry in the U.S. and the World," AAPG Conference and Exhibition, Houston, EMD Session, April 12. ([PDF](#))

Campbell, M. D., and J. D. King, 2011, Brilliant Brumby Project, Northeast Queensland, Australia Competent Persons Report (CPR) on Gold and Silver Potential for, Brumby Group Pty Ltd Southport, Queensland Australia, 125 p. ([PDF](#)).

Campbell, M. D., 2011, "Small Modular Nuclear Reactors, The Hyperion System, An Energy Solution to Remote Gas & Oil Production and Exploration," Presented in the absence of John R. (Grizzmar) Deal, CEO,

Hyperion Power Generation Inc. at the AAPG 2011 Annual Convention and Exhibition, Houston, April 12. (PDF)

Campbell, M. D., 2011, "Seeing Some Good News," *The AAPG Explorer*, February ([here](#)).

Campbell, M. D., *et al.*, 2010, As Chair of the Committee on Uranium (Nuclear and Rare Earth Minerals) of the Energy Minerals Division (AAPG), and I2M's Chief Geologist/Principal Hydrogeologist, presented the Committee's 2010 Mid-Year Report by Teleconference during the Division's Meeting, ([more](#)).

Ambrose, W. A., and M. D. Campbell, 2010, The Moon has Intriguing Implications," *The AAPG Explorer*, July, ([PDF](#)).

Campbell, M. D. and H. M. Wise, 2010, "Uranium Recovery Realities in the U.S. – A Review," Invited Presentation for the Dinner Meeting of the Houston Geological Society's Engineering and Environmental Group, May 18, Houston, Texas, 51 p. ([Click here](#)), Abstract ([Here](#)).

Campbell, M. D., J. D. King, H. M. Wise, R. I. Rackley, and B. Handley, 2009 "The Nature and Extent of Uranium Reserves and Resources and Their Environmental Development in the U.S. and Overseas," AAPG – Energy Minerals Division 2008 Report, revised for publishing in AAPG's *The Professional Geologist*, Vol. 46, No. 5, September/October, pp. 42-51 – Peer Reviewed. ([Click here](#))

Campbell, M. D. and J. D. King, 2009, "AusPotash Corporation Project, Adavale Basin, Queensland, Australia, NI 43-101 Report, by M. D. Campbell and Associates, L.P., Houston and Seattle, July 8, 113 p. ([Click here](#)).

Campbell, M. D., J. D. King, H. M. Wise, B. Handley, and M. David Campbell, 2009, "The Role of Nuclear Power in Space Exploration and the Associated Environmental Safeguards, An Overview," Report of the Uranium Committee, Energy Minerals Division to the Astrogeology Committee of AAPG. Presented at the Conference of the AAPG-Energy Minerals Division and Astrogeology Committee Sessions, June 8-10, held in Denver, CO. – Peer Reviewed. ([Click here](#)).

Campbell, M. D., B. Handley, H. M. Wise, J. D. King, and M. David Campbell, 2009, "Developing Industrial Minerals, Nuclear Minerals and Commodities of Interest via Off-World Exploration and Mining," Paper/Poster at the Conference of the American Association of Petroleum Geologists (AAPG), Energy Minerals Division Sessions, June 9, Denver, CO., 27 p. – Peer Reviewed. ([Click here](#)).

Campbell, M. D., 2009, "Uranium," in *Unconventional Energy Resources and Geospatial Information, 2008 Review by the Energy Minerals Division, American Assoc. Petroleum Geologists*, of the *Journal of Natural Resources Research*, Vol. 18., No. 1, January. – Peer Reviewed. (Uranium section in [Paper](#)).

Campbell, M. D., 2008, "Mestena Uranium LLC, Mestena Grande Projects, South Texas, NI 43-101 Report Draft," November, 154 p. ([here](#)).

Campbell, M. D., H. M. Wise, and J. D. King, 2008, "Nuclear Fuel Exploration, In Situ Recovery, and Environmental Issues in context with the National Energy Needs through Year 2040," *Proc. Texas Commission of Environmental Quality Conference and Trade Fair*, Session, "Underground Injection Control," Invited Paper, Austin, Texas, April 30, 2008 ([Click here](#)).

Campbell, M. D., J. D. King, H. M. Wise, R. I. Rackley, 2008 "The Nature and Extent of Uranium Reserves and Resources and Their Environmental Development in the U.S. and Overseas," AAPG – Energy Minerals

Division Conference, April 23, 2008, Session, “Uranium Geology and Associated Ground Water Issues”, San Antonio, Texas – Peer Reviewed. ([Click here](#)).

Campbell, M. D., 2007, “Pressure on the Electrical Grid and 3rd Quarter, 2006 Uranium Concentrate Production”, in *Unconventional Energy Resources and Geospatial Information, 2006 Review by the Energy Minerals Division, American Assoc. Petroleum Geologists*, of the *Journal of Natural Resources Research*, Vol. 16., No. 3, September. Peer Reviewed. (Uranium section in [Paper](#)).

Campbell, M. D., H. M. Wise, R. I. Rackely, 2007, “Uranium In-Situ Leach Development and Associated Environmental Issues,” Proc. Gulf Coast Geological Societies Conference, Fall, Corpus Christi, Texas, 17 p. – Peer Reviewed. PDF Version, ([here](#))

Campbell, M. D., 2007, “Nuclear is Part of the Energy Equation, Price Boosts Uranium Exploration and Production,” *AAPG Explorer*, May, URL, ([here](#)).

Campbell, M. D., H. M. Wise, and B. Handley, 2007, *Nuclear Power – Winds of Change*, Energy Minerals Division, AAPG, Uranium Committee 2007 Report, March 31, Peer Reviewed. (PDF, [here](#)). *The AAPG Explorer* Abbreviated Version ([here](#)).

Campbell, M. David, and M. D. Campbell, 2007, “Forensic Investigations of the Grave Site Environs and Remains of Harold E. Vest Interred in 1946 in Henrietta, Texas, C&A Project # 706 for H. E. Vest, H. W. Powers, and Son, LLC, Irving, Texas, 62 p. ([PDF Version](#)).

Campbell, M. D. and M. David Campbell, 2005, “Uranium Industry Re-Development and Expansion in the Early 21st Century, Supplying Fuel for the Expansion of Nuclear Power in the U.S., The Environment vs. The Paradigm,” Rocky Mountain Natural Gas Strategy Conference & Investment Forum, Session 1, Energy Supply – Quantities and Qualities, Presented by Colorado Oil & Gas Association, August 1, Denver, Colorado, 44 p. ([PDF Version Presentation](#)). ([Conference Article](#)).

Bost, R. C., M. D. Campbell, M. David Campbell, T. R. Eckols and Andrew L. Fono , 2005, “Flawed Geoscience in Forensic Environmental Investigations, Part II, How Daubert Affects the Scope and Bases for Expert Opinions” NGWA Environmental Law & Ground Water Conference, Baltimore, MD., July 21-22, ([Conference Program](#) | [Paper](#)).

Bost, R. C., M. D. Campbell, M. David Campbell, T. R. Eckols, and Andrew L. Fono, 2005, “Flawed Geoscience in Forensic Environmental Investigations, Part III, How Daubert Is a Surrogate for Ethical Questions Regarding Expert Opinions” NGWA Environmental Law & Ground Water Conference, Baltimore, MD., July 21-22, ([Conference Program](#) | [Paper](#)).

Campbell, M. D., *et al.*, 2005, *Recent Uranium Industry Developments, Exploration, Mining and Environmental Programs in the U.S. and Overseas*, Energy Minerals Division, AAPG, Uranium Committee 2005 Report, March 25, ([here](#)).

Campbell, M. D., and M. David Campbell, 2004, “Crisis Management, Ground-Water Supplies in the 21st Century,” *EnviroTechnology*, Vol. 1, Summer, pp 78-81. Peer reviewed. ([As Published](#) | [As Submitted](#)).

Campbell, M. D., 2004, *Professional Memorial, Ted H. Foss, Ph.D., P.G.*, Geological Society of America Memorials, Vol. 33, April, pp. 17-22. ([here](#)).

Anecdotes of a Lifetime

Campbell, M. D., R. C. Bost, and M. David Campbell, 2004, *"Flawed Geoscience in Forensic Environmental Investigations, Part I, The Effect of Daubert Challenges on Improving Investigations"* NGWA Environmental Law & Ground Water Conference, Chicago, IL, May 5-6, ([Conference Program](#) | [Paper](#)).

Campbell, M. D., M. David Campbell, and M. Saribudak, 2004, *"Growth Faulting, Associated Geologic Hazards, Economic & Regulatory Impact, and Methods of Investigation for the Houston, Texas Area,"* South-Central Meeting, Geological Society of America and Texas Section of the Association of Engineering Geologists Growth Fault Symposium, Texas A&M University, College Station, TX, March 16, 83 p. ([Program](#)).

Campbell, M. D., 2004, "Environmental Geoscience and Litigation, Dos and Don'ts, Now or Later," Featured Speaker, Houston Geological Society Environmental and Engineering Geology Dinner Meeting, February 10. Abstract ([here](#)).

Campbell, M. D., 2000, "Federal and State Regulations and Field Implementation in Hazardous and Solid Waste Investigations and Management," An Invited Lecture for the University of Texas School of Public Health, August 29th and September 19th, Presentation Sponsored by the Institute of Environmental Technology, Houston, Texas.

Campbell, M. D., 1999, *"The Role of Environmental Technology in Developing, Maintaining, and Protecting Ground-Water Supplies in the 21st Century,"* in *The U.S. Water Report*, Saringa Group, Inc., San Francisco, CA, pp. 264-271. Peer Reviewed. For pdf file (click [here](#)).

Campbell, M. D., 1999, "Federal and State Regulations and Field Implementation in Hazardous and Solid Waste Investigations and Management," Invited Lectures for the University of Texas School of Public Health, September 15th and October 27th, Presentation Sponsored by the Institute of Environmental Technology, Houston, Texas.

Campbell, M. D., 1998, "Ground-Water Supply Systems, Hydrogeology and the Delivery of a Municipal Water Supply," *Seminar on New Municipal Ground-Water Supply Issues, Houston, Texas*, April 16, Sponsored by the Institute of Environmental Technology, the Environmental Litigation Associates, and Gardere Wynne Sewell & Riggs, L.L.P., Attorneys, at Holiday Inn – North, I-45, Houston, Texas ([MDC Presentation Slides](#)).

Campbell, M. D., 1996 (5,4,3 & 2), Lectures on, "Environmental Awareness and Its Development, An Emphasis on the Oil & Gas Industry," *Proc. Introduction to Environmental Technology*, Spring Semesters, Institute of Environmental Technology and Houston Engineering & Scientific Society, 28 p.

Campbell, M. D., 1996 (5,4,3 & 2), Lectures on, "Resource Conservation and Recovery Act (RCRA) and Applications," *Proc. Introduction to Environmental Technology*, Spring Semesters, Institute of Environmental Technology and Houston Engineering and Scientific Society, 88 p.

Campbell, M. D., 1996 (5,4,3 & 2), Lectures on, "Applied Hydrogeology, Ground-Water Flow," *Proc. Introduction to Environmental Technology*, Spring Semesters, Institute of Environmental Technology and Houston Engineering and Scientific Society, 54 p.

Campbell, M. D., 1996 (5,4,3 & 2), Lectures on, "Applied Hydrogeology, Typical LNAPL & DNAPL Behavior in the Subsurface," *Proc. Introduction to Environmental Technology*, Spring Semesters, Institute of Environmental Technology and Houston Engineering and Scientific Society, 77 p.

Anecdotes of a Lifetime

Campbell, M. D., 1996 (5,4,3 & 2), Lectures on, "Ground-Water Modeling, Practices & Pitfalls," *Proc. Introduction to Environmental Technology*, Spring Semesters, Institute of Environmental Technology and Houston Engineering and Scientific Society, 97 p.

Campbell, M. D., 1995, "[The State of the Environmental Industry](#)," An Invited Presentation, Society of Texas Environmental Professionals, Held at Houston Engineering and Scientific Soc., August 3, 2-Hour Presentation.

Alyanak, N., J. T. Grace, and M. D. Campbell, 1995, "[A Cost-Effective Statistical Screening Method to Detect Oilfield Brine Contamination](#)," *Proc. SPE/EPA Exploration & Production Environmental Conference*, Houston, TX, March 27-29, Peer Reviewed. pp. 631-640.

Alyanak, N., and M. D. Campbell, 1995 (4 & 3), "Statistics in Environmental Investigations," *Proc Introduction to Environmental Technology*, Fall and Spring Semesters, Institute of Environmental Technology and Houston Engineering and Scientific Society, 45 p.

Campbell, M. D., 1995, "[On the Spelling of the Term, Ground Water](#)," *Bull. Houston Geological Society*, Vol.37, No.6, February, pp. 23-24.

Campbell, M. D. and K. H. Forster, 1995, Hydrogeology and Mining, a Study Guide for Workshop presented at *The National Mining Conference*, Knoxville, Tennessee, May 11, 137p.

Campbell, M. D., 1994, "Estimating Hydraulic Conductivity For Evaluating Contaminant Transport," An Invited Presentation, Houston Geological Society, Environmental / Engineering Monthly Meeting Abstract, HGS Bull., Vol. 36, No.6., p 19, ([here](#)).

Campbell, M. D. and K. H. Forster, 1994, Mining Hydrogeology, a study guide for a mini-course presented at the *National Symposium on Mining, Hydrology, Sedimentology and Reclamation*, Reno, Nevada, December 5-9, 137p.

Campbell, M. D. and K. H. Forster, 1994, Basic Mining Hydrogeology, a study guide for a mini-course presented at the *National Symposium on Mining, Hydrology, Sedimentology and Reclamation*, Springfield, Ill., December 7-11, 96p.

Forster, K. H. and M. D. Campbell, 1994, "Hydrogeologic Investigations for Designing a Dewatering and Depressurizing System in a Gulf Coast Lignite Mine," *Kentucky Coal Mining Symposium*, Bowling Green, 10p.

Campbell, M. D. and James T. Grace, 1993/94, "Phase I and Phase II Investigations of Potential Brine Contamination Sources, West Texas," Campbell and Associates Report (Private Distribution), Phase I, 28 p., Phase II, 385 p.

Campbell, M. D., 1993, "Guidance on the Selection, Design and Testing of Vapor Extraction Systems," Campbell and Associates Report (Private Distribution), October, 6 p.

Campbell, M. D., 1993, "Management of Environmental Project Teams, Line vs. Matrix Approaches," An Invited Presentation, Houston Geological Society, Environmental/Geotechnical Monthly Meeting, *Abstract, HGS Bull.*, Vol. 35, No. 11, p. 28. Presented later as an IET Lecture on January 19, 1995 ([Here](#)).

Swartz, T. E., K. Montesoglu, M. D. Campbell, and O. Akkol, 1991, "[Turkey, Ground-Water Issues in a Country with a Developing Economy](#)" in *Proc. Fifth National Outdoor Action Conference on Aquifer*

Restoration, Ground Water Monitoring, and Geophysical Methods, AGWSE Conference, May 13-16, Peer Reviewed. Las Vegas, Nevada, pp 165-174.

Campbell, M. D., Starrett, M. S., Fowler, J. D., and Klein, J, 1990, "[Slug Tests and Hydraulic Conductivity](#)" in *Proc. Petroleum Hydrocarbons and Organic Chemicals in Ground Water, and Restoration*, API/NWWA Conference, October 31 -November 2, 1990, Houston, Texas, Peer Reviewed. pp 85-99.

Campbell, M. D., *et al.*, 1990, "Hydrogeologic Principles and Contaminant Transport in Landfill Applications," An Invited Presentation, Law Engineering Technical Workshop, Greenville, S.C., June 1.

Campbell, M. D., 1989, "Hydrogeology and Water Wells," *Annual Mtg. Texas Water Board Directors*, One Hour Presentation, Dallas, for Law Engineering, Houston.

Larsson, I., M. D. Campbell, *et al.*, 1984, UNESCO Guidance Document, [Ground Water in Hard Rocks \(Igneous and Metamorphic Rocks\)](#), United Nations (UNESCO) and the Swedish International Development Authority (SIDA), 450 p., Peer Reviewed. (Editions in English, French, Spanish & Russian). ID ([more](#)).

Campbell, M. D., 1981, "Fundamentals of Water Well Technology, Well Operations and Maintenance in Igneous and Metamorphic Rocks, in *Proceedings Interregional on Ground Water in Hard Rocks*, Nov-Dec, 1979, Coimbatore, India, Peer Reviewed. pp. 116-145.

Campbell, M. D., 1981, "Economic Considerations on Ground Water Exploration and Development in Igneous and Metamorphic Rocks," in *Proceedings Interregional on Ground Water in Hard Rocks*, Nov-Dec, 1979, Coimbatore, India, Peer Reviewed. pp. 105-115.

Campbell, M. D., *et al.*, 1979, *A Review of the United Nations Ground Water Exploration and Development Programme in Developing Countries, 1962-1977*, United Nations, Natural Resources, Water Series No. 7, ST/ESA/90, New York, 84 p. Peer Reviewed.

Colburn, C. E., Abrams, E. F., Campbell, M. D., *et al.*, 1979, EPA Guidance Document, [Protection of Ground Water Resources from the Effects of Accidental Spills of Hydrocarbons and Other Hazardous Substances](#), U. S. Environmental Protection Agency, Office of Drinking Water, EPA-570/9-79-017, July, 77 p. Peer Reviewed.

Campbell, M. D., 1977, "Water Well Technology for Ground Water Development and Production in Igneous and Metamorphic Rocks," *Proc. United Nations International Seminar on Ground Water in Hard Rocks, Stockholm-Sardinia*, September 22-October 7, 61 p. Peer Reviewed.

Campbell, M. D., 1977,(ed), [Geology \[and Environmental Considerations\] of Alternate Energy Resources, Uranium, Lignite, and Geothermal Energy in the South Central States](#), Houston Geological Society, 364 p. Peer Reviewed.

Campbell, M. D. and K. T. Biddle, 1977, "Frontier Areas and Exploration Techniques – Frontier Uranium Exploration in the South-Central United States," in *Geology of Alternate Energy Resources*, Chapter 1, Published by the Houston Geological Society, pp. 3-44. ([PDF](#)) Peer Reviewed.

D. L. Warner (and M. D. Campbell), 1977, EPA Guidance Document, [An Introduction to the Technology of Subsurface Wastewater Injection](#), Chapter 6 (Pre-Injection Wastewater Treatment and Surface Facility Design), pp. 188-233; Chapter 7 (Injection Well Design and Construction) , 234-282; Chapter 8 (Start-up Operations), 283-292, and Chapter 10 (Injection Well Abandonment), 320-328. U. S. Environmental

Protection Agency, EPA-600/2-77-240, Robert S. Kerr Environmental Research Laboratory, Ada, OK. Peer Reviewed.

Campbell, M. D., 1976, Guest Editorial, "[Thomas P. Ahrens -Father of Water Well Technology](#)," *Ground Water*, Vol. 14, No. 6, pp. 365-366.

Campbell, M. D., 1976, "Water Well Construction Activity in the U.S., An Evaluation of Population Growth, Ground-Water Usage, and Gross National Product," NWWA Research Facility Report, Geology Department, Rice University, Houston, Texas ([Summary Results](#)).

Campbell, M. D., and S. N. Goldstein, 1975, "Engineering Economics of Rural Systems. "Part1 – "Elements of System Design". Part 2 – "Application of Economic Criteria to the Evaluation of Project Feasibility, A Case Study," in *Proceedings of Rural Environmental Engineering Conference on Water Pollution Control Technology in Low-Density Areas*, September 26-28, 1973, University of Vermont, Warren, Vermont, pp. 145-180. Peer Reviewed.

Campbell, M. D., and J. H. Lehr, 1975, "[Engineering Economics of Rural Systems, A New US Approach](#)," *Journal American Water Works Association*, Vol. 67, No. 5, pp. 225-231. Peer Reviewed.

Campbell, M. D., et al., 1975, EPA Guidance Document, [Manual of Recommended Water Well Construction Standards](#), US EPA Contract 68-01-92, Office of Research and Development, 177 p. (NWWA Research Facility at Rice University and NWWA Water Well Standard Committee) Peer Reviewed.

Campbell, M. D., and J. H. Lehr, 1975, "[Well Cementing](#)," *Water Well Journal*, Vol. 29, No. 7, pp. 39-42. Peer Reviewed.

Campbell, M. D., and R. H. Schwartz, 1975, "Critical Energy Resource Areas, Subsurface Information from Ground Water Exploration and Other Shallow Exploration Activities," *Proc. Symposium on Subsurface Geo-Science Records and Materials, sponsored by the Federal Energy Administration*, Dallas, Texas, April 10.

Campbell, M. D., and G. R. Gray, 1975, "[Mobility of Well-Drilling Additives in the Ground-Water System](#)," in *Proceedings Conference on Environmental Aspects of Chemical Use in Well Drilling Operations*, Houston, May, 1975, pp. 261-288. Peer Reviewed.

Campbell, M. D., 1974, "[Rural Water Systems Automation and Telemetry, An Economic Advantage](#)," *Rural Water News*, No. 12, NDWP Technical Note 2.

Campbell, M. D., 1974, "Rural Water Systems, Ground Water Quality Control and Testing," *Rural Water News*, No. 11, National Demonstration Water Project Technical Note. 1.

Campbell, M. D., 1974, "Regional Survey of Theses and Dissertations on Ground Water," *Ground Water*, Vol. 12, No. 2, pp. 112-117.

Campbell, M. D., 1974, "A Guide to the Technical Literature of the Ground-Water Industry," NWWA Research Facility Report, Geology Department, Rice University, Houston, Texas, June, 45 p.

Campbell, M. D., William A. Hunt, and W. Moberg, 1974, [Chapter 2, "Operating and Maintaining Rural Water Systems," and Chapter 4, "Training and Utilizing Plant Operators,"](#) in *A Guide for the Support of Rural Water and Wastewater Systems Operations and Maintenance*, Commission on Rural Water and NWWA Research Facility, Rice University, Houston, 283 p.

Anecdotes of a Lifetime

Campbell, M. D., 1974, "O and M Costs, Pay Now or Pay Later," *Water Well Journal*, Vol. 28, No. 2, pp. 26-27.

Campbell, M. D., 1973, "Well Cost Analysis," *Water Well Journal*, Vol. 25, No. 5, pp. 35-38.

Campbell, M. D., 1973, Guest Editorial, "Practical Ground Water Research, A University-Industrial Solution," *Ground Water*, VII, No. 6, pp. 2-3.

Campbell, M. D. and Hunt, W. A., 1973, "Engineering Economics of Rural Water Systems," in *Proceedings of International Ground Water Symposium/Macquarie University*, Sydney, Australia, Seminar 1, National Development – Session 3, "Cost Benefit Versus Risk Capital," Sydney, Australia, November 20-23, pp. 1-20.

Campbell, M. D. and Hunt, W. A., 1973, "The Challenge of Environmental Protection and Industrial Development – An American Viewpoint," in *Proceedings of International Ground Water Symposium/Macquarie University*, Seminar 1, National Development – Session 3, "The Place for Private Water Supplies," Sydney, Australia, November 20-23, pp. 1-12

Campbell, M. D., 1973, [Spray Effluent Irrigation, An Editorial](#), *Irrigation Journal*, May-June, p. 4.

Campbell, M. D., and J. H. Lehr, 1973, [Water Well Technology](#), subtitled, Field Principles of Exploration Drilling for Ground-Water and Selected Minerals, a textbook, McGraw-Hill, 697 p., 165 figs., 120 tabs., 68 eqs., 674 refs. (12th printing – 1987). Peer Reviewed.

Campbell, M. D., and Lehr, J. H., 1973, [Rural Water Systems Planning and Engineering Guide](#), Commission on Rural Water, Washington, D. C., 150p. Peer Reviewed.

Campbell, M. D., 1973, Guest Editorial, "[Industrial Progress Through Practical Research](#)," *Ground Water*, Vol. 11, No. 1, pp. 2-4.

Campbell, M. D., 1972, "Water Well Construction Technology, -Variations on Rotary Drilling and Other Common Drilling Systems," *Water Well Journal*, Vol. 26, No. 8, pp. 39-43.

Campbell, M. D., 1972, "Water Well Technology, – The Turbodrill," *Water Well Journal*, Vol. 26, No. 9, pp. 48-52.

Campbell, M. D., 1972, "Water Well Construction Technology, -Future Drilling Systems," *Water Well Journal*, Vol. 26, No. 11, pp. 46-51.

Campbell, M. D., 1972, "Introduction to Rotary Drilling Systems and Mud Drilling Fluids," *Water Well Journal*, Vol. 26, No. 6, pp. 42-45, 17 refs.

Campbell, M. D., 1972, "Water Well Construction Technology. Part 3 – Cable Tool Drilling," *Water Well Journal*, Vol. 26, No. 5, p. 58-61.

Campbell, M. D., 1972, "Rock Drillability," *Water Well Journal*, Vol. 26, No. 4, pp. 55-58, 7 refs., 4figs.

Campbell, M. D., 1972, "Water Well Construction Technology. Part 1 – Introduction," *Water Well Journal*, Vol. 26, No. 3, p.42-45.

Campbell, M. D., 1971, "[Notes on Science, Progress Through Research](#)," *Water Well Journal*, Vol. 25, No. 11, p. 48-49.

Anecdotes of a Lifetime

Campbell, M. D., 1971, "[Notes on Science, Terradynamics](#)," *Water Well Journal*, Vol. 25, No. 10, p. 42-44.

Campbell, M. D., and S. H. Ross, 1971, "[Geophysics and Ground Water, Part II, Applied Use of Geophysics](#)," *Water Well Journal*, Vol. 25, No. 8, pp. 35-50, 13 figs., 3 tabs., 23 refs.

Campbell, M. D., and S. H. Ross, 1971, "[Geophysics and Ground Water, Part I, Applied Use of Geophysics, A Primer](#)," *Water Well Journal*, Vol. 25, No. 7, pp. 39-50, 14 figs., 3 tabs., 23 refs.

Campbell, M. D., 1971, "Hot-Line to Technology," *Water Well Journal*, Vol. 25, No. 4, p. 54; Announcement of the appointment of Mr. Campbell as the Director of Research, NWWA Research Facility, Columbus, Ohio ([more](#)).

Management of Geothermal Exploration and Development Projects

In 1976, Mr. Campbell conducted extensive investigations on the potential geothermal value of selected properties in [Dixie Valley, Nevada](#) for a series of clients. Based on the available geological, geophysical, and hydrogeological data, Mr. Campbell recommended further investigations and a preliminary drilling and hot-spring sampling program. Results indicated favorable conditions existed in the subsurface complex of Basin-and-Range geologic structures. Additional federal lands were acquired by the client in Dixie Valley and other geothermal companies became interested in the area. Deep exploratory drilling began and significant discoveries of elevated temperature, liquid-dominated geothermal energy reservoirs were identified. Economic analyses were conducted on behalf of the client to establish land values for possible buyout or merger with other geothermal companies. The client subsequently sold its interests. Dixie Valley geothermally-generated power plants went on-stream in 1987 and is producing electricity for the Nevada-California power grid on a regular basis.

Mr. Campbell conducted a series of additional geologic, hydrogeologic and economic investigations for a number of geothermal companies in the western US. He continues to monitor industry activities.

Applicable Geothermal Publications / Major Reports

Campbell, M. D., 1983, "Report of Investigations on Selected Geothermal Properties and Their Potential Productivity, Western United States," a Keplinger Consulting Report (private distribution), 32 p., June.

Campbell, M. D., 1983, "[Dixie Valley, Nevada, A Promising Geothermal Area Under Development By Industry](#)," *Proc. 18th Inter. Society Conversion Engineering Conference*, Orlando, Florida, August 21-26, Session 79, 6 p.

Campbell, M. D. and C. C. Wielchowsky, 1982, "[A Review of the Dixie Valley, Nevada, Liquid-Dominated Geothermal Resource and the Relationship of Selected Geologic Characteristics to Potential Geothermal Production](#)," *Proc. Am. Chemical Eng. Institute, Ann. Mtg.* (1982), 43 p., 6 figs., 5 tabs., refs.

Campbell, M. D., 1979, "Geopressured Geothermal Energy Potential of the Hidalgo Fairway, Texas," *Proc. Seminar on Geothermal Energy*, Brownsville, Texas, October 4, sponsored by the Brownsville Navigation District, 15 p., October.

Campbell, M. D., and C. C. Wielchowsky, 1978, "Interim Evaluation and Exploration and Development Status, Geothermal Potential and Associated Economics of Dixie Valley, Nevada," a Keplinger Consulting Report (private distribution), 110 p., September.

Anecdotes of a Lifetime

Campbell, M. D., and C. C. Wielchowsky, 1977, "Phase II Preliminary Evaluation of Dixie Valley, Nevada, Geothermal Potential and Associated Economics," a Keplinger Consulting Report (private distribution), 44 p., September.

Campbell, M. D., 1977, *Geology [and Environmental Impact] of Alternate Energy Resources, Uranium, Lignite, and Geothermal Energy in the South Central States*, Houston Geological Society, 364 p.

Campbell, M. D., 1977, "A Review of the Mineral Potential (Uranium, Fluorspar, Mercury, Geothermal Energy, Coal and Other Minerals) of Certain Land Holdings in the Big Bend, Texas Area," a Keplinger Consulting Report (private distribution), 20 p., May.

Campbell, M. D., 1977, "A Preliminary Evaluation of the Hughes Geothermal Properties in Churchill County, Nevada," A Keplinger Consulting Report (private distribution), 62 p., April.

Management of Coal / Lignite Exploration and Development Projects

In the mid-1970's, Mr. Campbell initiated and managed the lignite exploration activities for General Crude Oil Company (Div. International Paper, Inc.) in Arkansas, Texas, Mississippi and Alabama. Subsequent consulting assignments on coal and lignite in the 1970's and 1980's involved, exploration programs, preliminary mining feasibility studies, detailed reserve analyses, property evaluations, and mining operations assessment and evaluation.

Applicable Coal-Lignite Publications / Major Reports

Campbell, M. D., M. David Campbell, J. D. King, and H. M. Wise, 2014, "Coal, Just Not for Burning," in the journal, *The Professional Geologist*, Jul-Aug-Sep Issue, pp. 21-25. An expanded version ([here](#)).

Campbell, M. D., and K. H. Forster, 1987, Basic Mining Hydrogeology, A Study Guide for a Mini-Course Presented at the 1987 National Symposium on Mining, Hydrology, Sedimentology and Reclamation, Springfield, Illinois, December 7-11, Sponsored by the University of Kentucky, Office of Continuing Education and Extension, College of Engineering, 88 p. ([here](#)).

Campbell, M. D., 1983, "Preliminary Evaluation of Coal Reserves, Cambria County, Pennsylvania," a Campbell, Foss and Buchanan Consulting Report (private distribution), 10 p., December.

Campbell, M. D., C. C. Colburn, and D. J. Lynch, 1979, "An Evaluation of Coal Resources and Mining Economics, Wayne County, Utah," a Keplinger Consulting Report (private distribution), 295 p., March.

Campbell, M. D., and J. P. Garten, 1977, "Evaluation of a 340 Acre Surface Coal Mining Prospect, Sand Mountain, DeKalb County, Alabama," a Keplinger Consulting Report (private distribution), 31 p., June.

Campbell, M. D., 1977, *Geology [and Environmental Impact] of Alternate Energy Resources, Uranium, Lignite, and Geothermal Energy in the South Central States*, Houston Geological Society, 364 p.

Campbell, M. D., 1977, "A Review of the Mineral Potential (Uranium, Fluorspar, Mercury, Geothermal Energy, Coal and Other Minerals) of Certain Land Holdings in the Big Bend, Texas Area," a Keplinger Consulting Report (private distribution), 20 p., May.

Campbell, M. D., 1976, "Alternate Energy and Mineral Development, General Outlook and Comparative Economics," *Proc. 1976 Keplinger Energy Seminar*, University Club, New York City, November 23, 30 p.

Management of Mineral Exploration Programs

During the mid to late 1960's, Mr. Campbell worked for a major American oil and minerals company (Conoco Mining Group) in Australia and Southeast Asia successfully conducting / managing field exploration programs, drilling operations, and water-supply investigations for development projects involving industrial and energy minerals, and precious and base metals (discovery credited on new phosphate field in NT). In the early 1970's, after returning to the U.S., he was transferred to the Conoco Uranium group in Casper. He then served about two years as Regional Geologist with a major uranium exploration and mining company in Wyoming (Teton Exploration, Div. United Nuclear Corporation). While there, he conducted research on hydrochemistry associated with roll-front uranium occurrences and applied the results to the company's field program nationwide.

Mr. Campbell subsequently conducted various exploration programs as a consultant in the U.S. for companies such as Texas Eastern Nuclear, Omega Energy Corporation, General Crude Oil Company, and others during the mid-1970's on targets ranging from uranium, rare earth minerals, sulfur, industrial minerals to base metals and precious metals. He continued to be engaged in mining projects as a consultant during the latter 1970's and early 1980's.

In 1983, [Mr. Campbell and two associates](#) formed a consulting firm and conducted many [domestic](#) and [international](#) geologic, mining, economic, and hydrogeologic investigations including mineral property valuations and exploration programs ([re-discovery credited](#)), mine operational and financial management projects, [mineral reserve analyses](#), preliminary feasibility studies, environmental investigations of various types, and other geotechnical investigations.

In the early 2000s, Mr. Campbell was made a Fellow in the Geological Society of America (GSA), and was appointed as Chairman of the AAPG Energy Minerals Division (EMD)'s Committee on Uranium (and Nuclear Minerals), a position he continued to hold until 2021 (see [Here](#)). In 2009, he was subsequently elected as President-Elect of the EMD and completed his term as President of EMD in 2011, (see [Here](#)).

In 2010, after some 17 years operating a private practice via M. D. Campbell and Associates, L.P., he joined [I2M Associates, LLC](#) based in Seattle with an office in Houston, for the purpose of working projects related to a renewed interest in mineral commodities throughout the world. Mr. Campbell was made a Fellow in the Society of Economic Geologists (SEG) in 2011, and earlier a Registered Member of the [Society of Mining and Exploration \(Registered Member of SME of AIME\)](#).

Applicable Minerals Publications / Major Reports / Presentations

Campbell, M. D., R. I. Rackley, R. W. Lee, M. David Campbell, H. M. Wise, J. D. King, and S. E Campbell, 2018, "Characterization of the Occurrence of Uranium, Thorium, Rare Earths and Other Metals in Basement Rocks as a Source for New Uranium Roll-Front District in the Tertiary Sediments in the McCarthy Marsh and Death Valley and Associated Metallogenic Areas in the Eastern Seward Peninsula, Alaska," *Journal Geology and Geosciences*, Vol. 2(1), 2018, 65 p. ([here](#))

Campbell, M. D., H. M. Wise, and M. David Campbell, 2018, "Confronting Media and other Bias against Uranium Exploration and Mining, Nuclear Power, and Associated Environmental Issues," *Journal of Geology and Geoscience*, Vol. 2, No.1, 4 p. ([here](#))

Campbell, M. D., 2017, "Uranium (Nuclear and Rare Earth) Committee of the Energy Minerals Division (AAPG) Releases 2017 Mid-Year (Year-End) Report," of the Energy Minerals Division (AAPG), at the EMD Teleconference, November 26, 2017, Summary presented by Chair of the UCOM, Full report, ([more](#)).

Campbell, M. D., H. M. Wise, and M. David Campbell, 2017, "An Update, Nuclear Power and Uranium Markets, Ownership and Uranium One (Russian Government) and Other Ownership of Uranium Resources in the World," *Journal of Geology and Geoscience*, Vol. 1, No. 1, 3 p. ([here](#)).

Campbell, M. D., R. W. Lee, and M. David Campbell, 2017, "Gold and Other Metals in the Cao Ram Area, Doi Bu District, Hoa Binh Region, Southwest of Hanoi, Vietnam," *Journal of Geology and Geosciences*, Vol. 1, No. 1, 38 p. ([here](#)).

Campbell, M. D. and M. David Campbell, 2016, "Independent Assessments of Gold, Silver, Uranium, Phosphate, Potash, and Rare-Earth Deposits in Australia, Vietnam, Texas and Alaska," An invited 90-minute presentation during the Dinner Meeting of the Houston Geological Society's Engineering and Environmental Group in Houston, Texas. PDF of the presentation slides ([more](#)). The abstract and biography ([more](#)).

Campbell, M. D., V. J. Absolon, J. D. King, and M. David Campbell, 2015, "Precious Metal Resources of the Hellyer Mine Tailings Tasmania, Australia", by I2M Associates, LLC, for Confidential Client, March 9, 15 p.

Campbell, M. D., M. David Campbell, and J. D. King, 2014, "A Report on the Gold and other metals in the Cao Ram Area, Đồi Bù District, Hòa Bình Region SW of Hanoi," by I2M Associates, LLC for Confidential Client, May 23, 114 p.

Campbell, M. D., J. D. King, H. M. Wise, B. Handley, J. L. Conca, and M. David Campbell, 2013, "Nuclear Power and Associated Environmental Issues in the Transition of Exploration and Mining on Earth to the Development of Off-World Natural Resources in the 21st century," in *Energy Resources for Human Settlement in the Solar System and Earth's Future in Space*, AAPG Memoir 101, (eds) W. A. Ambrose, J. F. Reilly II, and D. C. Peters, eds., pp. 163–213 ([more](#)).

Campbell, M. D., and J. D. King, 2012, "Wishbone II Project, Northeast Queensland, Australia," Competent Persons Report (CPR) for Wishbone Gold, plc, Shore Capital & Corporate Limited, London, England, by I2M Associates, LLC, Houston and Seattle, July 10, 139 p.

Campbell, M. D., and J. D. King, 2012, "White Mountain Project, Northeast Queensland, Australia," Competent Persons Report (CPR) for Wishbone Gold, plc, Shore Capital & Corporate Limited, London, England, by I2M Associates, LLC, Houston and Seattle, July 10, 128 p.

King, J. D., and M. D. Campbell, 2012, "On the Need Today for Due Diligence in Small Mergers and Acquisitions for Investment in Mineral Exploration, Mining, and Brownfield Projects," an I2M White Paper ([PDF](#)).

Campbell, M. D., and M. A. Wiley, 2011, "Uranium and Nuclear Minerals," in *Unconventional Energy Resources, 2011 Review* by the Energy Minerals Division, American Assoc. Petroleum Geologists, *Journal of Natural Resources Research*, Vol. 20., No. 4, December, pp. 279-328. ([Paper](#), pp. 311-328).

Anecdotes of a Lifetime

Campbell, M. D., 2011, "State of the Uranium Industry in the U.S. & the World, Updated – 2011," Presented at the April Meeting of the Ohio Geological Society, Ramada Plaza Hotel & Conference Center, Columbus, Ohio, April 21, ([PDF](#)).

Wise, H. M., and M. D. Campbell, 2011, "State of the Uranium Industry in the U.S. and the World," AAPG Conference and Exhibition, Houston, EMD Session, April 12. ([PDF](#)).

Campbell, M. D., and J. D. King, 2011, Brilliant Brumby Project, Northeast Queensland, Australia Competent Persons Report (CPR) on Gold and Silver Potential for, Brumby Group Pty Ltd Southport, Queensland Australia, 125 p. ([PDF](#)).

Campbell, M. D., 2011, "Small Modular Nuclear Reactors, The Hyperion System, An Energy Solution to Remote Gas & Oil Production and Exploration," Presented in the absence of John R. (Grizz) Deal, CEO, Hyperion Power Generation Inc. at the AAPG 2011 Annual Convention and Exhibition, Houston, April 12. ([PDF](#))

Campbell, M. D., and J. D. King, 2011, Iron Glen Project, Northeast Queensland, Australia, Competent Persons Report (CPR) on the Base- and Precious-Metal Potential for Iron Glen Mining Pty Ltd., Allenby Capital Limited and [Strategic Minerals plc](#), London, England, by I2M Associates, LLC, Houston and Seattle, May 2, 199 p. ([PDF](#)), ([Video](#)).

Campbell, M. D., *et al.*, 2010, As Chair of the Committee on Uranium (Nuclear and Rare Earth Minerals) of the Energy Minerals Division (AAPG), and I2M's Chief Geologist/Principal Hydrogeologist, presented the Committee's 2014 Mid-Year Report by Teleconference during the Division's Meeting, ([more](#)).

Campbell, M. D. and H. M. Wise, 2010, "Uranium Recovery Realities in the U.S. – A Review," Invited Presentation for the Dinner Meeting of the Houston Geological Society's Engineering and Environmental Group, May 18, Houston, Texas, 51 p. ([Click here](#))

Campbell, M. D., J. D. King, H.M. Wise, B. Handley, and M. David Campbell, 2009, "The Role of Nuclear Power in Space Exploration and the Associated Environmental Safeguards, An Overview," Report of the Uranium Committee, Energy Minerals Division to the Astrogeology Committee of AAPG. Presented at the Conference of the AAPG-Energy Minerals Division and Astrogeology Committee Sessions, June 8-10, held in Denver, CO. ([Click here](#)).

Campbell, M. D., B. Handley, H. M. Wise, J. D. King, and M. David Campbell, 2009, "Developing Industrial Minerals, Nuclear Minerals and Commodities of Interest via Off-World Exploration and Mining," Paper/Poster at the Conference of the American Association of Petroleum Geologist (AAPG), Energy Minerals Division Sessions, June 9, Denver, CO., 27 p. ([Click here](#)).

Campbell, M. D., 2009, "Uranium," in *Unconventional Energy Resources and Geospatial Information, 2008 Review by the Energy Minerals Division, American Assoc. Petroleum Geologists*, of the *Journal of Natural Resources Research*, Vol. 18., No. 1, January. (Uranium section in [Paper](#)).

Campbell, M. D. and J. D. King, 2009, "AusPotash Corporation Project, Adavale Basin, Queensland, Australia, NI 43-101 Report, by M. D. Campbell and Associates, L.P., Houston and Seattle, July 8, 113 p. ([Click here](#)).

Campbell, M. D., *et al.*, 2008, "Nuclear Fuel Exploration, In Situ Recovery, and Environmental Issues in context with the National Energy Needs through Year 2040," *Proc. Texas Commission of Environmental*

Anecdotes of a Lifetime

Quality Conference and Trade Fair, Session, “Underground Injection Control,” Invited Paper, Austin, Texas, April 30, 2008 ([Click here](#)).

Campbell, M. D., 2008, “Mestena Uranium LLC, Mestena Grande Projects, South Texas, NI 43-101 Report Draft,” November, 154 p. ([here](#)).

Campbell, M. D., *et al.*, 2008 “The Nature and Extent of Uranium Reserves and Resources and Their Environmental Development in the U.S. and Overseas,” AAPG – Energy Minerals Division Conference, April 23, 2008, Session, “Uranium Geology and Associated Ground Water Issues”, San Antonio, Texas ([Click here](#)).

Campbell, M. D., *et al.*, 2007, “Uranium In-Situ Leach Development and Associated Environmental Issues,” Proc. Gulf Coast Geological Societies Conference, Fall, Corpus Christi, Texas, 17 p. PDF Version, ([here](#)).

Campbell, M. D., 2007, “Pressure on the Electrical Grid and 3rd Quarter, 2006 Uranium Concentrate Production”, in Unconventional Energy Resources and Geospatial Information, 2006 Review by the American Assoc. Petroleum Geologists, Energy Minerals Division, *Natural Resources Research*, Vol. 16., No. 3, September. ([Paper](#)).

Campbell, M. D. and M. David Campbell, 2005, “Uranium Industry Re-Development and Expansion in the Early 21st Century, Supplying Fuel for the Expansion of Nuclear Power in the U.S., The Environment vs. The Paradigm,” Rocky Mountain Natural Gas Strategy Conference & Investment Forum, Session 1, Presented by Colorado Oil & Gas Association, August 1-3, Denver, Colorado, 44 p.

Campbell, M. D., *et al.*, 2005, Recent Uranium Industry Developments, Exploration, Mining and Environmental Programs in the U.S. and Overseas, Energy Minerals Division, AAPG, Uranium Committee 2005 Report, March 25, ([here](#)).

Campbell, M. D., 2004, Professional Memorial, Ted H. Foss, Ph.D., P.G., Geological Society of America Memorials, Vol. 33, April, pp. 17-22. ([here](#)).

Campbell, M. D., 2004, Preliminary Examination of Mineralogical Samples from Rwanda, April 24, 32 p. (Confidential Client from Rwanda).

Campbell, M. D. and K. H. Forster, 1996, Hydrogeology and Mining, a Study Guide for Workshop presented at The National Mining Conference, Knoxville, Tennessee, May 11, 137p.

Campbell, M. D. and K. H. Forster, 1995, Mining Hydrogeology, a study guide for a mini-course presented at the National Symposium on Mining, Hydrology, Sedimentology and Reclamation, Reno, Nevada, December 5-9, 137p.

Campbell, M. D. and K. H. Forster, 1995, Basic Mining Hydrogeology, a study guide for a mini-course presented at the National Symposium on Mining, Hydrology, Sedimentology and Reclamation, Springfield, Ill., December 7-11, 96 p. ([here](#)).

Forster, K. H. and M. D. Campbell, 1994, “Hydrogeologic Investigations for Designing a Dewatering and Depressurizing System in a Gulf Coast Lignite Mine,” Kentucky Coal Mining Symposium, Bowling Green, 10p.

Anecdotes of a Lifetime

Campbell, M. D. and S. R. Dinkowitz, 1987, "Preliminary Conclusions on the Geology, Mineralogy and Structural Controls of Mineralization at the Lookout Mt. and Hamburg Mines," A Field Trip Lecture at the Norse Windfall Mines, Inc., Eureka, April 11, 1987, *Post-Meeting Field Trip, The Symposium on Bulk Minable Precious Metal Deposits of the Western United States*, Sponsor Geological Society of Nevada, 35 p.

Campbell, M. D. and T. H. Foss, 1987, "[The Re-Discovery of Precious Metals in the Eureka Mining District, Nevada](#)," *Proc. The Symposium on Bulk Minable Precious Metal Deposits of the Western United States*, April 6-8, 1987, [Geological Society of Nevada](#), 15p.

Campbell, M. D., T. H. Foss and K. J. Buchanan, 1986, "Report of Investigations on the Preliminary Feasibility of Development of the Eureka Precious Metals Project, Nevada," a Campbell, Foss & Buchanan, Inc. Consulting Report (private distribution), 123 p.

Campbell, M. D., and T. H. Foss, 1984, "Report of Investigations on the Geology, Geochemistry and Geophysics of the Eureka Precious Metal Properties, Nevada," a Campbell, Foss and Buchanan Consulting Report (private distribution), approx. 300 p., August.

Campbell, M. D. and T. H. Foss, 1984, "Preliminary Evaluation of Selected Precious Metal Properties in North Carolina," a Campbell, Foss and Buchanan Consulting Report (private distribution), 15 p., July.

Campbell, M. D., 1984, "Preliminary Evaluation of the Minera Guayape, S.A. Precious Metal Project, Honduras, a Campbell, Foss and Buchanan Consulting Report (private distribution), 10 p., May.

Campbell, M. D., 1984, "Preliminary Evaluation of the Agua Fria Precious Metal Project, Honduras," a Campbell, Foss and Buchanan Consulting Report (private distribution), 10 p., May.

Campbell, M. D., 1982, "Report of Investigations on Precious Metal Properties, Rainbow Valley Area, Maricopa County, Arizona," a Keplinger Consulting Report (private distribution), 105 p.

Campbell, M. D., and L. Clark, 1981, "Preliminary Economic Analysis of the Mining Restrictions and Land Takes from the Hartman Farm by the City of Columbus, Ohio, Division of Water," for the BancOhio National Bank, Trustee for the Hartman Trust, by Keplinger and Associates, Inc., Houston, May 15, 15 p.

Campbell, M. D., 1980, "Preliminary Investigations on the Uranium and Other Mineral Potential of Sudan," a United Resources International Consulting Report (private distribution), 19 p. (April).

Campbell, M. D., and D. J. Lynch, 1980, "Preliminary Mining Engineering Evaluation and Economic Analysis of the Sand and Gravel Resources on Selected Properties Near Columbus, Ohio," for the BancOhio National Bank, Trustee for the Hartman Trust, a Keplinger Consulting Report, January 1, 85 p.

Campbell, M. D., and K. T. Biddle, 1978, "Preliminary Evaluation of Quaternary Carbonate Deposit for Use as Raw Material in Domestic Cement Production," a Keplinger Consulting Report (private distribution), 27 p., July.

Campbell, M. D., 1978, "An Evaluation of Certain Tin and Uranium Interests, Prospect Evaluation and Associated Economics," a Keplinger Consulting Report (private distribution), 35 p., June.

Campbell, M. D., 1977, *Geology [and Environmental Impact] of Alternate Energy Resources, Uranium, Lignite, and Geothermal Energy in the South Central States*, Houston Geological Society, 364 p. For Text Summary, click ([here](#)).

Anecdotes of a Lifetime

Campbell, M. D., and C. C. Wielchowsky, 1977, "Phase II Geological and Mineral Reconnaissance of the Eastern Front of the Stillwater Range from I.X.L. to Cottonwood Canyons, Dixie Valley Area, Churchill County, Nevada," a Keplinger Consulting Report (private distribution), 65 p., October.

Campbell, M. D., 1977, "A Review of the Mineral Potential (Uranium, Fluorspar, Mercury, Geothermal Energy, Coal and Other Minerals) of Certain Land Holdings in the Big Bend, Texas Area," a Keplinger Consulting Report (private distribution), 20 p., May.

Campbell, M. D., 1977, "Preliminary Evaluation of Uranium Ore reserves in the Uravan Mineral Belt and Vicinity," a Keplinger Consulting Report (private distribution), 62 p., April.

Campbell, M. D., 1976, "Mineral Exploration and Development Program in the Republic of Niger, Africa," a Keplinger Consulting Report (private distribution) 22 p., November.

Campbell, M. D., 1976, "Alternate Energy and Mineral Development, General Outlook and Comparative Economics," A presentation made at the 1976 Keplinger Energy Seminar, University Club, New York City, November 23, 30 p.(Handout).

Campbell, M. D., 1974, *Uranium Potential of the United States, Stage I, Frontier Exploration*, United Resources Consulting Report for Pioneer Nuclear, Inc. and Texas Eastern Nuclear, Inc. (copyrighted), 218 p, 21 plates, 46 figs., 7 tabs., 389 refs. (Houston).

Campbell, M. D., 1974, "Potassium-Uranium Systematics, Geologic Implications of Moon-Earth-Meteorite Origins," *Rice University Department of Geology Special Paper*, 74 p. ([here](#)).

Campbell, M. D., 1971, "A Preliminary Evaluation for Uranium in the Green River Utah Project Area," Consulting Report, United Resources International, 44 p., 20 figs., 10 refs. ([here](#)).

Campbell, M. D., 1971, "Economic Silver Deposits, By Reduction Bubble?" Consulting Report, United Resources, 15 p., 6 figs., 7 refs. ([here](#)).

Campbell, M. D., 1970, "Preliminary Recommendation Report on the Uranium and Other Mineral Potential of Pennsylvania," Pa. Report No. 2, Stage II Evaluation, United Nuclear Corporation, (private client distribution), 80 p., 19 figs, 3 plates, 2 tabs., 37 refs. (unpubl.).

Campbell, M. D., 1970, "Final Reconnaissance Report on the Uranium Potential of Ohio," Ohio Report No. 2, United Nuclear Corporation, 42 p., 8 figs., 7 tabs., 1 plate (unpubl.)

Campbell, M. D., 1969, "An Evaluation for Uranium of the [Pidginga Lakes Area, South Australia](#)," Consulting Report of Minoil, 65 p., 8 refs. (unpubl.)

Campbell, M. D., 1969, "Final Report on Undilla Basin Phosphate, Queensland, Australia," for Queensland Department of Mines, and Continental Oil Company of Australia, Plant Foods Division, 65 p., 1 fig., 5 tabs. 4 plates, 3 appen. ([Here](#))

Campbell, M. D., 1969, "Report on Preliminary Beneficiation Results, Undilla Basin, Queensland, Australia," Inhouse Document to Conoco, New York Office, Continental Oil Company of Australia, Plant Foods Division, 15 p., 6 figs., 3 tabs., (unpubl.)

Anecdotes of a Lifetime

Campbell, M. D., 1968, "Analysis of Transportation, Water Resources, Multiple Product Recovery, and Mining and Slurry Transportation in Australia," Interim Phosphate Report No. 2, Australian Phosphate Project," Inhouse Document to Conoco, New York Office, Continental Oil Company of Australia, Mineral Exploration Division, 25 p., 15 figs.

Campbell, M. D., 1968, "Report of Potash Potential, Carnarvon Basin, Western Australia," Continental Oil Company of Australia, Minerals Exploration Division, 15 p., 6 figs., 3 tabs. Inhouse document provided to E. C. Gene Pendery, Manager, Plant Foods Division, CONOCO, Ponca City, OK (unpubl.)

Campbell, M. D., 1968, "Progress Notes on 1968 Drilling Operations for Phosphate, A to P 354M & 375M, Undilla Basin, Queensland, Australia," for Queensland Department of Mines, and Plant Foods Div., Continental Oil Company of Australia, June 30, 54 p., with Figs, Tabs, and Plates. ([Here](#))

Campbell, M. D., 1968, "Discovery of New Phosphate Deposits, Interim Phosphate Report No. 1, Alroy Downs Area, Northern Territory, Australia," for Northern Territory Department of Mines, Continental Oil Company of Australia, Plant Foods Division, 22 p., 3 tabs., 3 plates ([Here](#)).

Fitzpatrick, B. F., and M. D. Campbell, 1967, "Progress Report on Phosphate Exploration in the Undilla Basin, A to P 354M and 375M, NW Queensland," for Queensland Department of Mines, and Plant Foods Div., Continental Oil Company of Australia, 45 p., 21 Append, 2 plates. ([Here](#)).

Mine Management

During the mid-1980's, Mr. Campbell provided technical, operational, financial and environmental management consulting for a heap-leach precious metal mine in Nevada. He served as part of three-man, matrix consulting management team that provided management consulting for operations and management of a multiple mine-central mill project with 35 employees and for the prime mining, crushing, hauling, and agglomerating contractor with more than 30 employees.

Mr. Campbell's activities included,

- 1) management consulting for the start-up mine operations,
- 2) consulting on operational financial and accounting (\$8 million cash flow/year),
- 3) consulting on company operating and hazardous material safety and bullion security policy development via personnel manual,
- 4) joint-venture representation with major mining companies,
- 5) development of economic modeling programs for detailed financial analyses month-to-month economic conditions,
- 6) day-to-day monitoring of operational processes and hydrochemical data,
- 7) consulting on exploration programs and of land-acquisition projects,
- 8) conducted analyses of unsaturated flow in the heap-leach operations, monitored solution chemistry, and
- 9) initiated ground-water monitoring programs and provided guidance in negotiations with BLM and EPA.

Applicable Mine Management Publications / Major Reports

King, J. D., M. D. Campbell and T.H. Foss, 1988, Norse Windfall Mines, Inc. Personnel and Corporate Policy Manual, August, Eureka, Nevada ([here](#)) 30 p.

Campbell, M. D., T. H. Foss and K. J. Buchanan, 1986, "Report of Investigations on the Preliminary Feasibility of Development of the Eureka Precious Metals Project, Nevada," a Campbell, Foss & Buchanan, Inc. Consulting Report (private distribution), 123 p. (See [Summary Report](#)).

International Projects

Mr. Campbell spent his early professional years on projects in Australia, Southeast Asia and Micronesia, making trips to Japan, Hong Kong and Singapore as joint-venture project negotiation needs required ([more](#)). He has returned on occasions to present invited hydrogeological and water-supply papers. Mr. Campbell has initiated or been associated with projects on mineral exploration, mining, and water supply and hydrogeological topics in the following countries, [Australia](#), Canada, Chile, France, Honduras, Jordan, Italy (Sardinia), Liberia, Mexico, Niger, [Sri Lanka](#), Sweden, South Africa, [Sudan](#), Tanzania, and [Vietnam](#).

More recently, Mr. Campbell and his associates have worked on and are currently working on mining /environmental projects in Australia.

Applicable International Publications / Major Reports

Campbell, M. D., and J. D. King, 2012, "Wishbone II Project, Northeast Queensland, Australia," Competent Persons Report (CPR) for Wishbone Gold, plc, Shore Capital & Corporate Limited, London, England, by I2M Associates, LLC, Houston and Seattle, July 10, 139 p ([PDF](#)).

Campbell, M. D., and J. D. King, 2012, "White Mountain Project, Northeast Queensland, Australia," Competent Persons Report (CPR) for Wishbone Gold, plc, Shore Capital & Corporate Limited, London, England, by I2M Associates, LLC, Houston and Seattle, July 10, 128 p.([PDF](#))

Campbell, M. D., and J. D. King, 2011, Brilliant Brumby 43-101, Brumby Group, Southport, Qld, 125 p.([PDF](#))

Campbell, M. D., and J. D. King, 2011, Iron Glen 43-101 (and CPR), Strategic Minerals, plc, London, 155 p.

Campbell, M. D., and J. D. King, 2009, AusPotash 43-101 Report for AusPotash Corporation, Southport, Qld., 112 p.

Campbell, M. D., and M. David Campbell, 2004, "Crisis Management, Ground-Water Supplies in the 21st Century," *EnviroTechnology (Chinese)*, Vol. 1, Summer, pp 78-81. ([here](#)).

Swartz, T. E., K. Montesoglu, M. D. Campbell, and O. Akyol, 1991, "Turkey, Ground-Water Issues in a Country with a Developing Economy" in *Proc. Fifth National Outdoor Action Conference on Aquifer Restoration, Ground Water Monitoring, and Geophysical Methods, AGWSE Conference*, May 13-16, 1991, Las Vegas, Nevada, pp 165-174.

Larsson, I., M. D. Campbell, et al., 1984, [Ground Water in Hard Rocks](#) (*Igneous and Metamorphic Rocks*), United Nations (UNESCO) and the Swedish International Development Authority (SIDA), 450 p.

Campbell, M. D., 1984, "Preliminary Evaluation of the Minera Guayape, S.A. Precious Metal project, Honduras, a Campbell, Foss and Buchanan Consulting Report (private distribution), 10 p., May

Anecdotes of a Lifetime

Campbell, M. D., 1984, "Preliminary Evaluation of the Aqua Fria Precious Metal Project, Honduras," a Campbell, Foss and Buchanan Consulting Report (private distribution), 10 p., May.

Campbell, M. D., 1981, "Fundamentals of Water Well Technology, Well Maintenance and Well Economics as Applied to Ground Water Development in Igneous and Metamorphic Rocks," in *Proceedings UNESCO African Regional Seminar on Ground Water in Hard Rocks*, Arusha, Tanzania, Sept. 14-Oct. 2.

Campbell, M. D., 1980, "Preliminary Investigations on the Uranium and Other Mineral Potential of Sudan," a United Resources International Consulting Report (private distribution), 19 p. (April).

Campbell, M. D., 1979, "Economic Considerations on Ground Water Exploration and Development in Igneous and Metamorphic Rocks," *Proc. Inter-Regional Seminar on Ground Water in Hard Rocks, Coimbatore, India*, November 22-December 20, 1979, UNESCO/SIDA/CGWB/TNAU, 14 p.

Campbell, M. D., 1979, "Practical Geological Guides for Drilling and Test Pumping in Igneous and Metamorphic Rocks," *Proc. Inter-Regional Seminar on Ground Water in Hard Rocks, Coimbatore, India*, November 22-December 20, 1979, UNESCO/SIDA/CGWB/TNAU, 24 p.

Campbell, M. D., 1979, "Preliminary Evaluation of Selected Oil Shale Resources in Jordan, "a Keplinger Consulting Report for the World Bank, 10 p., November.

Campbell, M. D., et al., 1979, *A Review of the United Nations Ground-Water Exploration and Development Programme in Developing Countries, 1962-1977*, United Nations, Natural Resources, Water Series No. 7, ST/ESA/90, New York, 84 p.

Campbell, M. D., 1977, "Water Well Technology for Ground-Water Development and Production in Igneous and Metamorphic Rocks," *Proc. United Nations International Seminar on Ground Water in Hard Rocks, Stockholm-Sardinia*, September 22-October 7, 61 p.

Campbell, M. D., 1976, "Mineral Exploration and Development Program in the Republic of Niger, Africa," a Keplinger Consulting Report (private distribution) 22 p., November.

Campbell, M. D., 1969, "An Evaluation for Uranium of the [Pidginga Lakes Area, South Australia](#)," Consulting Report of Minoil, 65 p., 8 refs. (unpubl.)

Campbell, M. D., 1969, "Final Report on Undilla Basin Phosphate, Queensland, Australia," for Queensland Department of Mines, and Continental Oil Company of Australia, Plant Foods Division, 65 p., 1 fig., 5 tabs. 4 plates, 3 appen. ([Here](#))

Campbell, M. D., 1969, "Report on Preliminary Beneficiation Results, Undilla Basin, Queensland, Australia," Inhouse Document to Conoco, New York Office, Continental Oil Company of Australia, Plant Foods Division, 15 p., 6 figs., 3 tabs., (unpubl.)

Campbell, M. D., 1968, "Analysis of Transportation, Water Resources, Multiple Product Recovery, and Mining and Slurry Transportation in Australia," Interim Phosphate Report No. 2, Australian Phosphate Project," Inhouse Document to Conoco, New York Office, Continental Oil Company of Australia, Mineral Exploration Division, 25 p., 15 figs.

Campbell, M. D., 1968, "Report of Potash Potential, Carnarvon Basin, Western Australia," Continental Oil Company of Australia, Minerals Exploration Division, 15 p., 6 figs., 3 tabs. Inhouse document provided to E. C. Gene Pendery, Manager, Plant Foods Division, CONOCO, Ponca City, OK (unpubl.)

Anecdotes of a Lifetime

Campbell, M. D., 1968, "Progress Notes on 1968 Drilling Operations for Phosphate, A to P 354M & 375M, Undilla Basin, Queensland, Australia," for Queensland Department of Mines, and Plant Foods Div., Continental Oil Company of Australia, June 30, 54 p., with Figs, Tabs, and Plates. ([Here](#))

Campbell, M. D., 1968, "Discovery of New Phosphate Deposits, Interim Phosphate Report No. 1, Alroy Downs Area, Northern Territory, Australia," for Northern Territory Department of Mines, Continental Oil Company of Australia, Plant Foods Division, 22 p., 3 tabs., 3 plates ([Here](#)).

Fitzpatrick, B. F., and M. D. Campbell, 1967, "Progress Report on Phosphate Exploration in the Undilla Basin, A to P 354M and 375M, NW Queensland," for Queensland Department of Mines, and Plant Foods Div., Continental Oil Company of Australia, 45 p., 21 Append, 2 plates. ([Here](#)).

Other Subsurface Investigations

Mr. Campbell also has conducted a number of other scientific, geologic, hydrogeologic and geotechnical investigations involving, growth-fault investigations, remote-subsurface data acquisition technology development, technology transfer, human toxicology, moon-earth-meteorite potassium-uranium systematics, paleoenvironmental and diagenetic processes in the subsurface, injection well design and operation, oil shale, sand and gravel reserve assessment and preliminary development feasibility, geologic assessment of cavern integrity and injection operations at Strategic Petroleum Reserve Sites in Texas, and subsurface structural traps for oil and gas. Mr. Campbell has a strong interest in the industrialization of space.

Applicable Publications / Major Reports / Presentations

Campbell, M. D., *et al.*, 1998, "Additional Investigations on the Upper Cretaceous Ferron Sandstone", Wayne County, Utah, Interim Report, click ([here](#)).

Campbell, M. D., Alexander, T. A., and M. David Campbell, 1990, "Siderite Occurrences in the Atoka Formation, Oklahoma and Arkansas, and their Hydrochemical, Diagenetic and Paleomagnetic Implications, *Geological Society Section Mtg*, Oklahoma State University, Stillwater, March 5-6 (Abstract). See Interim Report, click ([here](#)).

Campbell, M. D. and R. N. Arrington, 1983, "Preliminary Geological Evaluation of Oil and Gas Potential of San Pete County, Utah," a Campbell, Foss and Buchanan Consulting Report (private distribution), 40 p., December.

Campbell, M. D. and R. N. Arrington, 1983, "Preliminary Geological Appraisal of Selected Properties in Kansas and Alaska for Oil and Gas Potential," a Campbell, Foss and Buchanan Consulting Report (private distribution), 15 p., December.

Campbell, M. D., and L. Clark, 1981, "Preliminary Economic Analysis of the Mining Restrictions and Land Takes from the Hartman Farm by the City of Columbus, Ohio, Division of Water," for the BancOhio National Bank, Trustee for the Hartman Trust, by Keplinger and Associates, Inc., Houston, May 15, 15 p.

Campbell, M. D., and K. Wilbanks, 1980, "Preliminary Investigations on Oil Shale and Asphalt-Impregnated Rocks of Potential Economic Significance in Selected States of the Mid-Continent Region, United States," a Keplinger Consulting Report (private distribution), 49 p., December.

Anecdotes of a Lifetime

Campbell, M. D., and S. Poythress, 1980, Report of Investigations on Cavern No. 3, Bryan Mound Strategic Petroleum Reserve, Freeport, Texas, a Keplinger Consulting report of DUCI and U.S. Department of Energy, New Orleans, 92 p., Appendices I-IX, August.

Campbell, M. D., and D. J. Lynch, 1980, "Preliminary Mining Engineering Evaluation and Economic Analysis of the Sand and Gravel Resources on Selected Properties Near Columbus, Ohio," for the BancOhio National Bank, Trustee for the Hartman Trust, a Keplinger Consulting Report, January 1, 85 p..

Campbell, M. D., 1979, "Preliminary Evaluation of Selected Oil Shale Resources in Jordan," a Keplinger Consulting Report for the World Bank, 10 p., November.

Colburn, C. E., Abrams, E. F., Campbell, M. D., *et al.*, 1979, EPA Guidance Document, Protection of Ground Water Resources from the Effects of Accidental Spills of Hydrocarbons and Other Hazardous Substances," U. S. Environmental Protection Agency, Office of Drinking Water, EPA-570/9-79-017, July, 77 p. Peer Reviewed ([more](#)).

Campbell, M. D., and S. Poythress, 1979, "Preliminary Geological Evaluation and Reconnaissance Drilling of Oil Shale Resources, San Saba County, Texas," a Keplinger Consulting Report, (private distribution), 40 p., October.

D. L. Warner (and [M. D. Campbell](#)), 1977, [EPA Guidance Document, An Introduction to the Technology of Subsurface Wastewater Injection](#), Chapter 6 (Pre-Injection Wastewater Treatment and Surface Facility Design), p. 188-233; Chapter 7 (Injection Well Design and Construction) , 234-282; Chapter 8 (Start-up Operations), 283-292, and Chapter 10 (Injection Well Abandonment), 320-328. U. S. Environmental Protection Agency, EPA-600/2-77-240, Robert S. Kerr Environmental Research Laboratory, Ada, OK.

Campbell, M. D., 1976, *Paleoenvironmental and Diagenetic Implications of Selected Siderite Zones and Associated Sediments in the Upper Atoka Formation, Arkoma Basin, Oklahoma-Arkansas*, unpubl., Master's Thesis, Rice University, 165 p., 45 figs., 35 tabs. For Interim Report, click ([here](#)).

Campbell, M. D., 1975, "Glossary of Sedimentary Structures in Carbonate Rocks," in *Carbonate Facies in Geologic History*, by J. L. Wilson, Springer-Verlag, p. 75-86.

Campbell, M. D., 1974, "Potassium-Uranium Systematics, Geologic Implications of Moon-Earth-Meteorite Origins," *Rice University Department of Geology Special Paper*, 74p.

Campbell, M. D., 1973, "A Review of Nitrate in Ground Water and its Toxicological Significance," *NWWA Research Facility Special Paper 2*, 23 p.

Campbell, M. D., 1973, "[Practical Ground-Water Research, A University-Industrial Solution](#)," *Ground Water*, Vol. 11, No. 6, Nov-Dec. A Guest Editorial.

Campbell, M. D., 1971, "[Notes on Science, Terradynamics](#)," *Water Well Journal*, Vol. 25, No. 10, p. 42-44.

Publications / Papers in Preparation

Campbell, M. D., *et al.*, (in Preparation – 2019), "Anatomy of a Case of Gold-Silver Mine Development, Operation, Foul-Play, and Demise in Eureka County, Nevada," preparing for subsequent publication. Introduction to Paper, click ([here](#)). Source ([here](#)). ([Background](#)).

Manuscripts Reviewed for the Technical Journals

Many manuscripts have been reviewed over the years for [*Ground Water*](#) and for the [*International Journal of Environmental Forensics*](#). Mr. Campbell also reviewed numerous manuscripts while serving on the [*Ground Water Editorial Board*](#) (1971-1978). More recently he has been appointed to the Editorial Boards of the [*Journal of Geosciences*](#) and to the [*Journal of Geology and Geoscience*](#).



Index

Non-Family First Names and Initials in Chronological Order by Geographical Location and Major Subjects Discussed

[Back to Table of Contents](#)

Lancaster, Ohio

Chapters: [1](#), [2](#), [3](#): 1941-1959 Pages 9, 18, & 40

Alan H., 63	Joe C., 48, 50, 52, 54, 62, 65, 66, 69, 70, 73, 98, 143, 154, 289, 358, 364, 410
Barb W., 62	John A., 145
Barbara F., 69	John M., 58, 59, 61, 137, 138
Bob M., 42, 67, 68	Jon N., 32, 43, 48, 68, 69, 289, 358, 364, 394
Butch G., 31, 66	Joyce R., 25, 41
Brownie C., 12, 21	Judy M., 64
Coach Eng., 67, 68	Julianne H., 62, 63, 81, 154, 228
Dan B., 16	LeRoy F., 37, 42, 46, 47, 62
David M., 55	Nancy B., 46
David S., (aka Deacon), 42, 43, 46, 48, 49, 52, 54, 55, 61, 62, 69, 72, 73, 81, 143, 205, 289, 358, 364, 366, 380, 394	Nancy C., 372
Dennis S., 23, 24, 31, 38, 41-43, 46, 48, 52, 54, 56, 62, 69, 73, 152, 358, 364, 365, 394	Nancy S., 46, 154, 367
Dick E., 63, 48, 69, 70, 72, 73, 74, 364, 369, 370	Penny P., 69
Donna W., 55, 62, 63, 154	Phil H., 48, 52-54, 62, 64, 68, 69, 73, 143, 154, 159, 246, 251, 256, 258, 289, 358, 364-366
Doug L., 263, 277, 279, 294, 303, 304, 316, 416	Ralph H.G. M., 131, 138, 140, 145, 422
Dwight K., 25, 31, 45, 152, 160, 419	Regina K., 16
Elaine A., 41, 130, 133, 366	Roger G., 42, 62, 69, 73, 366, 367
Earl Y., 73, 75	Roger M., 13, 19
Fred L., 55, 64, 65	Roger P., 25, 42, 61, 62
Gary B., 23, 41, 42, 69	Sharon M., 25, 41
George S., 50, 52	Steve B., 46, 69, 154, 289, 358
Hazel F., 70	Sue E., 19
Helen A., 70	Suzie H., 62
Jack K., 49-52	Tillie B., 70
Jack M., 128, 142, 145	Tom G., 367
Jake H., 42, 46, 62	Tom H., 48, 61, 69, 98, 143, 289, 364
Jim B., 88	William G., 109

Heading for California (SBVC)

Chapter [4](#): 1960-1961 Page 71

Virginia K., 77-79, 81, 92, 125, 251, 263
Sarah S., 81-83, 85, 86, 88, 89, 92, 93, 96,
97, 454

Anecdotes of a Lifetime

Larry M^c., 89-105, 166, 395
Reggie M^c., 99-101
Jackie M^c., 98, 100-103
Vernon B., 83, 84, 87, 89
Jason W., 92, 93, 95, 96
Carol C., 92-94, 96, 97, 306
Bonnie T., 86, 88-91, 93, 95, 97, 98, 395

The Ohio State University, Columbus, Ohio

Chapter 5 & 6 : 1962-1966 Pages 16 & 125

Jack O., 118
Mary F., 113, 115, 121, 137, 145, 146, 154
MaryAnn F., 134, 136-147
Jay H. L., 148-150, 155, 157, 219, 221, 230, 232, 258-267, 269,
271, 282, 284, 338, 339, 341, 375, 378, 416, 420, 422
423
Nancy W., 149
Bill R., 152
Bill L., 211
Bill, Ht., 149, 150, 250, 261, 269, 270, 271, 274, 277
Gary S., 153
Russel, S., 263
Chuck R., 112
Geoffry T., G., 117, 119, 123, 124, 141, 143, 144, 147, 262
Sheila, P., 168, 169, 172, 183, 190, 192, 209
Walter S., 416, 422
Frank, H. T. R., 147, 416
Gene, S., 153, 217, 228, 318
Carolyn, S., 153
Jason T., 261
Drs. W., 148
Nancy W., 149
Wayne P., 158, 159
Jack M., 128., 142, 145

Heading for Australia and Beyond

Chapter 7 : 1966-1969 Page 163

Robert, A., 170-175, 179, 180, 182, 183, 185-210, 215, 217-219, 221-228,
230, 231, 235, 236, 239, 240, 244, 249-251, 267, 302, 315, 316, 318,
322, 416
Dottie, A., 170, 183, 186, 187, 197, 209, 222, 228, 230, 231, 235, 302
Rossi, G., 173-183, 185, 189, 194-196, 204-206-208, 211-217, 222-225,
232, 235, 239, 240, 241, 244, 267, 416
Brian, F., 173, 175-177, 179, 180, 182, 183, 185, 186, 189, 192, 194, 196,
204, 205, 207, 212, 217, 224, 235, 236, 239-241, 244

Earl A., 239, 240
Jeremy C., 187, 202-204, 222, 271
Jimmy R., 188, 189, 206, 222, 226, 227, 231, 232, 239-241, 245, 247,
249, 251, 267, 315, 380, 416
Jack S., 180-182, 184, 185, 189, 197, 204, 205, 211, 212,
218, 225, 231
John, V., 187, 204, 252-255
Mrs. Canter., 222, 227, 230, 235
Tom Z., 204
Simon B., 381

In Wyoming

Chapter 8: 1969-1970 Page 238

Ludwig K., 239, 244, 245, 247, 250, 268, 275
Bill Hy., 241, 244, 245, 247, 248, 250, 261, 269, 270, 271, 274, 277
Oliver J., 242-247, 250
Ruffin R., (aka Rack), 125, 246, 248, 249, 251, 256, 258, 333, 372, 396,
416
Bruce R., 246, 249, 251, 253, 256, 257, 258, 416
Art R., 246, 249
John Q., 187, 204, 252-255
Dick L., 256

Columbus, Ohio

Chapter 8: 1971-1973 Page 258

Lesley P., 261, 262, 265, 266, 268-271
Bill Ht., 150,
Truman B., 273
James C. W., 273
Robert B., H., 273
Susie Hc., 260-261

Heading for Rice University, Houston, Texas

Chapter 9: 1973-1976 Page 266

Lesley P., 268-271, 277, 278, 281, 286, 290, 345, 349, 418
Bill Ht., 273
George G., 264, 271, 416
John J.W. R., 267-269, 271-275, 278, 416
Martha Lou B., 267, 268, 274, 281, 285
John A.S. A., , 268, 275, 284, 286
James L. W., 271-273, 284, 285
Rudy S., 270, 271, 274, 284-286
H.C. C., 327, 385, 416, 417
Butch W., 279

Anecdotes of a Lifetime

David T., 276, 277
Sande T., 277
Eric, N., 281, 308,
Ken M., 274, 281, 289
Kevin B., 274, 288, 294, 295
Charles Wy., 292, 298, 416
Charles W., 416
Mohammed, G., 274
Don W., 286

Houston, Texas

Chapters 10, 11 & 12 : 1976-2022 Pages 287, 333 & 353

Henry K., 285, 287, 289, 416
Kep K., 285, 303, 314, 320, 321
Gary F., 319
William H.T., 325, 416
Grimm M., 308-312
Corkie S., 308

Ted Foss., 322, 324, 368, 344
Robert D., 328, 333, 336
Keving B., 322, 325-327, 329-331, 334, 335
Jeff K., 323, 324, 327, 328, 330-332, 334, 335, 337,
348, 351, 371, 372, 375, 381, 385, 396, 416, 417
Steven D., 332

Don Z., 335, 338, 340, 347
Rick P., 335, 336, 341
Syed A., 341
Clay S., 341
Marshall L., 341
Owen S., 342, 343, 345
Telfryn J., 341

Dick S., 344-349
Dick W., 352, 375
Ben T., 344
Chi³, 344
Carl B., 344
Jim H., 345
James K., 347

Jim W., 345, 346, 348, 351, 354, 355, 356, 357
Tom L., 345, 346, 348, 351, 354, 379,
Rae E., 353, 354, 356
Bill Hc., 352, 355, 373, 375.

Anecdotes of a Lifetime

Izzy T., 354
 Tom S., 348, 352, 353, 374
 Charles P., 354
 Charles Kt., 294
 Steve F., 354, 355
 Carol W., 357

Richard B., 336, 348, 368, 373, 416
 Bruce Hn., 378, 381
 Henry W., 283, 378, 381, 401, 402, 416
 Tom Su., 353, 381
 Tom A., 384
 Bill Am., 378
 Edith W., 381
 Scott T. 381
 Roger L., 392, 398, 402, 416

.....Major Subjects Discussed

Genealogy, 134, 344, 359, 361, 367, 381, 383	American Civil Liberties Union (ACLU), 7, 252, 253-255, 257, 378, 419, 423
"Swing Low, Swing Chariot, " 37	Fascism, 7, 62, 354, 400, 401, 419, 420
Capitalism, 116, 150, 252, 386, 401, 405, 406	John Birch Society, 238, 258, 406
Democracy, 10, 400, 402, 408, 411, 419	Marxism/Socialism, 150-252, 405
Democrats, 361, 401, 402, 407	William Tecumseh Sherman, 111, 393
Republican, 7, 238, 355, 361, 367, 400-402, 406-408, 410, 411	Masonic Lodge, 31, 93, 160
	Moose Lodge, 37, 38
Gold & Silver, 8, 48, 216, 240, 291, 311, 313, 320, 321, 323, 324, 327, 327, 328, 329-337, 339, 340, 356, 387, 391-393, 395, 397, 415, 426	Potash, 8, 172, 220, 241, 291, 332, 340, 378, 391
Phosphate, 8, 172, 175, 177, 178, 179, 180, 184, 188, 190-192, 195-197, 200, -205, 207, 209, 210, 217, 222-226-230, 232, 234, 235, 239, 241, 242, 250, 291, 391	Uranium, 8, 192, 197, 208, 217, 240, 241, 244-250, 252-255, 272, 279, 280, 281, 289, 291-293, 298-311, 216, 320, 364, 368, 374, 375, 377, 378, 381, 382, 386, 387, 391, 401-403, 410, 414, 422, 424, 426, 430, 431
<i>Limeliter</i> s, 85, 106	Rare Earths, 286, 386, 391, 402, 403, 414, 420, 424, 431
<i>Drosophila</i> (aka flies), 180, 181, 227	Palau, 8, 191, 196, 197, 200, 204, 207, 250
Tuckerbox, 198	Mt. Isa, Queensland, 175-179, 183-188, 197, 207, 208, 210, 211, 213, 215, 218, 220, 225-228, 234, 420

Anecdotes of a Lifetime

Aboriginals (Australian First Peoples), 235-238	Kerr McGee, 247-249, 251, 253
Anchor Hocking, 6, 19, 58, 73, 74, 88, 109, 118, 157, 370, 371, 423	Teton Exploration, 249, 252-254, 258-262, 359, 423, 430, 446
Zenith, 18, 133, 140	United Nuclear, 249, 253, 254, 260, 423, 446
Alcoholics Anonymous (aka AA) 6, 10, 77, 81, 371	UNESCO, 8, 294-296, 301, 302, 314- 316, 318, 441, 453, 454
Diamond Electronics, 6, 129-131, 140, 157, 173, 423, 429	Diamond Power, 6, 109, 114, 118, 124, 127, 129, 130, 132, 157, 423, 429
Camp Arrowhead, 31, 33, 34, 36, 37, 429	Keplinger & Associates, Inc., 289, 301, 312, 326, 359
Science Club, 6, 54, 55, 65, 141	Law Engineering, 338, 340-346, 348, 349, 351-353, 356, 357, 359
Germany, 5, 8, 9, 10, 14, 18, 113, 117, 149, 150, 151, 153, 158, 159, 161, 163, 172, 201, 219, 220, 236, 243, 294, 316, 318, 322, 359, 399, 406, 409, 412	ENSR Consulting & Engineering, Inc. 344-349, 352, 356, 357, 359
Ukraine, 409, 410, 412, 413	DuPont, 7, 340, 341, 343, 344, 346- . 350, 352, 354, 357, 368, 369, 371, 406
Italy, 8, 9, 14, 236, 291, 294, 300, 302, 361, 366	India, 8, 21, 265, 277, 290, 294, 301- . 305, 315, 316, 321, 414, 416, 426
Japan, 5, 8, 9, 14, 18, 196, 201, 203- . 205, 217, 229, 239, 243, 250, 270, 406, 411, 412	Sri Lanka, 8, 277, 290, 301, 302, 304, . 426
England,(aka UK), 9, 10, 85, 126, 270, 300, 412, 414, 417	Seward Peninsula. Alaska, 286, 298, 307, 311, 310, 313, 402, 410, 426, 432, 433, 446,
Oklahoma Fuzzball Litigation, 376-380	Ohio State Football, 40, 72, 104, 107, 127, 166, 235, 241, 265, 270, 281, 291, 359, 368, 406, 418

XXX



Michael D. Campbell was born and raised in Lancaster, Ohio. He is a graduate of the Ohio State University in Geology and Hydrogeology in 1966 and of Rice University in Geology and Geophysics in 1976, and has been licensed as a Professional Geologist and Hydrogeologist in TX, LA, MS, WY, WA, and Alaska. Over a career of almost 60 years, he has been elected a Fellow of many geological societies in the U.S. and around the world. He was a Founding Member in 1977 of the Energy Minerals Division of AAPG and was elected EMD President (2010-2011) and served as Chairman of the Uranium (Nuclear and REE) Committee (2004-2021). Since 2010, he has served as Chief Geologist / Hydrogeologist for I2M Associates, LLC and I2M Consulting, LLC based in Houston, Texas and Seattle, Washington. He is well-known internationally for his engagements as a technical leader, senior program manager, consultant and lecturer in hydrogeology, mineral exploration and mining and associated environmental and geotechnical investigations. He has traveled extensively throughout the world to such places as Australia, India, Sri Lanka, Tanzania, Zambia, South Africa, Sudan, Sweden, Japan, Vietnam, Palau, Sardinia, Italy, France, Germany and other countries on projects for the United Nations and UNESCO for developing or improving ground-water supplies and for large and small mining companies developing other natural resources. He has published three technical books on uranium, water well technology and other natural resources, and numerous associated reports, technical papers, and presentations in the U.S. and overseas. Mr. Campbell also has served the legal community over the years as an Expert Witness or Consulting Expert on some 40 cases. In pro bono, he served as Principal Instructor for the Institute of Environmental Technology in the mid-1990s. In 2004, he was elected to the Lancaster High School (Ohio) Distinguished Alumni Hall of Fame. He and his wife, Mary, raised a family of 5 children, all now with one or more college degrees, and they have been married for some 45 years.

See: <https://www.i2mconsulting.com/michael-d-campbell-pg-ph-curriculum-vitae/>.

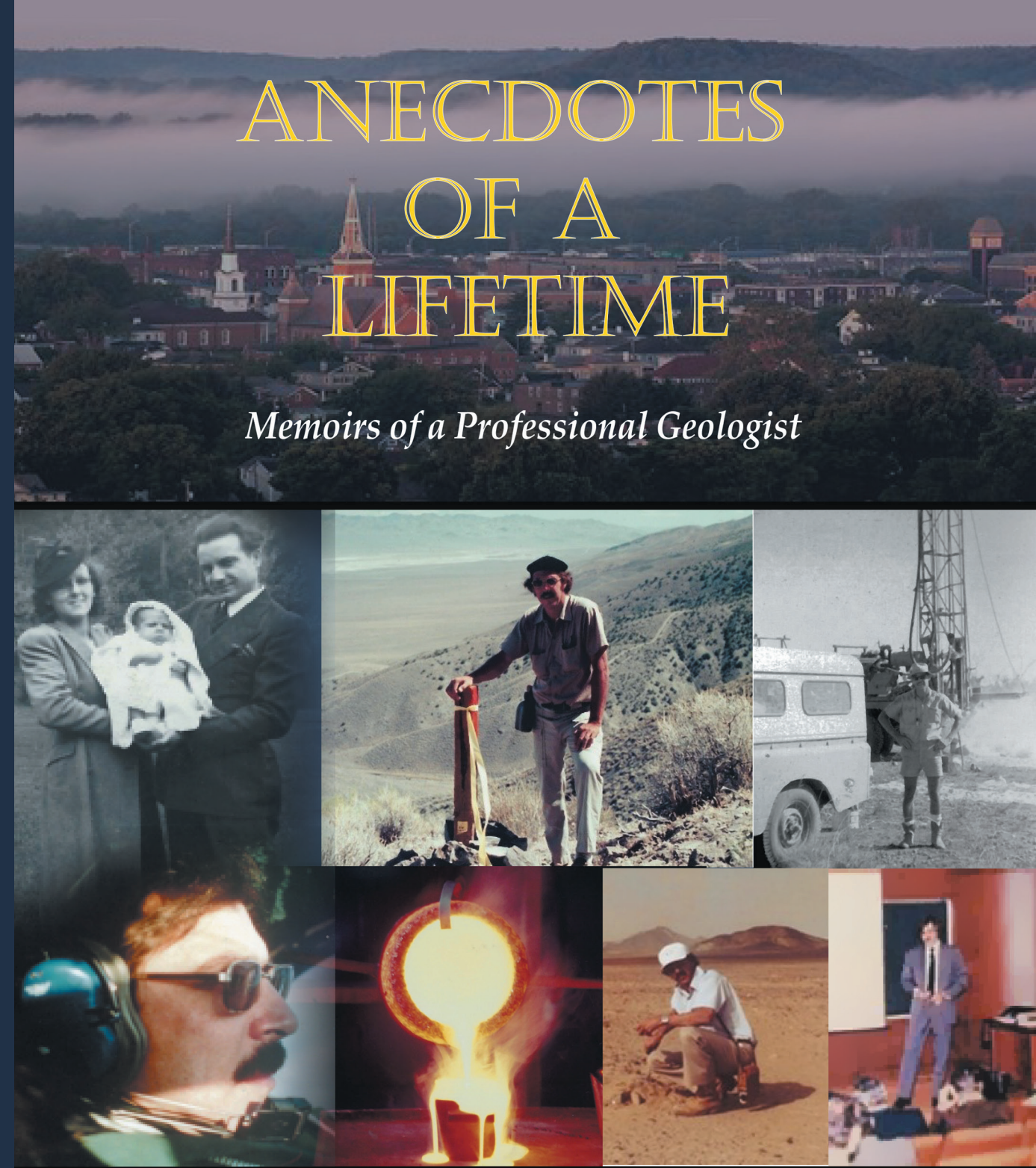


Daniel Moore is a journalist and writer covering energy and environmental issues for Bloomberg in Washington, D.C. Also a native of Lancaster, Ohio, he studied journalism and political science at Kent State University. He previously worked for seven years at the Pittsburgh Post-Gazette. He lives with his wife, Katherine, and two cats, Neko and Fred, in the nation's capital, where he is a member of the National Press Club. In his free time, he enjoys running, hiking and playing guitar.



ANECDOTES of a LIFETIME
Memoirs of a Professional Geologist

MICHAEL D. CAMPBELL, P.G., P.H.



As Recalled by
MICHAEL D. CAMPBELL, P.G., P.H.
With Daniel Moore