

Money Making Rules

By

A

Public Company CEO

Bob Fitting

Smashwords Edition

Copyright 2012 Robert Fitting

Also by Bob Fitting

Singapore Sting

This book is dedicated to my wife Lorraine who always makes my life interesting and frequently exciting. Thanks for thirty-three great years.

CHAPTER 1

In business and in life, there are sets of rules that make sense to follow, but the primary ones the *First Rule* of many of these sets are ignored because it's assumed you already know them because they make so much sense, in fact most of us don't think about them, so I have tried to write them down as I went through my work biography. For example the set of rules we learn in driving are: Stay right, pass left, stay in your lane, don't speed, etc. The *First Rule*, the most important rule of driving is assumed. The *First Rule of Driving*; *Never* put your car in a space occupied by something else! Some other *First Rules* I have learned.

First Rule of Life

First Rule of Survival

First Rule of Flying

First Rule of Magazine Advertising

First Rule of The Obvious

First Rule of Negotiation

First Rule of Trade Shows

First Rule of Customer Handouts

First Rule of Mailings

First Rule of Profit Making

First Rule of Stand-Up Comedy (For Me)

We all know why they don't send donkeys to college; no; one likes a smart-ass! Except, I do. I am a professional smart-ass and proud of it. Humor in the forms of sarcasm, cynicism, jokes, and pranks has followed me most of my life, or perhaps I'm a carrier? Unknown to me at the time, humor started in my first months of life when I became my own uncle! I was born in 1935, my mother was Dorothy Freeman, nee Fitting and my father was Clarence Larry Freeman (They had to get married!). Apparently Dorothy violated the *First Rule of Life* (I like calling it the Maiden Rule). If you don't learn to say no, you will probably be screwed! I was named Robert Clarence Freeman. At the age of four months, as a result of a breakup I was told, I was adopted by Dorothy's mother; my grandmother and her father; my grandfather making Dorothy my legal sister and blood mother and my grandmother my legal mother, my blood aunt was my legal sister, well you get the idea. I was adopted into a family gaining two legal brothers and four sisters and losing six legal aunts and uncles. My name was changed to Robert Clarence Fitting. I was taught all my youth that my blood father was not a nice person and I should avoid him. But more of that in fifty some years.

We all grew up in a small duplex on Canal Street in Lebanon Pennsylvania; population around 10 thousand. Lebanon was fifteen miles from Hershey where a lot of my mother's relatives worked in the chocolate factory. I would guess the duplex was around 2500 square feet. The first floor had a living room, sitting room, and eat-in kitchen. We had an outhouse and took baths in a tub in front of the coal stove in the kitchen on Saturdays. The second floor had three bedrooms, mom and pop had the bedroom at the back of the house, a bath was added sometime around my seventh year of life. At the Canal Street end of the second floor was a closet that became my bedroom until I was around ten years old. The attic had been converted into a bedroom with two beds for my brothers. Around 1945 or so, brother Marlin went into the military and I was promoted to the attic. The other occupant of the attic was Brother Donald, who at the time was in his twenties, had a job, had a car, and was rarely home, meaning that I had the luxury of a virtually private bedroom. My sister Mary had married and was gone before I can remember and Sister Marion had the bedroom facing Canal Street. My sister

Mildred had the middle bedroom. The house also had a basement that became my hobby shop; making crystal radios and model planes. In my teens, the basement was also my repair shop where I fixed neighbor's radios and small appliances.

I suppose you would call mom plump. I cannot remember her without wearing an apron. And as was the practice then, most foods were prepared each day. Also, I am not certain, but I would bet mom and pop never ate in a restaurant. Mom was known in the neighborhood as an excellent cook and helped the neighbors with her recipes. She was always preserving foods, canning vegetables, drying fruits, and making jelly and jams. There were no freezers in those days. Mom was famous in the neighborhood for her doughnuts that she made about twice a year. She would take orders and make hundreds of doughnuts each time. I was happy when she was making doughnuts because I got to eat the holes. Mom was the disciplinarian in the family. Whenever punishment was merited, she would go out to the yard and cut a switch from what I called the switch-bush and freely use it on my backside. Over the years, I tried to poison the switch-bush by pouring salt and gas on it and also peeing on it to no avail.

We had no family car so mom and pop depended on Donald to take them to the store or the doctor. There were quite a few vendors that came to the house. We had a butcher that came by weekly in a van; stocked with beef, pork, chicken, and all kinds of sausages, complete with a grinder and chopping block. The butcher also sold cheeses. There was a coffee man, milk man, bread man, and before we got a refrigerator, an ice man. The farmers cruised the neighborhood with apples and peaches, potatoes, and lard. One farmer only sold celery; specialization was beginning. Before the war was rolling, we also had drifters, hobos, and all sorts of men trying to make a buck. There was a fellow who fixed umbrellas, one who sharpened knives, and another guy who repaired bicycles. Mom always gave them a sandwich whether we needed the services they were offering or not. During the war, mom would collect the used lard and another vendor would pick up the lard and sell us laundry soap made with the lard. There was a rag man who would buy old rags and clothing as well as a scrap man who would buy junk metal.

Lebanon had a bus service, conveniently the bus stopped in front of our house. By the time I was twelve, I could take the bus into and go to one of the three movie theaters, as I recall, for seventeen cents. On Sunday, Donald usually drove dad (I called him Pop)

and me to see pop's father (George Washington Fitting) in Harrisburg. Then after a two hour visit we would return home. At the end of WWII, there was a big surge in purchasing of items that could not be bought during the war and that people could not afford before the war because of the depression. Radios, washers, electric stoves, refrigerators, vacuum cleaners, lighting fixtures and all kinds of kitchen appliances were in demand. TVs showed up a couple of years later. Soldiers were coming home with money in their pockets, marriages were flourishing, and the people who stayed home and worked in the war industry had lots of money to spend. However, most houses had been originally wired with only one ceiling light in each room and typically one outlet in each room. There was a great demand for increasing the wiring in the houses and Pop would spend weekends upgrading houses. He had a captive workforce; me, age twelve, I was the only male left at home because by this time my brothers were on their own. Marlin was in the service and Donald was a machinist at Bethlehem steel. Donald still slept at home, I suppose he paid board, but he rarely ate with us. He came in late and left before I woke up in the morning. In weekends he would wash the car in the alley next to our house and occasionally take me to see the Hershey Bears Hockey games.

In a typical upgrade to add an outlet in a room, Pop would cut a hole in the wall for the outlet, I would drill a hole from the attic into the inside of the wall and drop a small chain down the wall until he could capture it. Pop was not tall or fat, but he was chunky and not suited for crawling around attics. My size made it ideal for the work in small attics. I would connect a wire on the chain and pop would pull the wire down the wall to connect up the outlet. By the time I was age fourteen, I had become a qualified electrician's helper, at least in my mind; having wired close to 100 houses. We would get paid each weekend in cash and Pop would give me three to five dollars for my efforts, a significant amount in those days.

Pop was a serious guy and rarely laughed. He was quite talented though and took on all kinds of projects including plumbing and carpentry. Now that the war was over and he had additional income from the weekend electrical jobs, he tackled home improvement jobs. We upgraded the kitchen, removed the coal stove and installed an electric range. I helped him dig out the basement and put in a concrete floor. He and I installed new sewer lines when we changed from septic tank to the city sewer system. We

built a new front porch and put on a new roof. We built a forty foot tower for the TV antenna to receive Philadelphia stations. At the time I often wished I could be playing baseball instead of working. Looking back, I now realize what a great opportunity it was for me, and I regret that pop never knew how much this would eventually mean to me.

I don't recall my mother, father or any member of my family telling a joke, ever! Although, there was one time when I thought Pop may have displayed some amusement. Pop was often asked to do odd jobs for the neighbors, particularly if it was electrical in nature. I knew that he despised one of the neighbors (I think his name was Ralph) because he was an alcoholic, had sometime employment, and was abusive towards his wife. I remember when Ralph showed up at the back door, neighbors always came to the back door and never the front, and asked to see pop. He told Pop that he had been trying to install a new ceiling lighting fixture and didn't know how to hook up the wires. Could pop please help him. Pop got this unusual smile on his face and told him that he was busy but that "My twelve year old son will do it for you." I went down the street with Ralph and connected the light fixture in under a half an hour.

I guess we were poor, but I never remember being hungry. My dad worked for Bethlehem Steel all during the depression as an electrician. First memories are around the beginning of World War II. Here's a piece of dark humor; around 1941, Sister Mildred wanted to marry Elmer (or had to, I never knew what the story was), and it was assumed that Elmer would be drafted into the service very shortly since everyone his age was being drafted. It made no sense to buy a house because Mildred would be alone, so after the marriage Mildred and Elmer moved into the middle bedroom on the second floor awaiting the draft. Elmer was never drafted because of some physical defect and, *Mildred and Elmer never moved out!* They had three children who were raised in the middle bedroom and later in the closet and attic. Apparently not a big deal, since I know they all turned out alright.

Legal sister Dorothy (and blood mother) worked in a textile factory sewing clothing and married Glenn Lansberry a few years after the divorce from the not-so-nice person and blood father. She would stop by frequently for lunch; the factory was only a mile away. I learned to be manipulative and preyed on her guilt resulting in many presents, allowances, and trips to Hershey Park. This may have been my first training for

a CEO position. She bought a complete set of Hardy Boy books, an Erector set, and a wood burning set that I wanted because there was an incentive system to buy ice cream popsicles. Every once in a while one of the Popsicles had the word "FREE" burned on the stick and you could return it for a free Popsicle. I had planned to counterfeit the free sticks with the wood burning set, but I never could make the word look good enough. Dorothy bought model airplanes, a Christmas train and a lot of toys that my adopted family couldn't afford. When I turned sixteen and got my driver's license, I could find ways to permit me to drive her car. Her new husband detested me for taking advantage of Dorothy. Can't blame him for that.

The Canal Street house had an alley along side it that was very steep, almost a block long and was used for propulsion of virtually any thing with wheels in the summer and that would slide in the winter. It was dangerous in the winter because if you couldn't stop a sled, you would slide into Canal Street. It was before my time, but I was told Brother Marlin broke his arm sliding under a car. In the summer, I saw virtually everything go down Fitting's Hill including wagons, scooters, bicycles, and one time a baby carriage with my twelve year old friend Roger in it. Another kid was standing on his little brother's tricycle, probably going twenty five miles an hour, with no brakes of course when he arrived at Canal Street at the same time the bus pulled up, stopped, and the back door opened. He landed inside the bus and broke his collar bone. Fitting's hill was fun when it rained; it became a river and we floated all kinds of stuff down the hill.

Sunday lunch was the big meal of the week with all the kids (and spouses after they married), except for Mary and her husband Dave who went to his mother's house for a similar Sunday lunch. There would often be more than a dozen and mom would prepare a huge pork roast. Sunday dinner, we called it supper, was always waffles and some fruit.

I don't remember many memorable humorous moments in my school days. Up until high school, I was always an honor roll student, but became lazy in high school graduating in the lower third of my class. Of course there were childish pranks but very few are worth repeating. One perhaps worth mentioning had to do with an illegal transmitter when I was thirteen years old. I had learned from a friend, that you could convert an ordinary radio into a transmitter by connecting a telephone mouth piece from an old telephone to a certain part of the radio. Then by hanging a long wire out my attic

window for an antenna, I could broadcast. I tested the radio transmitter by having a friend who lived three houses away listen to my transmission. Most housewives in those days had a radio in the kitchen and listened to the local radio station WLBR, “The voice of Lebanon Valley”. When I transmitted, the signal was strong enough to over power the local station for about a block. I would start transmitting by saying “This is an emergency broadcast”, and then follow with some silly announcement like “The Japanese have invaded Philadelphia and are marching towards Lebanon” or “The damn has broken, run for your life” I don't know if anyone actually heard my radio, but a few weeks later I saw a van with all kinds of antennas driving around my neighborhood. That was the end of my radio announcer days.

I remember when we had a telephone installed, around the time I was eight years old. It took a while to realize that could be a useful tool for practical jokes. Unlike today, it was rare for the house to be empty of occupants, so the opportunity to use the phone for pranks was limited. Down the street a block was a small gas station/convenience store run and owned by Ralph Albert. We would buy soft drinks, ice cream, and candy. My recollection was that Ralph was an old curmudgeon who never smiled and hated to be bothered by customers. One day with my friend Roger Plasterer encouraging me, I called Ralph and asked “Do you have Prince Albert in a can?” Prince Albert was a popular pipe tobacco, When Ralph replied “Yes.”, I said “Why don't you let him out?”, then laughed and hung up. We thought we were very clever.

In those days, the telephone connection was made by an operator, so Ralph called the operator and found out who placed the call, within ten minutes, my mom had the switch out, end of phone tricks.

After high school when I bought my first car, financed by pop, I inherited the duty from Donald of driving mom and pop to the store, doctor, and to Harrisburg. My first car was a 1940 Desoto Coupe. Pop walked two miles to and from work for many years. But, after I got the car I would frequently drive him to and from work. I found out later he was experiencing pain of angina from coronary heart disease which would ultimately kill him. I figured out, at that time, what I called the *First Rule of Driving: Never* put your car into the space occupied by something else. And a corollary: *Never* put your car into the empty space that *will be* occupied by something else at the same time. The reason I could state

this first rule was because I violated it once and the consequence was clear and immediate.

The 1940 Desoto business coupe was a wonderful car for sneaking kids into the drive-in movie because there was a door behind the front passenger seat that opened into a huge trunk. We would put four in the trunk and two up front. Another car would pay to get in and would park next to me. Then the kids in the trunk would come out through the trunk door into the front seat one at a time and leave the car through the front door..

After high school, I worked in a hosiery factory repairing the machinery and doing general maintenance. This job lasted about three months until a job opened up in Lancaster Pennsylvania making and testing TV black and white picture tubes, no color yet. In December 1953, I was laid off, the beginning of a recession that was one reason for enlisting in the Air Force. Probably the biggest reason was to get out of the Canal Street house and seek exotic travel and excitement.

CHAPTER 2

During the first six months of 1954, there was a major recession and many of my friends from high school were unemployed and collecting unemployment benefits. It was probably the best of times because we had a group of around twenty guys and gals who would hang out together; we would sleep late, and stay out late having dates, playing cards, and having a lot of fun at a small teenager snack bar/dance-floor/card room in an entrepreneur's basement called Bill's. One night in July, a bunch of us had left Bill's at midnight and ended up at one of the guy's house to drink beer and play cards. That was when six of us decided to join the Air force. That was the end of the only time I can remember when I had no responsibilities.

I did a lot of maturing in the three years eight months and twenty-one days spent in the Air Force. My basic training was at Sampson Air Force Base in New York, near Watkins Glen on Lake Seneca. During basic training, I was subjected to aptitude tests; I scored highest in Electronics and hoped to work in that field, and lowest in administration. I was assigned to personnel, and as I would learn, the military could have a cruel sense of humor. After Sampson, I was shipped to Web Air Force Base in Big Spring, Texas for the duration of my service days. So much for exotic travel and excitement.

I had a mentor in the Air Force-a Staff Sergeant by the name of Jack Lord who was my boss, he showed me around the base, invited me to his home (he was married and lived off base), helped me in many ways that made my Air Force stay easier.

It is clear to me that the more free time I had the more likely I would think up practical jokes. I had a lot of free time in the Air force-ergo more jokes. One of my first practical jokes also taught me that the jokes could have serious consequences. There is a document issued every day in the military called the morning report. The morning report, typed in seven carbon copies, listed all personnel that were not on the base, that were on

leave, in the hospital, in the brig, on temporary duty somewhere else, away at school, etc. The report was typically around ten pages and could have absolutely no erasures. It had to be submitted up the chain of command by ten o'clock every morning. The morning report clerk, Glen Chambers, got up every morning at five o'clock to prepare the report. He would have it on Captain Raeburn's desk by nine o'clock. Captain Raeburn was the head of personnel and usually arrived shortly after nine o'clock. So get the picture; pristine, no errors or erasures, must be signed by the captain and forwarded by ten o'clock, a short period of time before the Captain showed up and no time to redo if anything happened to it. Perfect! It had seemed to me that the captain had a good sense of humor. About this, I was wrong. I had taken an ink blotter and soaked it in ink. Then after drying, I cut out the shape of an ink blob about two inches in diameter. After Glen put the morning report on the Captains desk, and before he arrived, I carefully placed the blob on the report and laid his ink well (bottle) on it's side next to the ink blob so it looked as if the bottle had been knocked over and leaked on the report. The Captain arrived; he took only a glance at the report (with blob), stormed out of his office and had the head sergeant (who really ran personnel) call everybody; about twenty personnel into a formation at the front of the building. He was furious and wanted to know who had been in his office. Of course, I confessed and he dismissed everyone else so he could "talk" to me. And when he found out it was a joke, he was even madder than before. He scared me enough that I was on my best behavior for a long time. He didn't hold a grudge though, and I was permitted to fly with him in his B-25 a few months later.

Glen Chambers the morning report clerk was also my room mate. He would get up at five o'clock and walk about a quarter mile to the personnel building. He was off work around two o'clock in the afternoon and would frequently take a nap from three to six o'clock. One evening about six o'clock I noticed that the sky and degree of darkness was similar to the sky and darkness at six o'clock in the morning. So I shook Glen and said "Aren't you going to work this morning?"

Glen jumped up, put on his uniform and ran down the street to the personnel building. I think he figured out that he had been "had" when he came to the Airman's club and it was lit up and going strong.

New Second Lieutenants were considered easy and probably legal prey. Web Air Force Base is located in West Texas and there are frequent dust storms, so severe at times you can't see across the street. There were about six offices in the personnel department and a large open space for those of us in "Officer Personnel". On the other side of the building was a similar space for "Enlisted Personnel". Don Wilson and I had come up with this idea. Typically, all seven of us enlisted personnel would go for coffee around ten in the morning. Since the Lieutenant would not associate with the enlisted, he would usually tend to the phones for the thirty minutes we would be gone. Now the night before, there had been one of the worst dust storms that anyone had ever seen and was a subject of discussion in the morning. When we went out for coffee as usual, we actually went to the enlisted personnel side of the building. First, Don who had a great bass voice, called the Lieutenants phone and said, "This is Major Smith of Base Operations; because of the dust storm last night we are having to blow the dust out of the lines. I want you to put each phone in a waste basket on the desk and let them ring for fifteen minutes. Whatever you do, do not answer them or the clean-out will fail." Then we proceeded to call all of the phones in the Officer Personnel space and the Lieutenant dutifully put each phone in a wastebasket on top of each desk. After about five minutes, the head sergeant tried to explain to the Lieutenant that this was a joke. The Lieutenant ordered the sergeant to not touch the phones. During the time that the "clean-out" was taking place, a colonel that I knew came into personnel and asked why the phones were ringing and in wastebaskets. After the Lieutenants explanation, the colonel left the building laughing and said he would return later. It was six months later when the Lieutenant was promoted that he finally realized he had been the brunt of our joke.

Web Air Force Base was a training facility for aviation cadets who were in pilot training. At Web, the pilots transitioned into the T-33 training jet and upon graduating, would be commissioned as second lieutenants. They were assigned to the same squadron as the personnel people; a squadron is similar to an army platoon. Most of the time there were a couple of hundred cadets who were restricted to the base, had guard duty, and other unpleasant chores. The Air Force, though, allocated two dollars apiece to the squadron for the cadet's recreation. Since the cadets could not use this allocation, we arranged parties about every six months with the squadron, squadron officers, wives and

girlfriends. Captain would crank up his old B-25 and fly us to the border to buy the booze; Web was in a dry county. When the cadets graduated, some of us would wait outside the building where they were commissioned to salute them. It was a tradition for the cadet to fold a dollar bill into a pair of wings and give it to the first person saluting them. After being at Web for six months, they knew it was prudent to be nice to the personnel people.

I remember a First Lieutenant; I'll call him Lt. Quince who was very difficult, gave everyone in personnel a hard time, and was generally unpleasant to the enlisted men. That was not the norm. Eventually he received orders to be transferred to another base and we had our opportunity for revenge. When being transferred, the enlisted or officer personnel must have a checklist signed off by about ten people and only then could he receive his orders and payroll documents. The checklist signers certify that you have turned in anything that you may have checked out such as pilot's gear, any special gear, weapons, recreational material, and that you have no outstanding traffic tickets, debts, that your personnel file is up to date and you have picked it up. At the base hospital they certify you have all your shots and you must pick up your medical and dental records. There were probably more things that I can't remember. When Lt. Quince showed up in personnel, he was told he had to go to finance first on the other side of the base; finance told him that he had to get the Provost Marshall's signature first and the Provost Marshall sent him back to me in personnel. I told him I had sent his file to headquarters, and would he please stop there, get it signed, and return it. When he got to the headquarters office, everyone had gone to lunch. Finally around two o'clock, Captain Raeburn suggested that we had had enough fun, so I managed to find Lt. Quince's personnel file in Sergeant Lord's desk. When he showed up an hour later, he was polite and reticent; I'm sure he reverted back to asshole after he left Web, but it was fun.

I met my first wife during the last year in the service. She became pregnant two months after marriage in September 1957. I received an early discharge in April 1958 and son Robert was born two months later. During my Air Force time I had taken a number of correspondence courses and attended Howard County Community College in Big Spring at night time. After two years in the military I knew I wanted to get a college degree and do more with my life.

As an aside for my grandchildren, in the 1950's Coca Cola came in bottles instead of cans. The coke bottles had the name of one of the hundred or so city's where they were made on the bottom, and over time the bottles were distributed all over the country, so it was a natural source of gambling. Every afternoon during our break, five or six of us would buy a coke from the machine, and wager a quarter to see whose coke bottle had traveled the farthest. Winning a dollar when your pay was fifteen dollars a week was a big deal.

CHAPTER 3

I applied for enrollment in the school of engineering at Penn State in early 1958. I was rejected because I was lacking two tenths of a unit of solid geometry. My laziness in high school had come back to bite me. After my discharge in April 1958, I went back to my old high school to see what could be done about the deficiency. The assistant principal allowed me to attend geometry class with my old high school teacher Mr. Dexler. The first day I sat in class, Mr. Dexler handed out a test; it was a sheet of paper with ten yes/no answers on each side labeled A and B. The next day Mr. Dexler announced that I had the highest grade in the class and of course Mr. Dexler took that opportunity to berate his class. I was not popular with the other students. While he was telling the other students that they should be ashamed because this old person who had not studied in four years had the best grade, I noticed that I had mistakenly put the “A” answers on the “B” side and vice-versa. I never admitted to my mistake; I sat quietly in class and was awarded the required solid geometry credits. Was this another CEO lesson; don't admit your mistakes when every thing works out?

Penn State required me to take a version of the current SAT test and as a result I was finally accepted as a freshman. From the time of my discharge and up until school started, I worked second shift again for RCA in Lancaster, this time manufacturing and testing color TV picture tubes. Thanks to the Air Force, I was eligible for the GI Bill financing, it was around \$160 a month in 1958.

Our financial situation was not very good, and it was doubtful that we could survive on the GI Bill money alone, tuition and books would eat up most of the money. I spent much of the summer visiting relatives and scrounging furniture so we could rent an unfurnished (cheaper) apartment at Penn State. In September, with a rental trailer full of the scrounged furniture, we were off to college. At the end of my first semester, my

grades were high enough that I was invited into a number of honorary societies, Tau Beta Pi, Sigma Tau, and Eta Kappa Nu. By the end of the first semester it became clear that we were just about out of money and that I was actually a pretty good student. I went looking for a job. I had heard from another student that a new lab, called the Automation Lab whose charter was to help small Pennsylvania companies automate for cost reduction, was looking for someone with Boolean algebra knowledge to design a digital tic-tac-toe machine using electromechanical relays to construct a computer; it was funded by a grant from the relay company. I had no idea what Boolean algebra was all about, so I spent a weekend at the Library becoming, what I hoped, more proficient than the professor doing the hiring. They say “Necessity is the mother of invention”, substitute the word “desperation” and it would probably be more accurate. Once again I would learn something new, that I had some salesmanship and bullshit skills.

Monday afternoon I met with the professor and convinced him that I was the right student for the job. I completed the tic-tac-toe machine about seven months later. By that time I had been promoted to the lab manager with three other students working for me. Again I was learning that not only was I a good student, had salesmanship abilities, but that I also had management skills. This was more valuable experience that would be of great help later. I worked in the Automation Lab up until the beginning of my senior year and in summers taught mechanical technician classes; machine shop, gear design, and iron and aluminum foundry methods. Then I was offered a job at the Naval Research Lab on campus working on submarine torpedo analysis, at a substantial increase in pay. As a needy student, the increase in pay trumped all other considerations. The summer after my sophomore year, daughter Brennda was born.

My senior year was a blur with the new job and interviewing for jobs after graduation and helping to raise two kids. In those days, there were a lot of jobs to be had, and I had interviews in Massachusetts, New York, and New Jersey. I picked Bell Telephone Laboratories in New Jersey because of both the prestige and because they would pay for a graduate degree at NYU. Also at Bell Labs, I only worked one day a week the second year, none the first year and went to school the rest of the time. I knew that if I went to work full time I would probably never get to grad school. Because I took

classes in the summers, I graduated in March of 1962 (with distinction). Then I was off to Bell Labs in Whippany, New Jersey.

CHAPTER 4

When I arrived at Bell Labs in Whippany, New Jersey, my list of college Math credits was declared inadequate along with some of my colleagues. So, that summer about twenty of us went to math class for four hours a day, five days a week for about ten weeks. Each week we would start a new text book and have an exam on Fridays. We went through calculus, differential equations, partial differential equations, vector analysis, tensor analysis, probability analysis, statistics, and functions of complex variables to name a few of the text books. The first year at Bell Labs, I spent three days going to New York University and two days off to do homework. The second year was two days of school, two days for homework and one day of work each week. Again, I had a lot of free time on my hands. Thank goodness for my interest in Contract Bridge or I would have gotten into more trouble.

More than one hundred students, all in the top 10 percent in their respective schools, went to NYU classes held at Bell Labs in Murray Hill, New Jersey. At Murray Hill, there was a public demonstration area where the latest telephone technology could be tried out. One of the pranks that another student and I came up with had to do with an automatic dialer. To dial a number, a small punch card was inserted in the phone and then it automatically dialed the number. This was a working phone and the punch card called an answering machine that said “You have just used the AT&T automatic dialer; blah blah blah” We substituted the demo card for one that would dial the Office of the President of Bell Labs. Of course the next day it was back to normal; so we substituted it again. After a few days of that it lost our interest. I then noticed that all the elevators had phones that actually had a number that could be called, after all this was Bell Telephone Labs. So my friend and I had the card dialers calling the elevators. It was amusing to see what happened when the phone in the elevator rang.

Bell Labs was more academic than suited me. Although I tried to fit in, I wrote papers, presented papers at conferences, and applied for patents-I didn't like that most projects were run by committees. I liked to be in charge and make decisions without lengthy meetings. I began slowly to realize that I would have to move somewhere else to be satisfied. I was fortunate though to have worked on some interesting projects, for example I helped build President Lyndon Johnson's communication system used in Air Force One. He had been returning from Hawaii when a ham radio operator in Arizona recorded one of his conversations. There was a push to build an encrypted system for Air-Force One that I and a few others designed at Bell Labs.

The Vietnam War was just beginning and I worked on communications systems for the Military. Before satellite communications, the communication system used for a few hundred mile range and for high communications rates such as TV was called troposcatter; a system that depended on scattering radio signals in the troposphere (the first five miles of the atmosphere). The transmitting and receive antennas are usually sixty to one hundred foot dishes pointed at the horizon. Transmitter power is from ten to fifty kilowatts. It was then and is now the most difficult communications system to design and make work. Perhaps because of it's difficulty, I was involved in troposcatter much of my career. I designed and built a simulation system so troposcatter radios could be checked out in the lab. The company supplying troposcatter radios to AT&T and Western Electric was Radio Engineering Labs; in the process of testing their radios, I met the chief engineer Fred Kornberg. As you will see through this book our paths will cross a number of times.

Another system I designed with George Travis was the troposcatter angle-diversity test system that stretched from Iceland to Greenland. There was a funny story much to the chagrin of Dr. Howard Blank who was the software engineer working on the project, incidentally a very nice guy. The Bell Labs computer was a main frame in the basement and was fed either by punch cards or on big reels of magnetic tape. The magnetic tape was stored in the computer room with your last name on it. Howard turned in three months of work with his last name on the tape. "Blank", get it?

George Travis was a mentor and I looked up to him. I admired his ability to build or repair anything. I realized I also got a lot of satisfaction in building or repairing.

George and I traveled together a number of times on business, and we often would go to Golderi's Scrap & Junk Yard in Morristown, near Bell Labs, at lunch time to pick through the scrap for items we would want for our inventions, such as motors, pulleys, switches, and pumps. The owner was Mario (I think) Golderi, we would take our discoveries to his office where we would negotiate a price. I built a table saw, a lathe, and a garage door opener before they were common with Mario's stuff. One Friday at lunch time, George and I were at Golderi's and we noticed that there was very little going on; the crusher was not operating, the shear that could cut a four inch piece of steel in half was shut down, and the workmen were mostly standing around. We asked Mario what was going on. He said the huge magnet (that could lift an entire car) was broken and they couldn't move scrap around the yard. Furthermore it would take two or three weeks to get a magnet repairman out to fix it. George and I said we would come by the next day and believed we could fix. Mario said "Whadda I got to lose?"

The next morning, George and I took the magnet apart and found a corroded copper electrode, the reason the magnet didn't work. We went to my house and made a new electrode on my lathe, returned after lunch, and had the magnet operating by about two o'clock. Every Saturday at three o'clock, the end of the workweek, Mario would fill a cooler with gin or vodka for the twenty or so workmen and they would have a small end-of-the-week get together. When Mario found out we were not charging him for fixing the magnet, he asked us to stay for the get-together and announced that we would have free scrap picking for the rest of his life! It was a kick for us to socialize with the junk yard workers and created a story we told for years.

Most engineers are not into jokes, much less computer jokes. In the 60's, computer programs were written on punch cards. Each simple command required one punch card so a complete program could easily require hundreds of cards, and if any single card were out of place, the program would not work. I would substitute a stack of cards the same height as the actual program that the engineer had left on his desk. Then when passing his desk, I would bump into the stack and scatter them all over the floor. Fortunately, all the programmers were young and there were no heart attacks.

At one point, I shared a large office with Dick Rea, our desks were both along one wall. I noticed a hole in the wall along the side of Dick's desk, and I realized that the

phone line to my phone could be seen through the hole. Whenever I had a visitor, and particularly when it was an outsider who didn't know how the phone system worked, Dick would surreptitiously ring my phone; I would say excuse me, I'm expecting a call from my wife, and then I would answer the phone and act irritated because the phone line would get tangled with a drawer or something. After hanging up, I would excuse myself again, pick up the phone, and act as though I were calling the operator. I would say, "Operator, would you please pull about three feet of phone line in? Thank you." Magically the phone line would disappear into the wall as Dick pulled it from the hole in the wall next to his desk. I would act as though it were a normal thing to do, and get back to the visitor, "Now what were we talking about?" Most of the visitors usually said something like, "I didn't know you could do that!"

Playing contract bridge at lunch time became an obsession with our group, I think lunch times exceeded an hour frequently, and we would set up a table in the office shared by Eric Linger and me. Most of us smoked during the bridge game including a couple of kibitzers. Eric didn't play bridge and didn't smoke so I am sure it was an irritation. At the end of the office and above Eric's chair was a three-speed fan mounted on the wall; the type that would move back and forth. When the smoke built up too much for Eric, he would reach above his head and pull the chain that turned the fan on. You pull the chain once and it was high speed, pull it again and it would slow, until the 4th pull and it would turn off. Frequently, the fan would blow the cards off the table. After a few weeks of us irritating Eric and Eric irritating the bridge players, I decided to have some fun with the fan. In the evening I connected the rotating part of the fan so that when it was turned on, the first rotation would slow the fan by pulling on the fan switch, on the second rotation, it would slow down, and on the 4th rotation it would turn off. The next day we had a good laugh; even Eric admitted it was funny.

Living near New York City provided a great opportunity to explore; almost every weekend was spent in the city which was only a forty minute drive. We rode the subway everywhere, saw Broadway plays, enjoyed shows in Greenwich Village, rode the Staten Island Ferry, and walked around Times Square. Christmas at Radio City Music Hall was special and then dinner in China Town, Mott Street in Little Italy, on Sunday afternoon for lunch as well as visiting Coney Island for Nathan's Hot Dogs.

By the way, an engineering joke about NYC, do you know why the lights are dimmer in Central Park than Times Square? They are farther from the battery. For non-New Yorkers, the southern tip of Manhattan is called the battery because it once had cannons to protect the city.

The Jersey shore was another attraction because of wonderful beaches and great fishing. In the spring and summer we fished for fluke (a type of flounder) and in the fall there were blue fish. Getting to the shore was a thirty mile trip down the Garden State Parkway. I always claimed the Garden State Parkway was the safest freeway in the country. Why? Because there are not a lot of people killed at ten miles per hour. If you don't know it, there is a hell of a lot people in New Jersey.

Bell Labs, though was a wonderful experience for me, an inexperienced kid who grew up in a small town in Pennsylvania, There were scientists and engineers who had theorems and inventions named after them, some who published books, and many who were professors. To my knowledge I had never known a Jew before Bell Labs and suddenly half my colleagues were Jews. So I learned about Passover Seders, Bris ceremonies, Rosh Hashanah, Yom Kippur, and Jewish foods like matzo balls and potato latkes. After four years at Bell Labs in Whippany, my group was transferred to the new Bell Labs building near Holmdel, New Jersey.

Bell Labs attracted some of the best and recruited the top students. There were many brilliant and in some cases, a little peculiar, people that worked there. For example, one of the scientists rode a unicycle down the hall to his office every day. The people I worked with left such an impression that I still remember them today and could write chapters about them, George Travis, Peter Monsen, Ron Goff, Bill Strong, Dick Rea, Sam D'Ambra, John Boyhan, Dave Stott, Eric Linger, Mark Tidd, Vic Cutler, and Doug Brady.

I was tired of New Jersey weather and not happy with the environment at Bell Labs. I had loved the Southwest after living in Texas for almost four years, so I started to look for a job in that area. There was an annual electronics trade show in New York and I arranged for an interview with companies located in Denver, Phoenix, and Dallas. I flew to Phoenix in April 1967 to visit Motorola. Motorola should be sued for entrapment, I left JFK in a blinding snowstorm and four hours later landed in Phoenix where the weather

was seventy-five degrees, sunny, and smelled of orange blossoms. I was hooked on Arizona.

CHAPTER 5

In August 1967, the moving van loaded up our household goods and we loaded up the car for the drive to Phoenix. When we arrived in Phoenix, it was late afternoon and the temperature was 118 degrees. What in the world happened to the orange blossom smell?

Motorola Government Division had only a few hundred employees and designed communications systems, bomb fuses, and radar systems. I really learned a lot about business, marketing and management during the eleven years I spent at Motorola, the education was invaluable for managing companies later on.

At first, my communications systems skills learned at Bell Labs were used to design and support NASA programs. For example, I helped design the communication system that was used to send the Television pictures back to earth of Neil Armstrong walking on the moon. It is rare to be able to make up new jokes, but this event triggered one. When Neil Armstrong stepped on the moon, he had been given a prepared statement, but he added a little bit to the statement. Contrary to what you heard him say, what he really said was “One small step for man, one giant step for mankind, and this last step for you, Stanley.” At Houston, they edited out the last part, and when Neil returned, they asked him what that was all about. He told them that he use to live above Stanley's butcher shop. Stanley was always trying to get his wife to perform oral sex, and she always said “Stanley, when man walks on the moon!”.

One of the favorite places for customers was the Pinnacle Peak Patio steak house in northern Scottsdale. At Pinnacle Peak, the waitresses wore a holster with a scissors, and when anyone walked in the door with a necktie, it was immediately cut off and later stapled to the ceiling. If you ordered your steak well done, you would be served a smoking cowboy boot.

One time a customer of mine from the CIA (who had apparently been there before) announced that he wanted to go to Pinnacle Peak for dinner. When we walked in the door, a waitress tried to cut off his tie. But he had made a metal insert for the tie so she was unsuccessful. Later, when we were sitting at a table waiting for our steaks, a big bruiser of a guy showed up with a two foot long bolt cutter and snipped the tie off.

In high school I met Dan Fuhrman. And we hung out together. Dan was one of the most frugal people I knew. When I had decided to go into the Air force, Dan also went into the Air force a few weeks later and we saw each other at Sampson AFB. After basic training, I went to Texas and Dan went to Japan. After the Air force, we both went to Penn State. On occasion, when I could, I hired him to work for me in the Automation Lab. Again we parted ways with me going to Bell Labs and then Motorola and Dan going to an Aerospace company in LA. One weekend Dan and his wife Haruko, who he met in Japan, came to Scottsdale for a visit. I asked him if he had a necktie to wear to Pinnacle Peak that night. He didn't, so I took him shopping to buy one. I don't think I have ever seen anyone more shocked than when the waitress cut off his brand new tie. The next morning they got up early and returned to LA. Even though they later-on moved to Phoenix, Dan never talked to me again. Practical jokes can certainly have consequences.

One of the engineers that worked for me at Motorola was Karl Gohlke, a typical engineer, Karl was extremely frugal, Texas Instruments, and had just come out with a scientific calculator and it was being sold for \$169. A lot of the engineers in my group, including Karl and me ordered one of the calculators from Texas Instruments. Everyone that ordered one received it in the mail except for Karl. Karl called Texas instruments to find out what happened to his calculator. They said they would research this and get back to him. Weeks later, they got back to him and said that somehow the calculator had ended up in some dead letter office in San Francisco and they were working to get it returned and then would then ship it to him. In the meantime, the price of the calculator had dropped to \$139. Another month went by and he still had not received his calculator. Once again, Karl was on the phone with Texas Instruments to find out the status of his missing calculator. Texas Instruments told him that they would send him a new calculator, but it never arrived either. By this time the price had dropped to \$119. At this point, I think the God of Pranks was looking out for me because my secretary found an

identical Texas Instrument calculator in the parking lot that looked as though it had been run over by a truck. Its keys were sticking out hanging on springs similar to what you would see in a cartoon. I couldn't believe my good fortune, the parking lot calculator was in a leather case, just as it came from the factory. For some reason I had kept my old shipping box that my calculator came in from Texas instruments, I went to the tech pubs department and asked them to make a shipping label that looked just like the one that came from Texas Instruments. Then I took the calculator that had been run over by a truck, put it in the leather case, and in the box that I had kept and shipped it to Karl. I can only imagine how excited Karl must have been when he got a slip from the post office to pick up the package from Texas Instruments and I can only imagine the language Carl used when he opened the box and found the calculator that had been run over by a truck. As the days went by, I expected Carl to say something, but he never did, that is until the Christmas party when Carl was drinking heavily. I casually asked "Carl, did you ever get your calculator?" His reply cannot be included in this book. He never knew, but suspected that I was the prankster, by the way he eventually received his calculator, and by then it was selling for \$99.

I had three engineers working in the same office. One was a black guy named Napoleon Hornbuckle III. Napoleon, we called Nate, was a bright guy who went on to become a senior executive at Motorola. Nate came in to my office with Bob, one of the other engineers in his office, and said "You have to do something about a problem." "What is it?" He said "Charlie (Name Changed) farts all the time!". I was a fairly new manager and wanted to find out the facts, so I asked "What do you mean all the time? Once a minute, every ten minutes?" He said "About every half hour. "What "I asked "Do you find troublesome?" Bob Said "I can smell it!" and Nate said" I am on the other side of the office, so I don't smell it; but I anticipate that I will!" I asked if they had talked to Charlie and they hadn't. So I suggested that the next time Charlie farted, Nate should say in a loud voice "*What Was That?*" which would hopefully lead to a resolution. I found out later that it did work, Charlie had some digestive problem and didn't realize he was farting that much. A couple of weeks later I was in the restroom when the door flew open and Charlie ran into a booth , I heard a loud fart; and anticipating the smell, I ran out.

After about five years at Motorola, a Navy requirement-document landed on my desk describing the need for a satellite broadcast system for the fleet. On Navy ships, the upper parts of the ship are reserved for defense and there is no room for communications. It occurred to me that we could put four antennas around the ship at close to deck level, and by electronically combining the four signals, produce a robust system. I believed that each antenna would receive direct satellite signals as well as reflections from the ship and from the sea. This was such an unusual concept that a demonstration would be needed so I built a combining circuit for the multiple antennas and we showed it to the Navy personnel at San Diego. The Navy gave us a small contract to build a demo system to put on board a ship to see if it would work. A few months later, we installed the system on board the USS Jouett, a guided missile cruiser, and Jim Pohl, a navy engineer, Jim Tyner a navy lieutenant and I sailed from San Diego.

Our Captain was Samuel L. Gravely, he was the first black captain that later would be promoted to become the first black Rear Admiral in the US Navy, and this was his first sea command. The first test for the Fleet Broadcast System was that it had to work while the ship was passing under the Coronado Island Bridge; the system worked beautifully passing under the bridge and for the next four days at sea. Admiral Gravely was not so lucky initially. First a Sailor was missing (overboard?), then the missile that was supposed to fire at a target drone failed, and then the high speed test run shut down prematurely. Our Fleet Broadcast System was a big success, so I wrote a wire to Admiral Zumwalt, the Chief of Naval Operations, with Captain Gravely's signature, describing the successful completion of the testing of the Satellite Fleet Broadcast System; and to my surprise, Captain Gravely sent it without any changes. Finally over the next few days, the missing sailor was found back in port, the errant missile fired, and the power run worked. Soon after, Sam Gravely was promoted to admiral.

We had one more test to conduct for the navy. We installed the system on the aircraft carrier, the USS Ranger. Again, I was on board with Jim Tyner and Jim Pohl. The navy wanted proof that the aircraft taking off and landing would not interfere with the communications system. Once again, the system worked flawlessly. After five days on the Ranger and successful completion of the tests, I had an opportunity to leave the ship early. An eight passenger plane called a COD for Carrier Onboard Delivery was leaving

for San Diego and there was an open seat available. It was really exciting to be catapulted off the Ranger. In the COD you sit facing the rear of the plane; the catapult accelerates the plane to around 120 miles an hour in three seconds, and from the acceleration, if you are not prepared for it, as I was not, your feet fly out and your ankles hit the seat in front of you, ouch!

The Satellite Fleet Broadcast System (Nomenclatured by the navy as the AN/SSR-1) was being procured through a Naval Group called NAVELEX (Naval Electronics System Command) in the Washington DC area. The head of NAVELEX communications was Captain Harry Feit, a crusty, tough, and smart no-nonsense guy. He and I became friendly through five years or so of interaction during the development, manufacture, and installation. I would conduct quarterly meetings at Motorola, Scottsdale, and with familiarity, my smart-ass nature begins to appear. I think when it became clear that the program would be successful, Harry began to relax and he appreciated my sense of humor. For example, the equipment had modules with handles shaped like large Lifesavers to pull the modules out of the equipment with your finger. When asked how we selected the hole-size, I cracked that we had surveyed one hundred sailors to determine the average finger size. Captain Feit immediately commented, "You wasted your time; there was a hooker outside every navy base that could have told you that." NAVELEX was where I met a Navy Commander who would become a life-long friend, Jerry Waylan. During the manufacturing of the AN/SSR-1, I submitted an unsolicited (Tongue in Cheek) proposal to Captain Feit for twenty test sets to be used during installation; I called it the FEIT Set (Full Evaluation Installation Test Set). I don't think Captain Feit could resist having a piece of equipment named after him; at any rate Motorola was awarded a contract for the FEIT Set.

I called him Commander Doctor Waylan when I first met him in NAVELEX during one of my visits to Captain Feit. Jerry had a PhD and was the key designer of many of the Navy's communications systems including the UHF DAMA System. For the rest of my career, Jerry and I would cross paths frequently, both socially, visiting each others homes, and golfing, and professionally. After the navy, Jerry worked for SAIC, then became the VP of GTE Spacenet and managed all GTE satellites and satellite

systems. Jerry was a customer of mine after my Motorola days. Later, he was on my board of directors at Radyne.

There was radar on Shemya, the second last island of the Aleutian chain that was constantly monitoring Russian aircraft and missile activity. The information was transmitted through troposcatter communications. The first link from Shemya to Adak (the next island in the chain) was very long and worked marginally well. Motorola had a group in Chicago that designed a Digital Troposcatter System for Rome Air Development Center (RADC) in New York that was expected to improve the performance. The system was installed on Shemya and Adak and had poor performance. In the mean time Motorola (a typical big company move) decided to shut down the Chicago operation and transfer the Troposcatter responsibility to Scottsdale. Troposcatter is a very esoteric technology with very few experts in the country, and none of the Chicago experts would move to Scottsdale.

Picture this, Motorola has a contract with RADC, the system that was installed in the far west Aleutian islands doesn't work right, the only remaining Motorola person is a technician on Adak, all the expertise is gone from the company. I happened to be working in the same area in Scottsdale where the troposcatter responsibility was moved to and could overhear the manager Sam Romero spend hours each day on the phone to the technician in Shemya advising him to try various fixes. After a couple of weeks of phone calls and no progress, I approached Sam and explained my troposcatter experience. I told Sam I may be able to help and asked Sam if I could study the system drawings. In a couple of days I found a two major design flaws, either would prevent the system from working properly. Both required some hardware changes that I accomplished in a few days. I offered to take the new hardware to Adak and then Shemya and help the tech install it. It was expensive to fly out to the Aleutians' and Sam wanted me to stay a month. I said I would stay until the system was working. If I could do it in two days, then I would return in two days. If it took a week, then I would return in a week. This was a sticking point with Sam, so he would not approve the trip. About a week later, he was so desperate for a solution that he agreed with my terms and I took off for the Aleutian Islands.

The airline that flew from Anchorage to the Aleutian Islands was Reeve's Aleutian Airways, owned by Bob Reeves who had been a bush pilot in Alaska since 1936. The aircraft was a big four-engine Electra bought, from American Airlines; which I deduced because in the cabin, the American Name had been crudely spray painted over but you could still see the name. The plane had been configured for mostly freight and had about twelve seats. The stewardess, it turned out was Bob Reeves daughter, was dressed in a fur parka and mukluks. I had been forewarned that alcoholic drinks were not allowed on the flight so I brought a couple of those tiny bottles of Scotch. The stewardess saw me pouring one into a cup of water and scolded me; not because I had the Scotch, but that I was not careful enough in concealing it from her.

At Adak, the winds constantly blow and it takes tremendous pilot skills to land there. The primary occupants of the island were naval personnel since this was a submarine base. Some enterprising sailor had planted three pine trees that were getting smaller every year along with a sign declaring Adak National Forest. Next to the runway is a windsock made up of three inch iron chain. There is probably an axiom of human behavior that says "The more isolated a location, the more certain there will humor. The return plane would go to Shemya, then Attu; the last island of the chain, before turning around and heading back to Anchorage. At Attu, the very small terminal; not much bigger than an outhouse had a huge sign "Attu International Airport, Gate 1"

It took me four days to make the system work; two days at Adak and two more days at Shemya. Shemya was primarily an Air Force base where the winds make Adak's seem like a breeze in comparison. At Shemya I found another design problem and had to redesign a circuit with out having a stockroom of parts. I raided a very small Air Force repair shop for parts. After implementing the last fix, the system start working as originally envisioned, and the technician and an Air Force representative from RADC set about taking data for about a month. This troposcatter radio system was the longest and fastest communications system in the world after the fixes were implemented. I used the data collected and wrote some technical papers that I presented about eight times and was also published in the prestigious Institute of Electrical Engineers.

Rome Air Development Center had invited the military top brass and the key civilian personnel who had information to share about Troposcatter systems. The

auditorium had around 300 attendees; I was scheduled to speak near the end of the program. Most of the presenters were very serious PhD's who would show esoteric equations to explain the Troposcatter behavior. I need to explain a little more about troposcatter communications; very large antennas and high power blast the troposphere and other antennas, say 300 miles away are receiving signals that are reflected from the troposphere. Thus the signals change from minute to minute, hour to hour, day to night, and month to month.

Most of the presentations would show dots all over a graph called a scatter plot that might show signal levels versus time or versus distance or some other variable. Invariable the presenter would overlay a transparent sheet having a line drawn that would show the average of the dots or more esoterically, least-mean-square-blah-blah estimate using Euler's equation, *Very Boring*, and I am sure that most of the audience was totally lost.

My presentation was about the Aleutian Island System that I mentioned earlier. I started with the same kind of Scatter Plot, a graph with dots all over it; and explained some rationale for the data sounding very erudite to all but perhaps the PhD's, and then when I overlaid a transparency connecting the dots, it formed the Motorola logo. The audience appreciated the joke, except for the PhD's who were not absolutely certain, but suspected I might be making fun of them. Thirty years later, I ran into an attendee of that conference, Paul Mahoney, who told me the only thing he remembered was my humorous graph.

My engineering group at Motorola had designed a troposcatter radio, we sold some to Reginald Would at Bell of Canada for a telecommunications system used to carry the radar information from, the Distant Early Warning (DEW) line and the Ballistic Missile Early Warning System (BMEWS) that were installed to alert the United States of approaching Soviet bombers and ICBM launches, back to the US from the Arctic Circle. There were four locations in Canada in which we had to install our equipment and the transportation between locations was by a de Havilland Beaver, a single-engine, high-wing, prop plane known as a bush plane. The Beaver was the work horse of the north because it carried a big load and could take off on a very short runway. Unfortunately, the plane was so noisy that communications within the plane was only by hand signals. One

day during travel from one site to another, the weather was not very good, and the Beaver ride was extremely rough. I was in the back, and the tech who was riding in the front-right seat was apparently nauseous. The pilot had sandwiches for lunch in a brown bag sitting between the seats, so when the tech poked the pilot and pointed at the bag, the pilot thought he was asking “ May I have a sandwich?”, what the tech was saying was “I’m sick, is that a barf bag?”. So after the pilot pointed and shook his head yes, the tech grabbed the bag and threw up into it. Needless to say, the rest of the flight and the rest of the day were tense.

In Canada, people make fun of Newfoundlanders by telling “Newfie” jokes which are similar to every other ethnic joke. One day the pilot was putting a twenty foot long electrical wave guide (similar to a piece of pipe) in a cardboard box two inch by two inch by twenty feet, into the plane, and some one asked him what was in the box, he said “Some Newfie is shipping his clothesline home!”

Around 1970 I started to take flying lessons in a single engine Cessna and qualified for a license a few months later. Just like driving, I devised the *First Rule of Flying: Never* put your plane into the space occupied by something else and most importantly this includes the earth. And the *Second Rule Of Flying: Keep* the pointy end front and the dirty side down. I loved the excitement, the camaraderie with other pilots, and the prestige of owning a plane. The humor surrounding flying was usually dark which I also loved. For example, if flying at night over unlit terrain in the mountains in a single engine plane and the engine stops, what do you do? First you slow as much as possible without stalling, and then as you approach the earth, you extend the flaps and slow even more. When you sense you are around ten to twenty-feet above the ground you turn on the landing lights. If you don’t like what you see, turn the lights off!

After also getting my Instrument Rating, I became qualified in twin engine airplanes. A lot of general aviation twin engine planes are considered light twins. For example the Beechcraft Duchess, a light twin, can fly at 18,000 feet with two engines, but can only fly at 3800 feet with one engine running. At Flagstaff Arizona where the ground is at 7000 feet, the Duchess has a problem if one engine stops running. Hence the joke; what’s the purpose of the second engine in a light twin when the first engine has stopped? Answer: To fly you to the scene of the crash!

I made two trips to Kuching, Sarawak, Malaysia on the Island of Borneo. The first was with Bill O'Conner, the sales guy for international marketing, and John Knudsen, another sales guy for the troposcatter product, to check out an existing troposcatter site for upgrading. We flew to Tokyo, and then Kuala Lumpur (KL) where we met up with the Motorola Rep for Malaysia, Sam Muey Long. Sam was very well connected in Malaysia, counting as his friend, one of the rajah's that run the country. From KL, we flew to Singapore, then Kuching arriving around midnight. The only western hotel was a Holiday Inn, and in the lobby was their current sales promotion "The best surprise is no surprise!" Of course, there was a surprise about every three hours when the electricity went off. Meetings with the customer, Malaysian Telecom, went well, and we had time to look around. Kuching was part of Brunei until the mid 1800's when a riot against Brunei ensued, and was brought under control by a British Adventurer who became the first white rajah of Sarawak and Sarawak became part of Malaysia. I mention it because, when the British take over a country, they bring their culture with them; so we found ourselves on the veranda of the Cricket Club, being cooled by a huge fan that was operated by a rope being pulled by a local native.

The next morning we went to the Museum which was the only place to buy souvenirs. Borneo had a lot of head-hunter tribes in the past and most souvenirs were spears, knives, or shields. There were also shrunken heads; the real thing! John bought a spear; complete with blood stains. The Kuching airport terminal building is tiny and it was comical to see John sitting on one bench with his spear, while another passenger had bought a shield and was sitting across from him.

We flew Singapore air lines (SQ) from Singapore to Tokyo. At that time SQ had the most gorgeous women flight attendants I had ever seen; probably a mix of Malay, Chinese, and British. The flight attendants could not be married and had to retire at age twenty-seven. Things have since changed a lot; now they are still gorgeous, but may be married, and only have to retire at age thirty-seven. The world is going to hell.

A month later, the international marketing manager deemed it imperative for me to visit the customer in Kuching again to finalize the agreement that would lead to a contract. I wasn't too pleased about going, but I got on the JAL plane to Tokyo the next

day, Wednesday, for a meeting on Friday. From Tokyo we flew to KL arriving an hour and a half late, and I figure missing our next flight to Singapore.

It was quite a surprise to find that Sam had held the plane for me, and he had greased my way through immigration and customs. Within fifteen minutes of landing, we were on our way to Singapore. Sam was bragging about holding the plane and asked if he could do anything else for me. I told him I was a pilot and would like to be in the cockpit on the way to Singapore. He said “Wait a minute.”, and then went to the cockpit of the plane, a Fokker F-27, fifty passenger turboprop twin. A moment later he came back to my seat and said “com’on” and led me into the cockpit. The copilot had given up his seat for me and I sat as the copilot into Singapore at night relinquishing my seat on final approach. Can’t do that today!

The last leg of the trip was into Kuching, again arriving around midnight at the Holiday Inn, where the lobby sign now was correct “The best surprise is no surprise!”

There was a surprise the next morning when we went to the Malaysian Telecom office and found it was closed for a holiday. Sam called the customer and we were invited to his home. Not only was it a holiday, but the customer was going on a two week holiday, leaving on Saturday, the next day. He said we could not talk any business until he returned in two weeks. He and his uncle were going to a pottery factory and then tour the Coca Cola plant and we were welcome to tag along. At the pottery factory, I bought a beautiful hand carved urn for six dollars. They wrapped it in brown paper, making it look like an urn wrapped in brown paper. The coca cola plant was interesting because it was a 1930 model plant that had come out of Louisville, Kentucky when they upgraded.

The next morning I started the trek home; more than a little angry. I decided, that since the international department that put me on the wild goose chase would be paying for my travel, that I would upgrade to first class. When I boarded in Singapore carrying my urn, one of the beautiful flight attendants asked me, “Mr. Fitting, what is that you are carrying?” I told her “My poor departed wife always wanted a trip around the world, and now I take her ashes when I travel.” Probably an Asian thing, she never acted like this was strange. But a couple of hours later five of the other flight attendants came to my seat wanted to know more about the story and I finally confessed that it was a joke.

Motorola had an executive Institute that was used for evaluating their executives for future promotion. The Executive Institute was located north of Tucson on a large ranch consisting of three buildings. The first building was the dining room. The second building was the classroom and the third building contained rooms similar to an upscale hotel and included a lounge where we played cards, shuffle board, and drank booze. Motorola did not provide the booze, the students pooled some money and a staff member went to the liquor store for the booze, including wine with dinner. The three buildings were about a quarter mile apart from each other. Motorola would bring in outstanding speakers and instructors such as from the Brookings Institute, the Harvard Business School, and famous individuals like the famous longshoreman philosopher, Chauncey Leake. The staff consisted of a president, a vice president, a couple of instructors, a chef and two shrinks that were observing all time. Each class had sixteen students who came from all over the Motorola divisions; and were restricted to the Institute for the thirty day period. At the end of thirty days, each student evaluated all other students and the shrinks got together and evaluated the students.

Each guest speaker or group was introduced by one of the students. One evening after dinner we were to have a speaker discussing the 1969, Tax Reform Act. It was my job to introduce the speaker that evening. At dinner we had drunk a large amount of wine so that by the time class was starting, most of the class was intoxicated. When I got up to make the introduction, I said that our speaker was going to discuss the sixty-nine Reform Act (giggle), and that I had no idea why anyone would want to reform the sixty-nine act (giggle some more), at which point the speaker got up, recognizing that we were all plastered and decided he would not try to lecture a bunch of drunks that evening and we were dismissed. Needless to say, the president of the Institute was not very pleased with how we behaved, and wine was no longer allowed at dinner when there was an evening class.

The Institute had three or four golf carts that were used for students who had some disability or heart problem and couldn't walk from one building to the other. One weekend we decided, since we were bored, that we would hotwire the golf carts and have races. The races went very nicely until two of the golf carts collided with each other causing a serious amount of damage. Once again Monday morning, the president of the

Institute was not very happy and from that time on the golf carts were locked up during the weekends. Although the president of the Institute told us how displeased he was, I was convinced the shrinks were very happy seeing executives showing some initiative and I believe we all received high grades because of the antics that we pulled while we were there.

After ten years at Motorola, I was part of a business team and head of an engineering department with over one hundred employees. I was somewhat happy, but then a series of events at Motorola caused me to rethink my future.

I had invented a new communication system for the US Navy that is on every Navy ship today called Satellite Fleet Broadcast. I designed and built a demonstration system, helped install it on a ship, and demonstrated it to the Navy. I wrote the specification and won a competitive bid for about six hundred thousand dollars to build a few prototypes and test them. My department won the manufacturing contract for about twenty million dollars and we realized a profit of over seven million dollars, the most profitable contract of the Motorola Government Electronics Division that year. The same year I helped Motorola win a contract for another naval communication system called UHF DAMA that ultimately brought in over three hundred million dollars partly I believe as a result of my relationship with Jerry Waylan. My boss received his annual bonus of more than fifteen thousand dollars. My bonus was six hundred fifty dollars. When the bosses look out for themselves first, be careful. Strike one!

Motorola decided to bring in a number of senior managers from Magnavox, and TRW rather than promote from within. Program managers, marketing managers, and staff people were hired to take positions that I had thought would be possible stepping stones for me. My chances for promotion suddenly were reduced to near zero. Strike two!

The Air Force (A group called SAMSO, I think it stands for Satellite and Missile Strategic Operations) was planning to launch a series of twenty-four satellites that would enable planes and missiles to strike any target on the earth within a couple of feet. There would be a degraded mode of accuracy for commercial users. The system was called Global Positioning System (GPS). Jimmy Jones, a sales manager, and I went to visit the Commanding General of SAMSO in LA.

SAMSO wanted to give Motorola an exclusive contract for over six million dollars on a fixed price basis to build the first GPS receiver, we would then have the technology to build and sell GPS receivers to the world. They had picked us because of the combination of communications technology and chip technology. The general manager of the Government Division and one of my bosses took a trip to Washington and tried to convince the SAMSO General's boss, who was another General with an additional star that the program should be a Cost Plus contract instead of fixed price because of the risk involved. The Commanding General of SAMSO was infuriated. He called Magnavox, our competitor the next week and gave them the contract. Motorola Government Division was lacking in imagination. Strike three! Time to leave.

Milt Deever had been a staff guy at Motorola and had left to work for Fred Kornberg, (remember him from earlier; he was then CEO of Comtech Telecommunications.) I called Milt and asked if Fred would be interested in a start-up in the satellite data communications field that I had been trying to get Motorola interested in, I had the expertise the marketing contacts in the military, and believed I could attract the necessary talent in the Phoenix area.

Comtech Telecommunications was making low noise amplifiers and high power transmitters for the satellite industry. Fred was very interested in what I was proposing because it was a natural expansion of his business and I was a known technical person to him. He made me an offer as an employee with the idea that I would produce a business plan in the next couple of months and he would finance the start-up.

CHAPTER 6

Six months after starting Comtech Data Corp, my wife of 21 years said, “I don’t want to live with you anymore.” I moved out, Son Bob was in the army, and Daughter Brennda was going to high school and living at home. After a year, I had concluded that I liked being married and decided to start looking for a mate. Being a typical engineer, I thought about a specification for the next wife.

1. She had to be sexually attractive
2. She had to be intelligent
3. She had to have a good sense of humor
4. She had to be clean

When I thought about it, I realized that the first wife specification would have been;

1. She had to be sexually attractive
2. She had to be sexually attractive
3. She had to be sexually attractive
4. She had to be sexually attractive

Where did the “clean” come from?

In the Phoenix area there were a half dozen single clubs, which I realized provided pre-screening. For example, there was an East Valley, Catholic, Parents Without Partners Club, and there was a Non-smoking, Christian, West Valley Club. The first six or so questions that you would ask in a bar were already answered; where do you live? Do you have children? Etc. There was a club called Graduate Singles that had a dance and get-together every Saturday night that I started to attend. Attendees were supposed to have a graduate degree, but I soon realized that if you actually knew someone with a college degree, it was acceptable.

On the fourth of July, there was a pool party at someone's home in Scottsdale where I met Lorraine. We started dating regularly and were married the following year on June 20th at our best friend's house in Fountain Hills. Brennda was my "best man". Lorraine had two kids, Stephanie, age 11, and Bryan, age 9. At age 41, I changed wives, kids, dogs, houses, bank accounts, and jobs.

Divorces are not fun, but there is some dark humor based on divorce. For example, I have lived in Arizona for more than forty years. And when people find this out, they frequently ask, "Don't you wish you had bought land when you moved here?" I always answer, "No, I am very happy that I didn't." After they look at me strangely. I say "Because my first wife would have it!" Lorraine and I have been happily married more than thirty-three years, we love to travel and have been to sixty-four countries.

One of the skills I developed over the years was taking vacations, I have become very good at planning, taking, and enjoying vacations. Many of the best vacations were sailing trips to the Caribbean with friends. I had graduated from a blue water sailing course at the Moorings Sailboat Company in Tortola, British Virgin Islands (BVI), but it was difficult to find friends who could also sail, have time off, and could afford the costs. And, the women always said, "We don't cook." So, we would usually charter a large catamaran sailboat having four staterooms and four baths with a captain and a cook in the British Virgin Islands or other parts of the Caribbean. We made eight of these trips that were uneventful, but we did take one that was very strange.

We had taken several trips with certain friends, let's call them Bill and Shirley, that were very pleasant. I had planned a new trip to the BVI, and we invited Jim and Sharon who had never sailed before. The first night out, we anchored off Cooper Island. Lorraine and I played a card game with Shirley and Bill called UNO. Around ten o'clock we retired and in the middle of the night were awakened by loud noises and the captain hollering for us to get up; we had gone aground because the anchor slipped. The captain was transmitting may-day, may-day, and the BVI coastguard answered. After determining where we were, they said they would be there in thirteen minutes. In exactly thirteen minutes, the BVI coastguard showed up and pulled us off the rocks. The boat hull was intact, a new anchor was dropped, and we returned to bed.

In the morning, the captain and I took turns diving down to repair one of the rudders; it had been jammed up against the hull. The rudder was fiber-glass that we repaired by hack-sawing the top off, and by noon we were back under way. This was not the strange part. That night Lorraine and I played cards with Sharon and Jim. Shirley, who had been drinking heavily, started making abusive comments to Sharon, calling her a slut, a mother#@#@#, and worse names. I assumed that she was intoxicated because I had never seen this behavior before. The next morning Bill approached me and said he and Shirley were leaving. They called for a water taxi and they were gone. End of story.

As we grew older, sailing became too difficult, requiring more muscles than we had. Lorraine and I went to Fort Meyers, Florida for a week-long Power Yachting Course and were certified as power boat captains, and since then have taken boats around the Bahamas, South Florida, and the San Juan Islands. The only time I ever had boating trouble was when I chartered a forty-six foot, three stateroom, three bath Bayliner motor yacht out of Anacortes, Washington. It is customary, for the first time rental, to demonstrate your boating skills by taking the boat out of the slip and out of the harbor and then return it to her slip. The owner would like some understanding that you know something about their \$500 thousand dollar yacht. The slips were close together in Anacortes, and it was necessary to maneuver through a snail passage; the trial run went perfectly. A half hour later when we were ready to leave, the navigation system stopped working, and a repairman was summoned to repair it. After another hour, we started on our way again, but this time the boat would not turn in the directions that I expected when I used the motors to steer and I hit another boat breaking the rail on our boat. After managing to dock the boat again, and calling the rental company, I found out why. The repairman had turned the wheel completely to one side, not his fault; I should have checked the rudder location before leaving the dock. Another half hour and we were on our way again for a memorable trip in the San Juan Islands and Canada.

The Bahamas trip was with our good friends, Walt and Nancy Franklin, and C.J. Aunger and Beth Ealy. We rented a forty-six foot catamaran with twin diesel engines that had four bedrooms and four baths from the Moorings in Marsh Harbor. During the ten day trip, we stopped in Hopetown, Green Turtle Cay, Great Guano Cay, No Name Cay, and Spanish Cay. Typical of C.J., he immediately made a friend with a boat captain

tending some movie star's boat on Green Turtle Cay who provided us with entertainment and transportation around the island.

We still loved sailing and the women still didn't want to cook, so we also chartered a fifty foot catamaran complete with a captain and cook for our sixth voyage around the British Virgin Islands. The same friends went along, Franklins, C.J., and Beth. The yacht we chartered was the Viking Dream, owned and operated by a British couple. One of the many highlights of the trip was the sail to the island of Anegada; the northern most island of the BVI. A number of things make it special, it is very small, and it is a little difficult to get to because the navigation aids are not the best, and there is a reef to worry about. There is a small pristine, white sand bay in which to anchor and after taking the dinghy ashore, the only hotel has a bar on the beach where you help your self, write down what you take, and pay in the hotel before you sail away. The hotel has the only taxi, a pickup truck with benches in the back which we took across the island to one of the two pink sand beaches with some of the best snorkeling in the BVI. While snorkeling at either Cow Wreck Beach or Loblolly Bay, the bar owners are retrieving either lobster or fish from their traps for your lunch.

The food was outstanding, the snorkeling unbelievable, the weather remarkable, and the friends fantastic.

CHAPTER 7

Talk about a naive forty year old engineer! I agreed to start and build Comtech Data based on a contractual agreement. Equity (ownership) was not something I knew anything about. The contract was probably thirty pages of lawyer BS that I didn't really understand; but I was excited and anxious to try something new and it seemed that if the company performed well, I would receive bonuses and stock options. (My naive belief that Good deeds are rewarded) I also received a title of vice president and Milt, asked if he could return to Arizona to join me at Comtech Data which sounded good since he would bring the business experience. In order to staff the company over the next three or four years, I hired about twenty-five engineers and technicians from Motorola; many that had worked for me when I was there. One of the hires was an engineer by the name of Steve Eymann, the most important person I have ever hired because he became my partner until the end of my career. After about four years, the company was doing quite well.

A couple of years after starting Comtech Data, Milt and I were asked by Fred Kornberg to accompany him and his president, John Rosenblum, to France. The large electronics company, Alcatel, was interested in buying or investing in Comtech Telecommunications. We arrived in Paris the day before our meeting with Alcatel and the four of us had dinner together. I told the following off-color joke.

A French architect named Pierre was telling his friend while walking down the street, "You see that bridge? I Pierre build that bridge; but do they call me Pierre the bridge builder? No!" As they walked further, he said "You see that building? I, Pierre build that building; but do they call me Pierre the architect? No!" After a while he said "You see that monument? I Pierre build that monument; but do they call me Pierre the

monument builder? No! Why? You suck one little cock...!" This joke by itself is amusing but not special. It's what happened the next morning that made the joke worth repeating.

We arrived at Alcatel and were shown into a conference room, an Alcatel executive entered the conference room and identified himself, "Good morning, very nice to meet you, my name is Pierre Lebow!" It was almost impossible to not laugh, but we managed it. We were guests of Alcatel for about four days while they wined and dined us while showing us the Alcatel Facilities. One evening we were entertained by the Alcatel President and his wife at a restaurant noted for the Nouvelle cuisine française "New French Cuisine". This means that there are about twelve small courses served, each with its own wine. By the time the dinner was over, I was plastered, and though I don't recall it, my dinner partners claimed I kissed Mrs. Alcatel on each cheek and between her breasts. Perhaps the reason they never bought or invested in Comtech.

As part of our entourage, Alcatel's New York Representative (Call him Joe) joined us and was expected to take care of us our last evening in Paris. He suggested that we might be tired and should just eat in the hotel. We said, "No Way in Paris", so we started to walk towards the Champs Élysées. As we approached the famous boulevard around half past eight, we noticed an interesting restaurant; The Le Jardin at the Hotel Royal Monceau; and said we wanted to eat there. Joe said that it was impossible, that that was one of the most exclusive restaurants in Paris and took months to get a reservation. Of course, we gave him a tough time implying that Alcatel was not important enough, etc, and Joe said he would try to get us in. Joe went up to the matre'd and said, "I'm Joe Smith of Alcatel, Monsieur Lebow's secretary made a reservation for five at half past eight. The matre'd said "wee, Mssr, I have a reservation made by Madame Russo" and Joe replied, "Yes, I'm sure that's the one. The restaurant was a luxurious dining room with a glass veranda facing a garden. The glass had been opened to give the illusion of sitting outside. We were seated at the best table in the restaurant, and we were being served cocktails when the authentic party of five showed up. The matre'd and two of the waiters surrounded our table and started asking questions of Joe," Are you sure this is the right restaurant? Right time? Do you really have reservations?". Joe acted dumb and repeated that the reservation was made by Alcatel. Finally, they gave up, gave us menus, and took our orders. The authentic diners were seated in a good but not quite the best

table. In good restaurants, the Matre'd is always able to solve reservation problems. Half way through our dinner, one of the waiters stopped at our table and said "Congratulations, monsieur, you have managed to get a table!". Service was excellent and the food was terrific; there were no hard feelings about our figuring out how to get a table without a reservation. I think the Parisianers respect eccentricity and stubbornness. After dinner, we were served a forty year old cognac at no charge. When dinner was finished, Joe got the check for around \$13 hundred and then asked the rest of us if we have any cash since the restaurant didn't take credit cards, and he didn't have enough cash. Of course, we all said "No," After pondering his dilemma for a while, Joe took the check and signed it "Bill to Pierre Lebow, Alcatel." and then we left.

Here is a sort of funny story about learning the hard way. One of the products we made was a satellite TV receiver (before DirecTV) that was used with large ten to fifteen foot backyard dishes. Small companies would buy the system components including our receiver and sell the package along with installation. We typically sold the receivers to these small companies on cash on delivery (COD) basis; requiring a letter of credit or cash in advance. There was a company in Fort Smith, Arkansas that had been buying our receivers, four or five a month, then would package them with their dish antenna and sell to home users. I don't remember the company name, so let me call it Arkansas Satellite Systems and Home Object Limited (ASSHOL) (I know it's a stretch!). The president of ASSHOL wanted a line of credit because he said his business was expanding rapidly and they didn't want to have to get a letter of credit for each purchase. He invited me to Ft. Smith for dinner and to check out his factory. I arrived in Ft. Smith around five o'clock and went to dinner with the ASSHOL president. After dinner, we went to the satellite dish factory. They were manufacturing ten foot fiberglass dishes, ten at a time being made in molds; about twenty a shift. The foreman showed me around and said they were working three shifts and could not keep up with demand. My calculations were like this: twenty per shift; times three shifts; times six days a week; times fifty two weeks in a year; times \$1000; the price of a dish, equaled a whole lot of money! The next day back in the office, I approved a \$50 thousand line of credit and shipped the ASSHOL president thirteen receivers. There was only one small problem, we never got paid and it turned out that the ASSHOL president did not now nor ever own the dish factory. I suppose he paid

the second shift foreman \$100 to show me around; a great investment for the ASSHOL guy! I have heard that when you ass-u-me, you make an ASS out of U and ME. I had assumed that the ASSHOL president owned the factory because he was familiar with it and knew his way around.

First Rule Of Survival, Never turn over your business (or money) to an incompetent or a stranger. Seems straight forward, but we seem to do it all the time; your broker is probably a good example. In business, when it is often not our money, we do it more often. An example; The Company was growing very rapidly and our stockroom of electronic parts was out of control. There was no system of taking parts in and out. I advertised for a stockroom manager with experience. Of course with each passing day the situation in the stockroom was degrading. If you don't know what parts you have and don't know what you don't have, it is impossible to manufacture products efficiently. So when Joanne showed up and presented herself as having stockroom experience, or perhaps she said she actually knew someone with experience, or perhaps she had once seen a stockroom, and I was so anxious to solve the problem, I hired her immediately. Problem solved; wasn't I clever. I had just turned a critical part of the business over to a stranger and as it turned out, an incompetent.

Joanne stored things as she would in her garage or basement. Square things on one wall, round on the other, long parts who knew where; you get the idea. In manufacturing the parts are identified by alphanumeric codes so it was very difficult to find anything. Not Joanne's fault; I violated the *First Rule Of Survival* and turned over the business to an incompetent.

Another time, we were expanding rapidly in Europe and I needed a sales guy that could converse in more than English. I myself was raised in the typical parochial American manner and the only language I learned was English. So when Jerry Ruffner showed up and said things like "Ich spreche fließend Deutsch" and "Ich nehme Ihr Geld, Reisen nach Europa, und verursachen eine denn sie sind eine dumme Scheisse", I should have been more careful. The first translates to "I speak German fluently" and the second could have been "I will take your money, travel to Europe, and cause a lot of trouble because you are a dumb shit!" because that's how it turned out. Once again I turned a critical part of the business over to a stranger.

As time passed, I had a number of arguments with Milt and was finding out that he had been a staff guy at Motorola and had no real business experience, but knew the jargon and sounded as though he knew more than he did. In my opinion, he was more of a roadblock to success rather than a help. I had my nose in the engineering, manufacturing, and sales not realizing that his idea of bringing business experience to Comtech Data was spending a lot of his time at Comtech in New York smoozing with the boss. A typical problem; for example, when we needed a piece of test equipment required to ship products, I would put a requisition in his inbox and two weeks later dig it back out of his inbox, sign it and order the equipment. I finally told Fred that I was not willing to continue to work under Milt any longer, so Fred moved Milt back to Comtech, NY and I became the president.

Comtech Telecommunications had gotten into serious financial trouble by taking on a major military contract that was costing a lot more than they bid. Cash was so scarce that Comtech was dangerously close to bankruptcy. By the way, many people, when asked, might say that bankruptcy is when the liabilities exceed the assets, or losses exceed profits; not true, and in fact you can usually go a long time without paying your vendors, and without going bankrupt. But, stop paying the employees for a week, and they can put you in bankruptcy with a phone call. I'm sure times were tough for Fred, and Milt convinced him that I was paying company bills without prior approval. And I was fired. Wow was I stupid, I made an enemy in Milt and he is then sitting in the office next to my boss with the boss's ear. I was not paid any of my bonuses and I left with some Comtech restricted stock (referred to as type 144 stock, based on an SEC Regulation) that had a legend on the back requiring approval by Fred for me to sell. Over the next twenty-five years, I tried to sell the stock a number of times with no success. All those years, I guess Fred chose to believe that I was disloyal, whereas in my opinion the truth was that Milt had stabbed both me and Fred in the back by his wanting revenge. The story about Fred and the stock will be continued twenty-five years later towards the back of the book. By the way, after I was fired, Milt returned to Arizona to run Comtech Data, I had gone down the street to found EFData with Steve Eymann (the E and F in EFData). A few months after I left, Comtech Data was sold to Fairchild helping to solve the Comtech cash problem. Milt continued to run the Company for Fairchild. At EFData, we hired

more than thirty employees from the old company, Comtech Data and/or Fairchild Data, made competing products, and helped drive Fairchild Data out of business. With our taking most of the business, along with Milt's lack of business skills, the company closed its doors a few years later.

CHAPTER 8

I was fired on a Friday and by Monday I had a presentation ready and two appointments to present my idea for a new start-up, competing with Comtech Data. On Wednesday I made a presentation to Fairchild Industries in Washington, DC and on Friday to California Microwave (CMI) in Sunnyvale, California. Both companies were willing to finance my new start-up. The following week, Steve Eymann quit Comtech Data to help me plan the new company. He was offended by the actions of Milt and Comtech. We became partners in the new venture.

In the deal with Fairchild, they would advance us around \$2.5 million for which they would have 25 percent of the stock (equity ownership). If we required more cash, they would receive more stock. It was their belief that eventually we would need more and more cash and they would eventually have 51 percent of the stock.

In the deal with California Microwave, California Microwave would advance us about \$3.5million and have no stock ownership, but would have the right to buy the company after five years based on a formula that took into consideration profitability and cash flow. I was also impressed with Dave Leeson, the CEO and founder of California Microwave. He had been through the start-up business and would have a better understanding of what was needed. Also my experience with Comtech, not understanding equity, probably helped influence the decision. We decided to work with California Microwave. We started the business in October 1984. Fairchild did not take our decision kindly, and within a month after we started up, Fairchild bought Comtech Data and named it Fairchild Data.

During the first few weeks of the new venture, we spent a lot of time trying to find a name. Names are hard to come up with because millions have already been used or registered. We made lists of names and then would have to check them with each state.

We wanted a name that could be used and trademarked in the entire country. Out of frustration, we finally used our initials, Eymann and Fitting-EFData. A year later, I woke up one morning and realized that EF could stand for Error Free; a data communications term. We began to put Error Free tags on our products. We also had more important things to worry about than a name, and as it eventually turned out, every satellite user in the world would know our name.

For the first month, Steve and I were the only employees, having to do everything from building or buying work benches to negotiating the lease. When we started product development, Steve was both designer and purchasing agent. One day Steve ordered acid brushes, acid brushes are stiff bristled brushes used to clean the flux off circuit boards after soldering parts. Steve ordered a gross of the brushes, or so he thought; he actually ordered a gross of boxes of acid brushes, each box holding a gross. That was enough brushes that lasted us more than ten years. It was clearly time to hire our first employee, a purchasing specialist, Marla Evangelista who had worked for us at Comtech Data. Marla stayed with us for the next twenty years; at one time head of purchasing and later a sales manager.

Soon after, we had hired a few engineers and techs and we needed a receptionist and all around typist/phone clerk/helper. We hired Sandy Lepper who, over the next twenty some years would work for me and become a good friend and confidante. Sandy was promoted along the way and ended up as the Vice President of Human Resources at our next company. She was a caring empathetic person which made her successful in dealing with the employees. Unfortunately, her good nature and protected upbringing made her easy prey for Garry Kline's (our eventual CFO) and my jokes. Initially she could not swear at all, then after five years around Garry, she could swear but would blush, and finally after ten years, she could swear without blushing. Garry considered it a big success story.

Jill Lee who became known as either Betty Boop by me or Jiller by some was an early employee that worked for Garry. For the first few years working for Garry, she never laughed at his off; color jokes, but eventually came to appreciate them.

We were concerned about a law suit by Fairchild if we immediately produced satellite equipment, so our first product was a cable modem. I also called my Navy

friends from Fleet Broadcast days and was able to get a contract for an AN/SSR-1 upgrade as well as a repair contract for FEIT sets.

After about six months, there were three significant events occurred that were big factors in EFData's success. A new product came on the market, a semiconductor chip called Field Programmable Gate Array (FPGA) that Steve recognized would allow us to build better satellite equipment that would be smaller, faster, cheaper, and would allow changes in the field or factory through software rather than having to change hardware and circuit boards. The second event was the publication of a world wide specification for International Satellite equipment (Intelsat). The third event was a phone call from a sales guy (Bob Petrucelli) who had just been fired from Radyne (a company you will hear more about later). And he wanted to join with EFData, bringing with him tremendous market knowledge. In a few months, Steve had developed a satellite modem that we called the SDM-308. It was the perfect product for the Intelsat Market, every phone company in the world was a potential customer. Also, we could make it for \$5 thousand and sell it for \$12 thousand; a lower price than any on the market at the time. Bob Petrucelli had started a sales company on the east coast and knew most of the potential customers. We had found a goldmine! A Trifecta! The perfect storm! Or the proverbial golden goose, choose one or all.

The SDM-308 modem was about five inches high, nineteen inches wide and fourteen inches deep. It fit into a medium size suitcase that I could use for traveling to customers and giving demonstrations. The first customer on my list was British Telecom International (BTI) in London; and while in London, I could see another customer, Mercury Communications. Since I was going to be in London, I called an old friend Brian Litchfield who had a company called L-Teq. I had signed up L-Teq to represent Comtech Data earlier, but Brian was very unhappy with Fairchild Data. Fairchild had failed to field a new Intelsat modem, and he was interested in changing to EFData. I was worried about his relationship with Fairchild and asked him to fax me his current agreement. Upon reading the agreement, my attorney and I could find no problem with pursuing a relationship with L-Teq. I agreed to meet with L-Teq when I was in London and Brian decided to accompany me in a visit to BTI and Mercury. BTI and Mercury were very impressed with our product and were comfortable with L-Teq. Fairchild heard

of the meeting and shortly thereafter, we were served with a lawsuit claiming tortious interference with a contract. Milt Deever was at it again, trying to slow us down. Fortunately, CMI had a really good San Francisco law firm on retainer that we used for our defense-and an outstanding lawyer, Matt Moore, that handled our defense. Ultimately, the lawsuit was dropped, I found out that Brian was going to be in Arizona, and we served him with a subpoena at his hotel room which forced him to appear for a deposition. Two things happened at the deposition Matt conducted that made the law suit disappear. First, it was determined that the agreement that was faxed to me had been altered and the offending part of the agreement over which we were being sued had been removed by Brian. Second, Brian said a number of times during the deposition that the visits to BTI and Mercury caused no damage to Fairchild's business.

In the early days of EFData, Steve, in addition to purchasing acid brushes, also made up the payroll using an Excel program that he devised. Again, we had grown and needed a financial person to handle all the financial requirements. I advertised for a bookkeeper and had three or four applicants; I liked to ask the applicants to tell me a joke as a way of telling if they might be compatible with our culture and my sense of humor. I remember Garry telling a raunchy joke that made me laugh, and he was certainly qualified so I hired him.

We still needed a rep for Europe and England. I made a trip to visit and interview a sales company and talked to a few companies. My final interview was with John Rodgers and Tony Payne of Multipoint, they were my selection.

Our advertising usually included an animal because the *First Rule of Advertising* is, no matter what, get attention! When people page through magazines, they don't look at ads unless it gets their attention, which makes them stop and look longer. There is an acronym for magazine ads, AID. Attention, Information, Direction. If you don't do the first, forget the others. Most of our customers were male engineers. We would have used hot chicks except it is not socially correct anymore and we would have offended our few female customers. The second most likely thing to get people to stop and look further is an animal. Perhaps it from our caveman days, an animal is either threat or food! If you can tie the animal to a feature, it is even better. In one ad we showed a Cheetah, the world's fastest animal and connected it to our world's fastest modem. At any rate, what is

required is for someone to look at the ad and immediately say “Whoa! What’s that?” If you want an interesting experiment, page through any trade magazine, or the next time on a plane look at the airline magazine and see how many ads violate the first rule. I have found that it is usually over 75 percent. If there were a second rule of advertising, it would be “get attention”, and particularly in magazine ads where you have about a second to get people to stop and look further.

The only other Intelsat competitor in the marketplace was Hughes Networks Systems; they had started designing and marketing Intelsat products earlier than we did. The Hughes equipment was four times larger and cost twice as much as ours and as it turned out, were frequently late in delivery. Our east coast representative was Bob Petrucelli who I mentioned earlier. His company was Petrex, and he had a good relationship with MCI and AT&T; both heavy users of Intelsat equipment for international telephone calls by satellite. Unfortunately, MCI had already placed orders with our competitor Hughes. We found out that the MCI application was critical, it to be in service in ninety days by June 30th of that year. We also were pretty sure that the Hughes’s equipment design was not yet finished and would very likely be late.

Bob Petrucelli convinced MCI to accept a rack of our equipment, a cabinet that held eight modems and a controlling switch as a backup for Hughes. This one hundred thousand dollar rack would be sitting idle, and if Hughes didn't deliver on time, could be connected into the MCI system. As anticipated, Hughes didn't deliver, MCI used our equipment, Hughes was canceled, and MCI bought EFDData equipment for years after.

The same strategy worked with AT&T with their first application in Puerto Rico, with the exception, that AT&T had accepted some Hughes equipment already. AT&T never turned the Hughes equipment on, Bob and I suggested it could be used as artificial reefs.

We also needed some Asian Reps. On my way to Australia, I first stopped in Hong Kong to interview Datacom, the primary owner was Theodore Tsui. We met at my hotel, The World Hotel for breakfast. I was very impressed with his connections with Hong Kong Telecom, and his partner's connection with Beijing Telecom. I decided to go back to Theodore's office to meet his partner and had already decided to make an agreement with them. Even though I slammed the taxi door on Theodore's finger, he

agreed to rep us in Hong Kong and China. Datacom (Theodore Tsui) became a huge producer for EFData and for years got most of the satellite business in China.

On the same trip I visited Singapore also looking for a rep. YK Ng had emailed me and claimed he was well connected. All the reps claimed to be connected, know all the players, etc. The difficulty is verifying the sales rep claims. In Singapore, there was only one customer Singapore Telecom, so when I got to YK's office, I said "Let's go see the customer." He picked up the phone and fifteen minutes later we were in the Assistant Managing Directors office of Singapore Telecom. YK and the Assistant Directors were telling stories and giggling over their time in college. I hired YK and we never lost a job in Singapore after that.

A few years later, Beijing Telecom was planning to issue a major multimillion dollar contract to one of five companies in the US. Beijing Telecom sent a group of seven representatives to the US to visit the potential suppliers starting with the three NY and Washington suppliers on the east coast. While they were visiting on the east coast, our competitors took them to Broadway plays, to the Tavern on the Green restaurant in NY, to a Major League Baseball game, to the New York sights, and to the Washington monuments. Fairchild in Arizona took them to a famous steakhouse, and the Grand Canyon. Finally, after about ten days in the US, they were going to visit us at EFData. I wondered what in the world we could do to top the past visits with our competitors. I decided to invite them to my house. I had a wonderful patio and my house was on the east side of Camelback Mountain in Phoenix with an outstanding view of the valley. The weather was perfect for sitting outside. I had dinner catered from an authentic Chinese restaurant with dishes our visitors would be homesick for, jellyfish, for example.

Once again, I was blessed with an unusual opportunity. My house was next door to the Phoenician Resort, and when the Phoenician Resort was planning to have fireworks for their guests, they would send the neighbors a letter giving them a heads-up. I had received their notice the day before, that there would be a fireworks display at half past eight the night I was entertaining the Beijing folks. So at about twenty after eight, I told my guests that I had arranged a fireworks display for them at half past eight. Right on schedule the fireworks began and lasted twenty minutes. They were very impressed. We were awarded the contract.

Having two of the world's biggest phone systems as customers exclusive to us for satellite modems made marketing much easier, every foreign customer wanted to know what AT&T and MCI were doing with satellite phone service. Selling internationally can be difficult though; many countries have immigration and customs laws that are aimed at preventing or discouraging foreign vendors from competing by making it difficult to bring demonstration equipment into the country. Australia was particularly difficult to get your equipment in. It can easily take more than six months or more to get approval. The biggest customer in Australia was Overseas Telephone Corporation (OTC). I had an appointment with OTC, but without the demo equipment, a sale would be virtually impossible. I decided to take the modem in the suitcase and not claim it as demo equipment. Without checking inside, it looked like my normal clothing suitcase. If discovered, I thought the worst case penalty was the loss of the modem (\$5,000).

I was pretty nervous when I arrived at the Sydney airport and walked through customs after claiming on the entry form that I had nothing to declare, but the customs inspection was non-existent, and the customs agent waved me right through as I smiled at him. At OTC, the response was typical, "Hey mate, where were you six months ago?", "Your modem is so much better than the Hughes that we already ordered", and "Unfortunately with the contract we already have with Hughes, we don't know what we can do, thanks for coming, goodbye." Once again, we got an agreement with OTC, to place an order at no cost for a rack of our equipment, and if Hughes failed to deliver, then to plug it in and start using the EFData equipment, and if it works, purchase it. If Hughes does deliver, ship the equipment back to us, we would pay for shipping. Once again, Hughes failed to deliver, and OTC bought mostly EFData equipment for many years.

Our Intelsat equipment was in great demand. We didn't have to do much selling; just take orders. International orders were done with Letters of Credit, so we would get paid within a few days of shipping, but we often had thirty days to pay our vendors, the result was great cash flow and increased profitability. Of course, California Microwave noticed our good fortune and wanted to start discussions with me for an early buyout of the company.

I became interested in making neon signs and neon logos one year. I found out that glass tube bending is incredibly difficult. After work, I would practice for an hour

each day; it took about a month of practice before I could make an acceptable letter “L”. After that first success, tube bending became easier. Among other things, I made a ten foot Christmas tree and an EFData logo, and a sign for a Jewish friend “Drek Azoy” for his recreation room, meaning “Shit Happens”. Neon fabrication can be hazardous to your health. First are the high temperatures to melt the glass and the potential for burns. Second, I used a power line transformer that I bought from Arizona Power Services, the Arizona Power Company that put out 150 thousand volts and was used for bombarding the completed neon sign prior to introducing the neon gas. That could easily kill you. I used a tank of propane combined with the air from an old ShopVac vacuum cleaner to provide a high temperature flame to heat the glass. One day, I was bending glass, and turned off the ShopVac, but forgot to turn off the propane tank. The propane filled the ShopVac tank and a few minutes later, when I turned on the ShopVac, the gas exploded, making a loud bang, sending the ShopVac motor up instantly hitting the ceiling of the garage, scaring the crap out of me. Fortunately I was not hurt, but scared enough to be more careful.

We attended a trade show in Las Vegas the following year. Since the show was in Las Vegas, I thought it would be clever to fill our booth with neon signs for our products, and it would attract potential buyers. Most of our customers are male engineers, our major competitor; (Comstream) hired a good looking blonde to be in their booth. Guess which one was the bigger attraction, Neon or beautiful blonde gal? Another dumb idea of mine! Comstream had a better, lower cost product for awhile, but for most of their products, they would seem to lose interest very rapidly and would go on to something else. More about Comstream later.

Jerry and I went golfing one of the days we were in Las Vegas and I took that opportunity to talk to him about a bid I had submitted to GTE for around one million dollars. He promised me that he would give me the last bid opportunity. A couple of days before Christmas, Jerry called me and said he was sorry, but according to his project manager, we were 10 percent higher, and wouldn't lower our price and the project manager was recommending that the award be given to Comstream. I knew the project manager favored Comstream, and had a special relationship with the Comstream sales guy. I told Jerry that we had never been asked for a lower price, that we had 15 percent in

the price for negotiation, and that we would drop our price by 15 percent right now. Jerry said that based on what I just said that we were the winner!

My First Rule of The Obvious! The boss's decision trumps the subordinates. Thanks Jerry.

We used a tiger in a lot of our advertising. For handouts we bought tiger golf club head covers and tiger tails. I sent a tiger tail to Tiger Woods to hang on his bag; thought it would be a nice addition, but I never heard back from him. I guess he was busy with one of his girl friends. At trade shows, we usually had three sales ladies, and as mentioned before, most of our customers were male engineers. The sales ladies would ask the male engineers if they want some head or some tail and watch them blush. *The First rule of Trade Shows Is* "Get potential customers into your booth." If there is a second rule it would be "Get potential customers into your booth!" You can't sell without a customer. That's why, of course, Comstream had a hot blonde in their booth. One of our ways to attract customers was to have an annual handout of a toy or gimmick that would spread through the show so that everyone would want one. During the year before the trade show, we would scour catalogs and stores looking for clever handouts. One year, for example, we handed out in the booth a combination compass/magnifying glass/binoculars. One handout that was successful was a Nerd Kit-it was a plastic pocket protector with pens, pencils, and ruler, along with black heavy rimmed glasses. The glasses had a Band-Aid around the nose bridge. Rattle Snake eggs were a big hit; they came in a small brown envelope and when opened, a washer with a rubber-band inside the envelope would buzz like a rattler.

Let me tell you about the greatest negotiation of my career. *The First Rule of Negotiation, Never* give anything without getting something in return. Here is a case where the customer didn't understand the rule. Having gained a reputation as the Primo Intelsat equipment provider in the world, it was no surprise that we were then asked to bid on a new much higher speed Intelsat modem needed by AT&T, British Telecom and France Telecom. The only other bidder for the job was the French company, Alcatel. However, our bid was lower and our reputation of on time delivery was such that we were invited into a negotiation with these three companies. The negotiation would take place in Paris, so I went with my East Coast representative Bob Petrucelli since AT&T

was his customer. We met with the three companies' purchasing agents on a Tuesday morning in Paris; our opening bid was \$58 thousand each for twenty units over the next year. By Wednesday evening, Bob and I were convinced that we were the only possible supplier that could meet their schedule that Alcatel was not a serious competitor, and most importantly we found out that the British Telecom guys had a four o'clock flight Thursday afternoon back to London that they couldn't miss. So Thursday morning, Bob and I wasted time and then after lunch, had a private caucus and at half past one we went back to the meeting and made a new proposal. We suggested that it would be a better deal for them if we gave them a guaranteed price for units of any quantity for the next three years and in order to do that our price was now going to be \$62 thousand dollars a unit. Both British Telecom and France Telecom thought that was a wonderful deal, particularly the British Telecom guys, who had a flight at four o'clock. The British and French guys strong-armed the AT&T purchasing agent, John Kist, into accepting the deal. Later, after the AT&T agent thought about it, he was furious at the idea of paying more money than the original proposal. In actuality it turned out to be a good deal for the companies because they continue to buy this product for many years after that. To soothe the AT&T purchasing agent's bruised ego, Bob and I took him to the Crazy Horse that night. Le Crazy Horse Saloon is a Parisian cabaret known for its stage shows performed by twenty-three identical beautiful nude female dancers. And I mean identical, precisely five foot ten inches, dimensions of 24-28-24, c-cup bust size, and brown hair. We were shocked that John was not as enamored with the show as we were until we found out the next day that he was married to an ex-nun. Our cost for the product after development was \$13 thousand each, \$51 thousand margin on each one. Another golden goose.

Another example of *The First Rule of Negotiation*; Frequently our customers wanted to have a longer warranty period than our standard two year warranty, and in most cases actually did not cost anything because electronics failures happen mostly in the first year of operation. If it was believed we could not charge more money, I would at least try to get a promise of favorable treatment on the next bid or at least a promise that we will be given something that may have no current definable value; such as the last look at a price on the next procurement.

Son Robert was in the Army in Maryland, on one of my trips to Washington, I drove up to see him. We went north to Lebanon so he could see where I grew up. In Lebanon, we were driving on East Lehman Street and passed the Shuey's Pretzel Factory where I worked as a kid, hand twisting pretzels. The objective was less than a second for each pretzel. On Saturdays, we made soft pretzels and then I sold them in the business district from a sidewalk stand. It was Saturday, and I wondered if they still made the soft pretzels so I parked the car and we went into the building. Surprise, surprise, not only were they still making pretzels, but old Mr. Shuey was still there running the place and he recognized me. We bought some of the soft pretzels, still hot from the oven; then Mr. Shuey said, "There was a guy in here a few months ago and said he was your father, and he was trying to find you." Mr. Shuey didn't know any more about him that he could remember except he thought he was a Cadillac dealer near Philadelphia. The other thing he told me was that his son was living in Phoenix.

When I got home, I started calling all the Cadillac Dealers in and around Philadelphia with no success. Then I called all the Freeman names in the same areas, again with no luck. The operator was also helpful by calling unlisted numbers and inquiring if that Mr. Freeman could be looking for a lost son. Finally, I called Mr. Shuey's son and asked him for his father's phone number. I called and asked if there was any other information that he knew about my father. He said I should hold while he went through his desk. When he got back on the phone he had the phone number for the car dealership. It wasn't a Cadillac Dealer, but was a used car dealer. I called the number and was told he no longer owned the dealership-but someone there knew his home phone number.

Before I called him, I wanted to think about what obligation I thought I might have regarding him. Suppose he needed brain surgery, or a kidney transplant? I decided that he only had been a sperm donor and I had no obligation at all. In the evening, I made the call and my blood father answered; I bit my smart-ass tongue and did not say "Hi Daddy!", but said "Is this Clarence Freeman?" And when he answered in the affirmative, I said, "This is Bob Fitting, I believe I am your son and heard you were trying to find me." We had a pleasant half hour discussion. I found out where he lived which was only twenty miles from where I grew up.

I was planning to be on the east coast in a few weeks so I made an appointment to visit with him. He had a nice home, lived alone, had never remarried, and was making a small income by buying cars, fixing them up, and reselling them. I asked him if he would be interested in flying to Phoenix for Christmas, if I sent him a ticket. He was delighted.

The next year I called him to see if he wanted to come out for Christmas again, he asked if I could send two tickets so he could bring my half sister along! My family was suddenly bigger. A few years later, Clarence died, and at his funeral I met another half sister. I wonder if there are a few more out there.

Around 1990, an application for Entrepreneur of the Year for the Southwest area was submitted by my loving employees. There are six categories and my application was for Technology and Manufacturing. The Entrepreneur of the Year program is supported by Inc, Magazine, KPMG Audit Firm, and Snell & Wilmer Law Firm. The top fifty applicants are interviewed and a video is made to show at the annual banquet. At the banquet, the winners are announced at the end of the evening after everyone else has been mentioned. I became suspicious, then convinced, and finally confirmed through Steve Atkins's network at KPMG, that I would be announced as the winner. The program is held in the Hyatt Regency holding over five hundred people. Companies must pay for the tables for the evening. Being certain that I would win, I reserved four tables of ten. After all, I wanted my own cheering section. The Emcee was a local TV personality. Dave Koblinski was sitting next to me with Jeshelle, his wife. Dave was not in his element dressed to the nines and sitting with the executives. As time went on, I would say to him after the first twenty-five were introduced "Wow, Dave, I must have made the top twenty five!", then "Wow Dave, I must be in the top ten". As time went on, Dave got more and more excited," Wow, Dave, I can't believe I made the top five". Then top three, and finally when the second place was announced and it wasn't me, Dave said "You're going to win!" Then I said to Dave "Didn't you wonder why I reserved four tables? I knew all along."

The winners of the regional selections were invited to Palm Springs to select the US winner of Entrepreneur of the Year. One of the regional winners was Jerry Jones, owner of the Dallas Cowboys. It was no surprise that the overall winner, who would appear on the cover of INC Magazine with his gorgeous wife, was Jerry Jones.

We found a South Korean customer who wanted a troposcatter radio. I tracked down my old friend, Dr. Peter Monsen of Bell Labs and hired him as a consultant. Peter had become one of the foremost experts in the country on troposcatter technology. I assigned Eric Upton to be the project leader and a young engineer Bill Strick to be his assistant. We were about a month from shipping and we wanted to test the radio on a simulator, the only one available was in Florida. Eric, Bill and the technician packed up the radio and headed for Florida. A few days later they returned and were waiting at the luggage carousel for the equipment when Bill's recent wife, and army reserve sergeant walked up to them and snapped Eric's suspender. Eric immediately took a swing at her and she swung back. Both were swinging when the technician stepped between them and broke up the fight. The next day, Eric did not show up for work. I was anxious to talk to him and see what happened. I called him at home. First, he explained why he hit her. Eric always wore suspender and often when he was returning from the roach coach with a coffee in one hand and a jelly doughnut in the other, it was not uncommon for someone to snap his suspenders. He had gotten so angry, that he decided the next person that snapped his suspenders would be the recipient of his punch. Eric showed no remorse and I was stuck with a problem. Obviously, Bill did not want to work with him anymore and I was uncomfortable with having Eric around. Eric was the savviest guy on the tropo system and he had a lot of his software on his computer at home. Steve Eymann decided to call him to get the software returned to the company. Eric told Steve, " My fingers are on Control, Alt. Delete, and if you don't quit bothering me I will push the keys and delete all the software." Eric finally came to his senses and returned the software. I finally had to fire him anyway. I claimed that "Any employee who could not deck a female in one punch could not work for me." A joke of course.

Unisys in Salt Lake City wanted to bid on the Air Force TRC-170 troposcatter radio manufacturing program. It was worth about \$100 million, but they had no credibility in the area of troposcatter; so they contacted us and they also contacted Peter Monsen to help in the proposal analysis. The original TRC-170 had been built by Raytheon in the past; Raytheon is in the backyard of Hanscomb Field and has a lot of long standing relationships with the Air Force personnel who would be doing the procuring. In order to win, Unisys would have to have a qualified manufacturing facility

which they had, had to have a lower price than Raytheon, and had to demonstrate the understanding of troposcatter technology. There could be no mistakes if they were to take this job away from Raytheon, and the only place that Unisys could err was in the area of troposcatter where they had no credibility. Raytheon told us we were a team member, not a supplier. A team member usually has a teaming agreement outlining the role of each team member and is written by the prime bidder, in this case, Unisys.

Big company employees frequently are arrogant when dealing with smaller companies. I think there was a lot of arrogance and resentment because; the success of the Unisys procurement was dependent on a little company with only about four million of the hundred million dollars, at any rate, Unisys dragged their feet in preparing the teaming agreement. Each time that Unisys would ask for some part of the proposal or a write-up to be used in the proposal, such as the analysis of the digital modem (a critical part), I would write a cover letter that stated: "EFData is providing this (whatever they asked for) for no charge because of our understanding that we are a team member of Unisys. If this is not correct, please let us know immediately." This happened three times. Each time our letter was sent to the Unisys legal department and we never received a response (also arrogance I guess).

One day we got a call from Unisys that they had won the contract and they wanted to come to Arizona to finalize their contract with us. The next day they showed up after lunch with six Unisysians (or whatever they are called). Typical big company, the people who showed up were the purchasing people who had nothing to do with winning the job. The Unisysians occupied our conference room and asked to be left alone. At four o'clock they stopped by my office and said they had put their suggested price for the job on the blackboard for us to study. They would be back in the morning. I looked in the conference room and saw that they wanted to drop our part of the contract from around \$3.8 million to \$3.1 million.

The next morning, they went directly to the conference room, and said they were ready to negotiate. I sent the President, Brian Duggan, into the conference room to tell them "Mr. Fitting wants you to please leave the building and for you to go back to Salt Lake City, EFData is a team member and there is no negotiation." The Unisysians were in shock! They had a meeting immediately upon returning to Salt Lake and kept saying

that “They couldn't believe that they were told to go home. And how Unisys could be treated like that! Etc., Etc” I assume they talked to their legal department who probably said “Oops!” Shortly afterward, I received a call from Del Freeze, the overall project manager. “Would I have dinner with him in Phoenix the next evening?” The next evening, at dinner, he explained that they had to drop their price by about 10 percent, and that included our part. My argument was that we were team members, and they were obligated to ask us to agree. Time for *The First Rule Of Negotiation, Never* give anything without getting something in return. I told him that we would drop the price \$150 thousand, but that I wanted Unisys to guarantee the prices of certain parts that we couldn't get firm pricing on. There was around \$500 thousand in parts risk to us that Del didn't know, but he knew the parts-risk-price would never show up as a number anywhere to embarrass him and agreed to the deal.

Acquisitions for me were the most exciting transactions I had ever made, Particularly acquisitions of companies that were failing. Since I liked to fix things, an acquisition of a failing company represented the ultimate challenge. I had made one acquisition of a small company in Phoenix (MSE) that was being managed by Bob McCollum; the acquisition had met with moderate success. McCollum was co-founder and vice president of Microwave Systems Engineering, and later in the book you will see that Bob will become a major player in the satellite business. In doing this acquisition, I had learned some lessons. One of the most important lessons was to get involved earlier and more deeply. One way to acquire a company is to only buy the assets which include the technology and trade secrets (called intellectual property by the lawyers), equipment, and inventory. When you engage in an asset purchase, you do not get the liabilities such as payables (moneys owed), pensions, and law suits or employee obligations. The way it is done in Arizona and is similar in other states is as follows: The owners of the company agree to sell the assets for a price (in this case it was around one million dollars). The creditors are then sent a notice of the asset purchase giving ten days to respond. If the creditors do not respond within ten days, they have lost their rights. In this case, the creditors were owed around \$2.5 million. Most of the companies that were owed money were large companies and either can't respond in ten days because it takes too long for the notice to get to their legal department, or they don't bother, perhaps because they don't

understand the notice. In any case, of the twenty companies that were sent notices, only a single small company responded. After a negotiation with the small company, they dropped their objection and the deal closed at the end of the ten days. After more than thirty days, we had a few of the creditors send demand letters or try to file suit, but since MSE no longer existed, we would forward the info to the State Corporation Commission.

The First Rule Of Profit Making; Every 1 percent of profit is worth fighting for. Over the years I have seen the best negotiators, when you think negotiations were complete, ask for one more percent, and if you are tired or have lost your focus, will often give it away without anything in return. The effect is significant, if a \$100 million a year company can get one percent more profit, that's \$1 million dollars more profit. The worst examples I have experience with, are satellite and other system companies where the one percent increase would be dramatic. One satellite company I knew would usually have a profit of \$2 million on sales of \$100 million every year. A 1 percent increase in profit on every job would increase their profit from \$2 million to \$3 million, a 50 percent increase! Fear of rejection or fear of losing the order frequently suppresses the profitability. Many salesmen are too timid to try and their managers don't understand *The First Rule Of Profit Making*.

Companies fail of course for a number of reasons, MSE was struggling because of a lack of capital which also resulted in under-pricing their products (usually because of a fear of losing sales). MSE had been selling a particular product to Scientific Atlanta (SA) for \$215, the cost was \$185. MSE was afraid of increasing the price because SA had threatened to go to some other supplier. MSE did not believe that they could afford to lose this customer and continued to sell at a too low a price. After the asset purchase and the fear of losing the order had abated, Bob and I went to SA and told them that the price we were charging did not allow us to make an honest profit. We said that the price would go up to \$285 in ninety days, allowing them time to find another supplier. Three years later. SA was still buying the product for \$285. *The First Rule Of Profit Making* at work again. Companies under financial pressure often make decisions that are hard to understand and frequently worsen the problem. For example, MSE had spent cash that they couldn't afford to purchase a time management system (A modern time clock) so they could try to produce the SA product cheaper.

On more than one occasion, I had given a sales person the authority to negotiate, usually with dismal results. I told one sales person who was talking to the customer, trying to sell him a \$100 thousand order, that my minimum price was \$90 thousand, and I would split every dollar with him that he could negotiate above \$90 thousand. The sales person almost immediately drops the price to \$90 thousand because the commission is not as important as the rejection or the fear of losing the job.

I have always thought that successful car dealers are the epitome of ideal negotiators. They understand and apply both *The First Rule of Profit Making*, and *The First Rule of Negotiation*. Anyone who has purchased a car can probably remember that the final negotiations get down to a few dollars that most of us give up. The sales guy you first see on the lot doesn't understand the first laws, and is not permitted to negotiate.

Satellite Transmission Systems (STS) was a Long Island company run by Dave Hershberg, and they held a golf tournament for the key people in the industry every year. Hershberg was easy prey for me because he was hyper, always talking, and always in a hurry. On my way to the airport to fly to Long Island for the Golf Tournament, I happened to drive by a magic-trick store and I decided to drop in and buy some rubber dog-poop for a trick I was planning to play on Hershberg. I threw the dog-poop into my briefcase. In those days when you got on an airplane, you did not have seat assignments and the professional travelers would take either window or aisle seats or hope that no one sat in the middle seats. When I got on the plane I took an aisle seat, another business man was in the window seat and the middle seat was empty. The passenger in the window seat turned to me and said "I hope no one takes this middle seat." I reached into my briefcase and pulled out the rubber dog-poop and placed it on the middle seat. I said to him, "I think this rubber dog-poop will do the trick." He did a double take: "Do you always carry rubber dog-poop?" "No," said I, "I usually carry plastic vomit! It's much more effective."

A lawyer friend of mine by the name of B. K. Boothe told me that he always sat in an aisle seat and carried a piece of dental floss that he would hang out of his mouth. And when passengers who were looking for a seat saw this dental floss, they usually moved on. They did not want to sit in the middle seat next to him. BK told me that one time a woman sat next to him and asked why he had dental floss hanging out of his mouth. He told her that he had a stomach disorder, that on the end of the dental floss was

a piece of meat, and that he had to pull it up every hour to see if it was digesting. “Don't worry”, he told her, “I'll go to the lavatory to do the inspection.”

At the STS golf banquet, I had arranged with the waitress to put the rubber dog-poop on a plate along with mashed potatoes and peas. She also added a bit of gravy; her idea, a nice touch. The plate was served with one of those silver domes over it to Hershberg, who was talking as usual, and when the dome was pulled off and he saw what was on the plate, he stopped talking in mid-sentence. The waitress never returned my rubber dog-poop and I think she probably used it a number of more times after that.

At the end of the dinner, I had prepared a stand-up comedy routine that was pretty raunchy, I thought this audience would appreciate the off color humor, and they laughed and roared at every joke. I don't remember most of what I said, except for a crack about Hershberg, Hershberg was a Jew, and I said he had not been circumcised until he was thirty-five years old because they had to wait until the invention of microsurgery. Laugh, clap, roar!

I was asked to return the following year; this time I had prepared another set of raunchy jokes. However, for some reason, I was asked to entertain directly after the golf, during the cocktails and before dinner. It was a disaster, not only did the audience not laugh, many were offended by the language and jokes, the same language used the year before. *The First Rule of Stand Up Comedy (For Me): Never entertain a sober audience.* This is just a fun first rule with no financial benefit.

One of the worries of practical jokes is the element of potential retribution. I don't remember what the joke (or probably jokes) was that I played on Dave Koblinski, but the one he played on me was great! Dave had worked for me at Comtech Data and came to EFData shortly after EFData was founded. In a lot of ways, Dave was more like a son than an employee. Dave knew that I hated cricket sounds, I had recently moved into a new house that was infested with those noisy devils and it took months to get rid of them all. He made an electronic circuit that made a cricket sound and hid it in a hollowed out book in my bookcase. After about three days, it was driving me crazy. I called the janitor/maintenance man and asked him to go to the store and buy a can of Raid. I found out later that most of the executives were in on the joke.

I sprayed the back of the bookcase in the afternoon and by the next morning the cricket sound was gone. I thought I killed the cricket, but of course Dave had only removed the electronic cricket. Three or four days later, my cricket was back, but this time was in the ceiling. After a couple of days of the cricket, I asked the Janitor to get a ladder so I could spray the cricket in the ceiling. I think at that point, Dave and his cohorts were worried they might be overdoing the joke and came into my office and confessed. I thought it was a great practical joke and they could have extended it for another week or so. Of course, Dave was also worried about potential retribution.

We lost a job to Comtech Data before they were sold to Fairchild for a Shanghai Chinese customer. Part of the contract included training at Comtech Data in Scottsdale; EFData was only a mile away. Customers from China and other foreign places expect to be taken care of in the US because they don't usually have very much money. Typically we would pick up meal costs, transportation, and weekend excursions. Around noon, on Friday our representative in China called and said the Chinese customers at Comtech Data had called him and told him they were very unhappy because they were having to pay for meals that they couldn't afford and they wanted to visit the Grand Canyon the next weekend and Comtech Data had arranged for a limo that they would have to pay for. I told him to call the Chinese and tell them there would be a white stretch Limo at Comtech Data's door at three o'clock to pick them up and we would arrange to take them to the Grand Canyon at no cost. At three o'clock, the Chinese left Comtech Data and climbed into our limo; we brought them to our facility and had them for the whole weekend, a great sales opportunity. To get that much time with the customer would take two days of travel time and ten times the cost of entertaining them in Arizona. The money we spent was well worth it, and the irritation we caused the competitor was an added bonus. When the Chinese returned to Comtech Data Monday morning, Milt read them the riot act and called them unprofessional! Another call and we picked them up again in the limo. Livid is not a strong enough word to describe the Comtech Data execs, but they finally realized how much damage they were doing to themselves. Of course, this is the communications industry, and did we communicate! Within a week the industry knew about the way the Chinese were treated.

Jerry Waylan called me one day and asked if we were interested in joining he and Karen on a barge trip down the Loire Valley in France for his 50th birthday. At that time, Jerry was running GTE Spacenet and was one of our customers. So of course I said yes, we would like to go with him for his fiftieth birthday. Jerry's wife, Karen, liked the finer things in life. I don't know that I would call her prissy, but she certainly liked things neat and tidy and clean and new and expensive. Lorraine and I flew to Paris to meet them. Jerry had prearranged hotel reservations at the Bristol Hotel in Paris. The three best hotels in Paris are the George Cinc, the Bristol and the De Creon. At that time, 1992, the Bristol cost over \$700 a night, though I would say one thing about the Bristol. It has the most fantastic shower I've ever been in. It was the size of my garage with showers on three walls.

That night we were entertained by the French Company Arianespace. Arianespace has a spaceport in French Guiana, on the east coast of South America nearly on the equator from which they launch rockets to put satellites into orbit for companies around the world. As an aside for engineers, the reason to launch from French Guiana is that it is on the equator and requires less fuel to put a satellite into orbit. It takes about two years and \$120 million to build a communications satellite. Arianespace had launched dummy satellites to try out their rockets and were looking for the first real satellite launch. They owed Jerry big time because Jerry allowed them to launch his GTE satellite on their very first rocket launch. You can imagine the difficulty in convincing someone to allow them, on your very first rocket, to launch your hundred-plus million dollar satellite. So, repeating my self, they owed Jerry big time. They took us to the most exclusive restaurant in Paris, and at the end of the evening, they gave Jerry a 1942 bottle of cognac, the year of Jerry's birth.

We were picked up the next morning in a limousine to take us to the starting point in the Loire Valley for the barge. The barge was a twenty passenger boat that went about three miles an hour down the canals in the Loire Valley. It was a very nice trip with one exception. Towards the end of the week, Karen started complaining about getting bites during the middle of the night and we believe it was bedbugs. Imagine that, the most prissy person on our trip is the one getting bitten by bedbugs. Do you think the bedbugs

knew that? It's not like this was some cheap barge trip either the travel agent for the trip was a well-known British travel office Abercrombie and Kent.

After we left the barge we rented a car to travel through central France. The first night we had no reservations, and ended up in a small town that had only one hotel. The hotel only had two rooms available. One room had the bathroom down the hall the other room had the bath in the room. We chose to take the room with the bath down the hall, leaving Jerry and Karen with the upgraded room. The next night was in Chamborg, and the following night was in Lyon. We ended up back in Paris, dropped the car off and headed off once more to one of the top hotels in Paris this time, the Hotel De Creon. Karen and Jerry had been to Paris many times, but they didn't go to the places that Lorraine and I like. The next two days were spent showing Karen and Jerry around Paris to the places that we like to go to. Places that they had never been. For example, they had never ridden on the Metro. They had never been up the Eiffel Tower. We took them to the top of Notre Dame, and we went to the artist colony up behind the Sacré Coeur. I thought the whole trip was great; of course I wasn't the one who was bitten by bed bugs.

After three and a half years, California Microwave made an early buy-out offer that had a large down payment with additional payments over the next three years that were based on profitability. Steve and I had retained around 60 percent equity, and the remaining had been distributed to the engineers and executives as incentives. Not too bad considering we had made less than \$100 thousand investment in the company. I went to Sunnyvale to sign the papers and pick up the money. I arrived home at about eight o'clock and called Steve and Debbie to come to my house to celebrate. The day before, I had gone to the bank and picked up one thousand dollars in one dollar bills, so when Steve and Debbie showed up, I was sitting in a pile of money and throwing it into the air. Lorraine took a picture and I used that photo for years when I was asked to make a presentation as a successful entrepreneur. I would start the speech by saying, here is the objective of entrepreneurship. Steve and I signed a five year no-compete agreement.

Steve and I taped the dollar bills end-to-end to use to decorate the factory lunchroom the next day. The employees did not know that we sold the company and were very curious why we were decorating with the dollar bills. At two o'clock we held a meeting to explain what had happened. We also handed out checks from five hundred

dollars to over four thousand dollars to all the non-share holders based on their time of service and salary. There were a lot of happy faces that day, including Steve's and mine. What a kick it was to hand out money, particularly the factory employees who, in many cases, never had so much money at one time. I believe that about twelve of our executives had become millionaires working for us.

After being acquired by California Microwave, we would go to company outings at Quail Lodge near Carmel, California. At that time the subsidiaries included EFDData, STS managed by Dave Hershberg, and three or four others. Each subsidiary would bring two to four people, so including the staff people, there were around twenty-five attendees. Each division would make a presentation with a forecast for the coming year. This one particular year, the outing coincided with the NIT Basketball Tournament. Dave Hershberg had booked a cottage and fifteen to twenty of the attendees were cramped together in Hershberg's cottage watching the game. Hershberg had previously ordered pizza, but it had not yet arrived. At the game halftime most of us started harassing Hershberg about his incompetence in ordering pizza, did he give the right address, did he use a company credit card, etc. Hershberg, who I mentioned is pretty hyper, happened to be standing next to the bathroom door, so he reached for the closest phone that happened to be the hair dryer. He picked it up and expecting to be talking to an operator, started talking into the hair dryer. All of us found it very funny except for the three or four guys who worked for him, making it even funnier for the rest of us. The following week, I bought a hair dryer and glued an ear piece, a microphone, and a dial on it. It had a telephone wire and was labeled "HAIRPHONE". Sent by FedEx for the following day delivery, I never heard a sound from him, ever.

When we acquired MSC by purchasing the assets, we hired all the employees. Carolyn McCorkle was one of the office staff. She was single, though dating one of the technicians, and had at one time been married to a Phoenix Physician. I believe they had two sons. One day Carolyn came to work and told her boss Sandy Cassel, the HR manager, that she had cancer and would be missing some work in the future, but she would attempt to work as much as she could while she was taking chemotherapy. She also said that fortunately, Dr. McCorkle's insurance would cover the cancer treatment. A week or two later, Carolyn came to work with a bandanna on her head where her hair had

fallen out as a result of the chemotherapy. As time went on, Carolyn would bravely come to work, even though she was getting treatment for their cancer. After a few months, Carolyn had run out of sick time and vacation time, so a number of the employees donated their own sick and vacation time to help her out. About every two weeks, our CFO at the time , Steve Atkins, would drive to Carolyn's home, then drive her to the hospital for chemotherapy and go back two hours later and take her home. Sandy and Jill set up a support network of the secretaries and would arrange it so that Carolyn would get a card and a phone call virtually every day. Carolyn on a number of occasions late at night called Sandy and told her she thought this could be the last day of her life. Would she come over hold her hand for a while and of course Sandy would do that.

Carolyn was a great sports fan of football and would arrange to go to the Arizona Cardinals football games in her wheelchair. There was an area right on the field for disabled persons where she could sit in her wheelchair to watch the game. After more than a year of treatment for her cancer, she seemed to be declining. Her face was white. Her hair seemed to be falling out more and more and she needed more attention from Sandy and Jill. Carolyn told Sandy one day that before she died she would like to meet Joe Montana, the quarterback for the Kansas City Chiefs football team. Sandy called the Arizona Cardinals and they arranged for Carolyn to fly to Kansas City and meet Joe Montana. We bought her a camera so she could record the meeting with Joe.

Finally after about a year and a half, when it seemed things could not get any worse for Carolyn, she called Sandy from home, and told her that her son had been accidentally shot in a hunting accident in Ohio, and he was on life support system. A few days later, Carolyn called again and told Sandy that the son was brain-dead, and that they were removing the life-support system. Of course, we were planning to send flowers to the funeral from the company. However, Sandy was having trouble finding out where in Ohio the funeral was to be held. So Sandy decided to call Dr. McCorkle's receptionist, and asked where the funeral was to be held so we could send flowers from the company. The receptionist told Sandy to wait a minute, and then Dr. McCorkle came on the line Sandy said once again that she wanted to find out where the funeral was for the son. Dr. McCorkle told her his son was in his office right there, he had not been shot and that he was alive and well and that he knew nothing about Carolyn McCorkle having cancer. As

it turned out it was all a big lie that went on for almost two years. She had conned us all with the white face; it was probably talcum, the bandanna, and the stories.

Garry Kline, who was the controller at the time, decided to call the Phoenix Police Department and see what he could find out about Carolyn. He talked to a person at the Phoenix Police Department and asked him if you could tell us if someone had a police record or not. The police officer said, "I can't tell you if they have a record, but I can tell you if they do not have a record, what's the name of the individual?" Garry said "Carolyn McCorkle", at which point the officer said to him, "You mean *The Carolyn McCorkle?*" The police officer said to Garry, "Why don't you call this phone number that I'll give you and the person at that phone number will be able to answer your questions." Garry called the phone number and it turned out to be the Florence State Prison of Arizona. When Garry asked about Carolyn McCorkle, the officer at the prison said, "Oh yeah, I know Carolyn McCorkle, she was a guest of ours for two years!" As it turned out Carolyn had been convicted of embezzling from her sons' trust funds as well as writing bad checks for which she was convicted and sent to prison. Both Sandy and Jill were extremely upset because of all the time and emotion that they had put in to helping Carolyn, just to find out that this was a big giant hoax.

As time goes on, and we work together a lot, we learn to respect the other's opinions, and tolerate their foibles, particularly if we like them. Garry was a decorated ex-Marine (he always said "Once a Marine, always a Marine."), of the Vietnam era, three purple hearts, the bronze star, hated Jane Fonda. After he left the Marine Corp, he had been a biker for awhile, when he met his second wife, Rita. I asked him how that happened, he said. "I was in a biker bar and saw Rita. I walked up to her and asked her if she would like a ride on a shiny Harley, and when she said, "Yes!", I told her to get her ass outside and clean it." With Garry, that was probably a little exaggerated.

Garry and Rita had a son BJ, who, at around twelve years old contracted leukemia. Garry really loved the kid, very smart like his dad, and tons of personality. I always thought BJ was a lot like the kid in the Grisham movie "The Client". When it looked like his last chance was a marrow transplant, I twisted every vendor's arm that I could to be tested, but we never found a suitable match, and BJ died.

A few years later during the Carolyn fiasco, Rita died. At the funeral at the church, Carolyn showed up in her wheel chair looking pale and white (powder I suppose). There may have been dry eyes before that, I doubt there were afterward. Most of us were thinking there will be another funeral soon.

As an example of Garry's black humor that I loved; the day after Carolyn was found out, and we found out that her son had not died, Sandy and Jill (who had put the most effort into the Carolyn event over the past almost two years), were talking in the hallway as Garry came past them. Garry stopped and with a hangdog expression said to Sandy, "Sandy, I have a confession to make," they stopped talking and looked at Garry, who after a pause said, "Rita is still alive," and after awhile said "so is BJ who is living in Colorado." They both started hitting him with their fists and calling him names complete with cursing. Looking back, Garry's joke which appeared to be in poor taste, may have actually helped them deal with the Carolyn's betrayal. For the sake of humor, Garry never spared any one, any race, any religion, any sex, yet there was never any complaints, I'm sure because he was well liked.

I had retired my first time shortly before Carolyn had been found out, and I don't know why, but she was never prosecuted. About a year later, I read an article in the newspaper about a cancer society convention coming to Phoenix for five-year cancer survivors. As soon as I read the article, I could see that the God of Pranks was at work again and had sent me a message. I cut out the article and scanned it into my computer. Then I changed the keynote speaker from whoever it was to Carolyn McCorkle. After modifying the article, I printed it and faxed it to Sandy. I was not in the office when Sandy received the fax but I understand that she was extremely furious and went around the office ranting. She could not understand how an organization like The American Cancer Society could let somebody like Carolyn McCorkle be the keynote speaker. It took a while, but she was finally convinced that it had to be a practical joke.

About a year later, Marla came in my office to tell me that she had seen Carolyn at some restaurant in Tempe, which prompted to play another practical joke on Sandy. I wrote a letter to Sandy from Carolyn that said;

"Dear Sandy, I wanted to tell you how sorry I am for my behavior and for what I did to you in the past. Please pass on to everyone how much I regret my causing any pain.

I have been in counseling since I left EFData, and I have learned through counseling, that my behavior may have stemmed from what my father did to me when I was a child. All that is behind me now, I have turned over a new leaf. I really want to beg your forgiveness. I also want you to know that I have had a baby girl since I saw you last, and that I named her after you, Sandy McCorkle.

Sandy is a beautiful little girl in all aspects, except for one problem. She has a brain tumor and needs to have brain surgery that I can't afford, and I was hoping you and Jill would make a contribution towards her surgery so Sandy can live a normal life. Thank you very much, Carolyn."

Once again, when Sandy received the letter, she took it around the office in a rage talking to people about how that they should have prosecuted Carolyn and once again, people in the office convinced Sandy that it was another practical joke.

The Carolyn McCorkle story was not over. Six months later I received a letter in the mail from Carolyn McCorkle with a photograph of her baby boy that she named Bob McCorkle, after me. Clearly someone had taken a photograph of a baby and photo shopped my nose on it which made it look a lot like me. This time, it was I who went around the office showing the letter and photo, not ranting, but proud of the effort.

Our first EFData building was small and had only two bathrooms, both were unisex, both had a single commode. One day the janitor came into my office and showed me a sound-activated tape recorder that he found behind the commode. I thought that this was really weird, why would anyone want to record peeing sounds and grunts? I decided to have the recorder returned to the bathroom and someone would watch to see who the culprit was. I don't think there is any Arizona law under which we could have had him arrested, so when we found out who it was, he was terminated and told "Your services are no longer needed." Funny thing, he asked "Is this about the recorder?" About two years later, I read in the paper that he had been arrested for recording both sound and pictures in a supermarket bathroom. He drew a female judge and she threw the book at him, four years in prison.

Most companies have a lot of crap they hand out with their name on it, called advertising specialties. I realized that most of the pens, rulers, and junk that I had in my desk had been supplied by companies for advertising purposes, and I realized that I could

not name one of the companies on any of the items. Clearly, they were ineffective, a waste of money! That's when I devised the *First Rule of Handouts*, when a customer gets your handout; he should first say "Wow!" and second want to show it to a coworker, very tough requirements. Of course, our wine labels that I'll describe later fit the requirement. The nerd kit also met the requirement. It's easier to find examples of handouts that are not imaginative, pens, desk clocks, coffee cups, and Christmas cards for example, all a waste of marketing money. How, for example, does a Christmas holiday card help the business? It's received at the same time as the customer receives a hundred cards from a hundred other vendors. I suggest it would be a lot smarter and much more effective to send a Ground-Hog Day card; it would be unusual and would attract attention. And if clever enough, would be shown to other employees. Yet, it was difficult to get the marketing department to stop sending Christmas cards. It is so ingrained into their behavior.

I think mailing of product material is still one of the most cost-effective sales tools if done correctly, if not done correctly the mailings go from the mailman directly into the waste basket. I devised what I called the "Lump Strategy". The idea is that the secretary or the customer would notice the lump and out of curiosity would open the envelope to investigate. It would be even better if the lump followed the *First Rule of Handouts*, and the recipient said "wow!" and went down the hall to show it to someone else. That's the *First Rule of Mailings*. We used nerd kits as lumps and the tiger tails, as well as magnifying glasses, and toys (because most our customers were males.).

EFDData was making the majority of the profit for California Microwave; typically CMI had \$300 million in sales and \$25 million in profit. EFDData had \$100 million in sales and \$25 million in profit. You could look at it as the other divisions paid for corporate overhead. I was a shareholder and had become somewhat critical of unnecessary corporate expenses causing some tension between the corporate staff and me. For example, a consultant was hired on a \$100 thousand contract to design a Corporate Font. I asked questions like, "Do you really think customers notice the font?"

The directors were starting to be concerned that the goose that lays the golden eggs could go away, so I was asked to accept a board seat. This was at a time when it was not uncommon to have insiders on the board. The board consisted of Dave Leeson the CEO, Gil Johnson the President, Dave Hershberg the President of STS, Art Hausman the

former CEO of Ampex, Tom Seggie the former CEO of Varian, a Professor from Stanford, and me. This move probably caused more problems than it solved because I was another dissenting voice when it came to spending money unnecessarily and might have ultimately led to Dave Leeson stepping down as CEO. A search was started for a new CEO. The board considered three candidates, Hershberg, Phil Otto, and Me. The board also hired a psychiatrist to interview all of us. The psychiatrist came to Phoenix, spent the day with me, and had dinner with Lorraine and me. Phil Otto was selected, I'm sure the psychiatrist did not like what he saw in me. Too much of a maverick.

The new CEO was Phil Otto, a nice guy with a Harvard MBA. But, Phil decided that he didn't want entrepreneurs in the company and started making changes that he knew I would not agree with. In a couple of weeks I gave him my notice. I was the guy responsible for most the profits, so the board was very upset with Phil, and I found out later that they had given him marching orders when they selected him as CEO; "no major changes until he proved himself." After I resigned, Phil was told-"fix the problem and keep Fitting." Another opportunity for the *First Rule of Negotiation*, I agreed to stay, Phil agreed to not make certain changes, and I received a higher bonus. Of course, I knew that some day Phil would get even if he could. But in companies, you live for the moment.

I hired an ex-Motorola guy by the name of Arnie Sabel, on a two year contract and after six Months, realized I had made a mistake; he fit into a big company more than a small company. He brought politics with him and spent a lot of time being critical of the management. So, when Steve and I walked out one day, Arnie didn't understand that we were taking a negotiating position and virtually was doing cartwheels in the hallway. About five days later, after resolving a major issue, we returned, went to the conference room, called the staff together, and announced "We are back!" When I looked at Arnie, I understood the definition of "crestfallen". Later that day, I called Arnie into my office, terminated his contract, and paid him off. Not one of my rules, but if it were: *The First Rule Of Disloyalty*: Hide it or pay the consequences.

Four years after selling the company to California Microwave, I retired. I was fed up with not being my own boss and having to deal with the bureaucracy. For example, Phil had hired an army of bean counters, so when we would provide a five year financial plan, the bean counters would ask irrational questions, "Why is the margin (for a product

that we had not finished designing) in the fourth year 3 percent higher than in the fifth year?”, and stuff like that. We were still making most of the profit for the company along with Paul Jacobs of Microwave Data Systems, another entrepreneur and Phil was still trying to get rid of the entrepreneurs and founders. You win Phil, I quit! Two years after I left, Phil was replaced by the board. After I left EFDData in January, Steve became the president. About six months later, Steve called me and said, “I can’t take it any more, if you promise that we will do something together, I’ll quit tomorrow.” I said “Do it!”

After he left, we set up a new company and started thinking about what business we wanted to pursue.

CHAPTER 9

A start-up in the satellite business was not possible for Steve and me, because we were told by California Microwave that they would sue us. They called it killing the baby in the highchair! And frankly, it scared me; I didn't want Matt Moore coming after me. Once again, an opportunity appeared like magic. I had heard that Radyne Corporation in New York, another competitor of EFData, had gone bankrupt and was being taken over by Engineering Technology Services (ETS) in Melbourne, Florida. ETS was run by an old customer of mine, Tony Grimes. I knew Tony had no manufacturing experience, so I called to convince him that Steve and I could take over Radyne and make it successful. We had the design and marketing expertise and could attract talented engineers from EFData and Motorola if we moved it to Phoenix. By taking over an existing company, we would be reducing the law suit threat from CMI; usually the law suits would be about the employees taking intellectual property when they leave, Radyne would have their own. Steve and I were willing to take minimal salaries, with the expectation of sharing in the success through stock options.

I moved into the Radyne facility on Long Island in February 1995 and immediately could see some of the reasons why they went bankrupt. The products were pretty good, the profit margin on the satellite modems was good, but the management was atrociously incompetent. A couple of examples; a year earlier Radyne raised over one million dollars from investors and used it to pay executive's bonuses instead of for product design and manufacturing processes improvements. Another reason was the unfair culture that dis-incentivized most the employees. The executives would come in to the office somewhere between nine o'clock and eleven o'clock. But a time clock was installed in the factory and anyone else that was a few minutes late had their pay docked. Neither of these "brilliant" ideas helped morale.

Another unbelievable Radyne story, there were five computers and five printers in the sales and management offices, but only one printer cartridge, so when someone wanted to print a document, they had to go find the cartridge, turn off the printer, remove the cartridge, and put it in the printer where they wanted to print. It was really stupid and greedy; many of the executives had salaries over \$100 thousand and could have bought some fifty dollar cartridges.

Over half the company sales were international, and quotes and purchase orders were sent by fax. Radyne had an old fax machine that had to be fed by hand, and if the receiving fax was busy, you had to go back to the machine and try again. With the time difference for foreign countries, sales people had to stand by the fax and keep trying, sometimes at odd hours. The first thing I did was to buy a new modern fax machine and four more print cartridges, and then I removed the time clock. (The time-clock actually turned up later bolted to the wall in my office after we moved to Phoenix.) The cost for the cartridges and the fax was less than a thousand dollars. The profit margin on a single satellite modem was five thousand dollars. A couple of months later I moved the company to Phoenix with four employees.

The Radyne products, although working quite well in most instances, had a nagging problem for years of being sensitive to vibration. If for example, someone would tap on the front of the products with their finger or if someone would bump it, data errors would occur. The Radyne engineers, not having been able to solve the problem, had shock mounted the sensitive electronic circuits on foam rubber which reduced, but didn't completely solve, the problem. After moving the people and the product responsibility to Phoenix, Steve Eymann took a look at the design, and within a few hours had made a couple of design changes solving the many years-old problem; no more sensitivity to vibration! The guy's a genius!

Immediately after we moved Radyne to Phoenix, I ran an ad in the newspaper and we received at least sixty resumes and applications from EFData employees and we ultimately ended up hiring more than forty.

After Steve and I left EFData, Don Anderson was made the new president (known as Teflon Don I was told because of his lack of interaction with the employees). Don's management style also helped our recruiting efforts by passively encouraging many

employees to move in our direction. After we had hired many of the best engineering and sales people, the remaining EFData executives became very paranoid, making them easier prey for my humor. For example, EFData issued new employee badges and it was mandatory for employees to wear them. The female employees hated them because they were attached to their blouses by clips that caused a lot of wrinkles. The EFData management bought lanyards for the employees to hang the badges around their necks instead of clipping to their blouses. The executives got free lanyards while the other employees were charged five dollars each for them. Having heard about this “terrible injustice” to the EFData employees, I ordered two hundred lanyards at one dollar apiece with the Radyne name and phone number and had someone drop them in the EFData employee lunchroom. This caused quite a stir, with the EFData employees now wearing Radyne lanyards and resulted in high level executive meetings. Our objective was to have fun and have them waste time.

Of course after a few days, (it should have taken a few minutes) the EFData management told their employees they would exchange the Radyne lanyards with EFData lanyards. Then the people, who paid for the EFData lanyards before the free Radyne ones, wanted their five dollars back which took even more meetings. Obviously, those who received their five dollars back ended up with free EFData lanyards, so those who did not get a Radyne lanyard to trade wanted their free EFData lanyard. Then the ones who never did get a Radyne lanyard to trade wanted a free EFData lanyard. More meetings and lots of fun.. Total cost to Radyne was two hundred dollars and we received more resumes.

After we had hired a large number of the EFData employees, the president of EFData had our phone number blocked from their phone system so the employees could not call us. It didn't make a lot of sense since had a public pay phone in their lobby. I had our execs carry quarters around so when we saw an EFData employee at lunch (our buildings were only a mile apart) or at a trade-show, we would say “Call me some time.” and give them a quarter. Blocking our phone number was counter-productive, there were mutual friends at both companies and the result was more resumes.

The vending machine guy who filled the machines also serviced the EFData vending machines. One time I gave him fifty dollars to drop Radyne Employment

Application Forms in the lunch room at EFData. This caused a stir I was told because they were convinced that one of their employees was disloyal; more meetings. Lee Krise was a very creative Tech/Jr. Engineer and came up with another brilliant idea to devil them. We would buy a microphone listening bug and have it planted in their conference room where it would be found with a *dead* battery in it. It would make them wonder how long it was operating before the battery died. But I think by the time that idea surfaced, we had tired with playing tricks on them because it was just too easy.

Singapore Technologies (ST), a multibillion dollar company in Singapore, had been talking to Tony Grimes about buying ETS and Radyne. About a year and a half after we moved to Phoenix, the sale was consummated with ST owning 91 percent of Radyne. Steve and I had a significant amount of Radyne stock options.

Singapore Technologies had three directors on the board; Lim Ming Seong, Lee Yip Loi, and Chan Wee Piak. All the Singaporeans that I knew were smart and respectful and only wanted what was best for the company. Along with the Singaporeans, we had Jerry Waylan, Dennis Elliot, and me. I had met Dennis when I was on the board of Satellite Technology Management, Inc., another public company. ST provided other benefits beside money, corporate advice and more importantly they could provide other sources of financing. Drawing on their Chinese culture, they also brought a Feng Shui master to study the directions that our buildings and offices were facing, and to recommend changes that would improve our chance of success.

CHAPTER 10

The Comstream acquisition was the most interesting of my career. Comstream was a competitor owned by Spar Aerospace of Canada and had been losing money for years, I guess about a million dollars a month. The company had cutting edge technology, but couldn't seem to make money. Among other reasons, they always wanted to design or invent better products rather than sell their current products. Spar had become tired of the losses and first divested the chip design part of the company. The remaining part, about seventy-five million dollars in annual sales, was put up for sale. At the time we looked at it, our impression was that it would be worth around eighty million dollars. The company had forecasts that projected profitability and growth and based on the forecasts were building two new buildings. One was one hundred twenty thousand square feet and the other sixty thousand square feet. After spending a week doing due diligence, our team decided to make the first offer at seventy million dollars. But first, I had to go to Singapore to see Madam Ho Ching, the managing director of Singapore Technologies and get the money.

It was an interesting trip. Madam Ho Ching had been pre-briefed by our Director Lim Ming Seong who worked for her. Madam Ho is probably not known by most Americans. At that time, she was the wife of the Singapore Deputy Prime Minister, Lee Hsien Loong. Today he is the prime minister. She had earned a Masters Degree in Electrical Engineering with honors at Stanford University. When I met her, she was the CEO of Singapore Technologies, a six billion dollar company. Later, she would become the CEO of Temasek, a hundred billion dollar Company. A very impressive lady.

I made a forty-five minute presentation. She asked how much, and I said I would need eighty million dollars. Without a moment's hesitation, she said that it would be approved. After returning, we gave our offer to Spar, they threw us out of the bidding

because they believed the company was worth \$125 million. They did not get a suitable offer so the company was not bought. The CFO of Spar moved to San Diego to turn Comstream around. Another 25 percent of the company was sold off for ten million dollars, but Comstream continued to lose over five hundred thousand dollars a month.

About twenty months later, I called the CEO of Spar and said we were still interested and could we come visit him. Lim Ming Seong and I went to his office and he asked how much we would pay for Comstream. He was a sort of grump; perhaps because of the losses. He had a vintage 1940 Indian Motorcycle sitting in his office, and I asked him if the crime in Toronto was that bad. After he scowled at me, we went through a litany of the old and the new problems caused by building unnecessary and expensive buildings concluding that we might pay as much as twenty-eight million dollars. He said he would be interested. We wanted to perform a new due diligence. He said the deal would have to be kept secret and we could not go into the company because he did not want the company to be subject to any more turmoil. He would agree to have the management giving us a business presentation at an off-site location. The meeting took place in Newport Beach, at the Comstream attorney's office. In addition to the Radyne team, I invited Lee Yip Loi, Lim Ming Seong from the board of directors and Goh Boon Seong of ST. The management presentation was so disappointing that we lowered our offer to eighteen million dollars. Ultimately we would pay only fifteen million dollars for the company, and included was about eight million dollars in excess, but good inventory. A pretty good deal I thought, and SPAR was also delighted.

Once again, a trip to Singapore to see Madam Ho Ching was necessary to borrow the money for the acquisition. This time, the circumstances were different, the Asian currency crisis had peaked, ST wanted to invest in a new Singapore communications system that required cash, and they had just made a costly investment to buy a disk drive company. When I said I wanted to borrow twenty million dollars, she said, "No, I will loan you ten million dollars, but you will have to find the rest yourself, and I want my ten million dollars back!" However, ST made a call to Bank of America, the bank they did billions of dollars in business with, and asked them to give Radyne a credit line of ten million dollars. The combination gave us more than enough money to complete the acquisition.

While waiting for the Hart-Scott-Rodino filing and the national security filing to be approved, the national security review of foreign acquisitions of U.S. businesses is conducted by the Committee on Foreign Investment in the United States (CFIUS), Spar allowed me to occupy an office at Comstream so I could do some planning and move fast upon closing. During the month that I sat there, I could begin to understand the Comstream problems. For starters, the company culture encouraged spending, they had just occupied the 120 thousand square foot building with 140 employees. The new building had nineteen conference rooms, thirteen microwave/vending machine service areas, a lobby that would do a Hyatt Regency proud including real \$5 thousand palm trees that had been embalmed, a sleep room (I guess you got tired walking around the huge building), and a board room with \$1 thousand cow-hide chairs just to name a few excesses.

My office was near a mainframe computer printer. The operator during the day would print reports and stack them on a cart about 3 feet tall. When the janitor came in on the second shift, he would wheel the reports to the trash. No one ever read them! The 140 employees were distributed all over the building, sales in one corner, execs in another corner, engineering in the third corner, and accounting in the fourth corner. When meetings were necessary, you couldn't walk to adjoining offices, you had to arrange meetings in one of the nineteen conference rooms. They had a legal department (not needed), a contracts department (not needed), and an IT department with enough servers (twenty-three) to launch an intercontinental ballistic missile.

On the one hand, there was out of control spending, on the other hand the decision making was both strange and constipated. One of the products under development was a higher frequency band (Called Ku Band) small satellite terminal used by companies' world wide. I had gone through the status in a design review and noticed that it had been 98 percent complete for the past year and would satisfy about 90 percent of the market in its current state. The engineering department did not want to release the product for sale without meeting a single specification that was proving difficult. Crazy! After closing, I reviewed the design again and approved it for manufacture. The project engineer for the product left the company shortly thereafter because of my decision, and we sold hundreds of the product without anymore changes.

The sales commission structure was so screwed up that some sales people could have stayed in bed and would have received hundreds of thousands of dollars in commissions and others, no matter how hard they worked, would have received very little. But, I was grateful to find out all this stuff because, first it created an opportunity and second, it was easily fixable. It was management's view, that to boost the value of the company, the monthly sales had to increase. In order for the monthly sales to increase, they had to be ready to ship each month. That meant they had to build product to inventory, and finally the sales department was called upon to make outrageous forecasts to justify the inventory. The result was an excess of inventory, again an opportunity.

There were only about three hundred customers in the world at that time, so the sales model of direct sales was the right thing to do. Apparently Comstream didn't understand the market, because they had set up both distribution and direct sales channels. An analysis of the distribution channels showed that all the profit went to both a middleman and to salesman commissions, there was not much left for Comstream. Obviously there should be no company salesman commission when there is a distributor who sells the product.

Lorraine and I moved to San Diego for six months for the turnaround. Prior to closing, I had made the ideal organizational chart for the business. With the aid of Brian Duggan, the VP of marketing and Jamie Palmer, Executive secretary, who knew who the performers were better than anyone else, I filled in the chart with names. When I was done with the chart, there were about forty people left over.

Upon closing on the acquisition, I implemented the chart; meaning that the forty who had no place on the chart were terminated. I moved the remaining employees into one corner of the building while the sixty thousand square foot building was being modified for the business. Then I moved everyone into the sixty thousand square foot building moving sales, engineering, and other executives close together. The 120 thousand square foot building was a huge burden costing about \$160 thousand a month with five years still remaining on the lease, or around a \$10 million obligation. I paid Pacific Bell a million dollars to take the lease off my hands. Then I changed the sales commission structure to reward orders that came from sales-people's efforts. After making these few simple changes the business turned profitable in three months. Brian

was a good administrator, and I promoted him to President of Comstream when Lorraine and I returned to Phoenix. Comstream in San Diego was almost half of the business, Radyne Corporation was renamed Radyne Comstream Corporation.

Chapter 11

The internet boom was going strong and it seemed that it was a good time to take the company public. We were growing rapidly and had had a couple of profitable years. To have a company go “Public” is a dramatic change in operations and entails a great deal of work. First, you have to be able to qualify for the exchange that your stock will be traded on. In our case NASDAQ which required more capital than we had or required two years of profitability along with some other requirements. Then you find and negotiate a deal with an Investment Banker who has fund manager clients that will buy a majority of the stock. You must file a major document with the Securities & Exchange Commission which is created by a corporate law firm. After all the filings are approved, the Investment banker escorts, usually the CEO and the CFO around the country to sell the stock. In this case I would make forty-three presentations in six cities in seven days. The evening after the first day and six presentations, I decided that the employees would appreciate a daily log of the activity and each night I would email the daily log. It seemed like a good idea, but became very tiring after all day meetings and usually night time travel. The following is a copy of the log:

“The Road to the Public Offering”,

I had never done a road show before, so I approached the trip like it would be a great adventure. It turned out to be a great adventure. During the first flight, to Minneapolis, I decided to keep a diary of this adventure. Since none of the employees had ever been on a road show, most probably had no idea what a road show was all about, an Initial Public Offering (IPO) was also new to them, and with the wonders of the internet making it possible, I decided to email my scribbling to them whenever I could. In reality it turned out to be a much greater idea than when I first thought about it. The employees loved the stories the education, and the two hundred ended up buying over

one million dollars of our stock. In addition to building a company and performing well, if you want any public market support, you have to go on the road and sell the stock.

This story started about six months before when we engaged HD Brous & Company, the underwriters, to sell about six million dollars of our stock. At that time the stock was selling for \$3.50 and the “float”, the amount of shares that are on the market to be traded, was only six hundred thousand shares. Any shareholders with 10 percent or more of the stock fall under special rules and are not included in the float. We wanted to be able to be listed on the NASDAQ stock exchange. The requirements for listing are six million dollars in tangible net worth, a four dollar share price, and a float of five million dollars (that amounts to about 1.2 million shares at the four dollar price). Since the stock price was so low, we wanted to sell the minimum amount necessary to meet the requirements with the idea to sell more stock when the price was higher. In order to make the offering attractive, we planned to sell a unit consisting of a common share and a warrant. The warrant is like a stock option and gives the owner an option to buy an additional share later on at a fixed price. If the warrant were at, say \$6, and later the stock price climbed to twelve dollars, the warrant holder could still buy the stock at \$6.

Debra Fiakas, our assigned representative of HD Brous, suggested we attend the Regional Investor Bankers Association with our presentation in November. An interesting concept for presentations, you have no more than ten minutes to tell your story to about one hundred fifty Investment Bankers who are reading the Newspaper, typing on their laptops, or talking on their cell phones. We seemed to be well received, and the stock moved up to the five dollar range.

The next step was writing the prospectus that I will explain later. The offering is known as the “deal” by the lawyers, because they make a great “deal” I suppose. Hundreds of lawyer hours were spent writing up the prospectus. They like to argue endlessly over meaningless and useless phrases. One that comes to mind was an argument over using “consists of” in stead of “comprises”. Of course, they mean the same thing. That argument probably cost two thousand dollars. Lawyers didn’t get their bad reputation without a lot of hard work.

As most of you know, the past few months have been spent trying to get approval from the SEC, approval from NASDAQ, and approval from about thirty states to sell

securities in those states (called Blue Sky). Last Friday we received the approvals which have allowed us to print the prospectus (Called red herring shortened to “reds”). These are called red herrings because a red herring is a term used to describe a false sense of direction, not that we would ever do that. According to the dictionary, red herring comes from the practice of dragging a herring across the path to distract the hounds.

We started the two week road show on Monday night, two days ago. We expect to cover about eight cities and make about thirty presentations during the next two weeks. The we, meaning Garry Kline, Debra Fiakas the HD Brous underwriter hereinafter known as Deb, and me. The point of the road show is to present the company to underwriters, investment bankers, brokers, and dealers so they can pre-sell the stock. The investment banker and underwriter for the offering is HD Brous and Co. We had a meeting in Phoenix on Monday with a representative of another underwriter, Miller, Johnson, and Kuhn (MJK) from Minneapolis.

At a quarter to seven Monday night we headed for Minneapolis on America West, on time for a pleasant change. We agreed that we would not check any bags considering the tight schedule we had for the week. Besides, you don't sweat much in cold weather. On the flight, I was sitting with Garry and told him that the last time I was in Minneapolis was twenty-five years ago for a convention, and I had dinner and went to the Brass Rail Bar with Fred Kornberg, the guy who fired me from Comtech Data and is now our competitor. When we arrived in Minneapolis, a limo was waiting to whisk us away to the hotel. In this log, limo means a town car, not one of those stretch things with a bar and bowling alley. A half hour later we arrived at the Double tree Hotel. In the twenty foot walk to the hotel entrance, I found out what is meant by a minus thirty degree chill factor. There was a lovely lady behind the counter who appeared to have a terminal case of flue and badly in need of a personality transplant. She told us she couldn't find our reservations until we found a confirmation number. Then, after another fifteen minutes, she found the reservations. With that problem solved, I went off to bed at eleven-thirty. I found out the next day that Garry was not so lucky. He was sent off to room 1417 to find out that his key card didn't seem to work. After making some noise with the key card at the door, he apparently awakened the occupant of the room who hollered at him. (I understand the occupant was a former Green Bay Packer linebacker who was in the room

with someone who was not his wife.) Garry went back to the lovely lady at the desk to ask for an unoccupied room. We thought it was good fortune for Garry that his key did not work, when you considered what may have happened upon his entering the room with the linebacker and friend. On the other hand, it would have made a better story if his key would have worked.

Wednesday, I was up early for a seven o'clock meeting with MJK managers and then a nine-thirty presentation with about forty brokers/dealers/investment bankers including some in other cities through the use of video teleconferencing. We rushed out the door to catch a cab to the airport for our flight to Chicago Midway Airport. We thought this was the grossest and dirtiest cab we had ever seen. Grabbed a snack at the airport and away we went on a Northwest flight. At Midway, our limo driver never showed and we were running late, so we hopped in another cab. This cab was clearly grosser than the one in Minneapolis, and in fact could have been one of the grossest in the country. We had to put our bags in the trunk which we were sharing with a bag of dog food (Cabbie Snacks?) and a VCR (probably stolen). There is no way any other cab could be worse. We zoomed into downtown Chicago for a meeting with another broker/dealer whose name escapes me at this moment. I made a twenty minute presentation to about forty brokers in five different states from Albany to Denver by telephone.

We headed to the airport to find out that our flight to New York was canceled and we had to stay overnight in Chicago. We managed to get reservations at the Marriott and a flight reservation for the following day at noon to NY. We had to change appointments and move the Wednesday ones into Thursday, and start earlier Thursday and stay in NY until eight o'clock Thursday night. Lou at Bowers Travel did a great job in helping out. Since we were stuck in Chicago, we managed to have a nice dinner and casual breakfast.

Late Wednesday morning, we took a cab to the airport. Guess what? This cab made the last one look like it was as clean as an ambulance. There was a bulletproof shield between the driver and us. On the shield about where your knees would touch was this brownish red goop. This entertained us on the forty minute drive trying to figure the source of this goop. My view was that he had used his car for deer hunting and had put the deer he shot in the back. Garry was his usual couth self, and suggested that Deb should taste it to give us more clues. Our flight was about thirty minutes late arriving in

La Guardia, NY. But our driver was waiting to take us to Great Neck where forty Brokers and Dealers of HD Brous are waiting.

Wednesday evening, we made a presentation to a room full of brokers and analysts who work for HD Brous. Analysts are a pain in the butt because they ask serious questions for which I have to make up answers. Of course, Garry's job is to swear that whatever I say is the God's truth. On occasion they ask questions that we would rather not answer, and at that time I refer the question to Deb. Deb is a petite dark haired beauty; some would say striking! Since most the analysts are guys, this seems to take their mind off the questions. In fact, we have a great story to tell of our past success and the future of satellite communications for internet connectivity to foreign countries; and we seem to be well received.

After the meeting, we had dinner with Howard Brous, his head sales guy, and his super analyst. It would have been a perfect dinner except the analyst (please note the first four letters of analyst) who wanted to know more info about the company financial information than I know. However, I finally got him to talk about basketball. Go Knicks!

I was busy checking email, changing reservations again, and working on travel plans for next week. Off to bed about eleven o'clock. Our rooms are next to the Long Island Railroad so that every hour I am awakened by the passing train. We have to get up at five o'clock in the morning (three o'clock Phoenix time) to head for New York City

Thursday morning, I went to the lobby to find some coffee and nothing was open. The guy behind the hotel counter, who by the way, was better looking and had slightly better personality than the lovely lady in Minneapolis said that I could get coffee at the train station that was only a five minute walk. He meant five minutes for a marathon walker. Ten minutes later in thirty degree wind chill (and uphill) I found some coffee. Our limo was there on time to get us into the "Big Apple".

This limo was a stretch; still no bowling alley but it did have a bar. We are keeping the limo all day until we get dropped off at the airport. First stop was breakfast at the Hotel "W" with Marc Clee at eight o'clock. Marc is with American Funds that manage some \$3 billion. Interesting thing about Marc, he was once on the board of directors of Radyne when it was still in NY. I made my twenty minute presentation between mouthfuls of food. I think he is planning to buy some of the stock. The

presentation includes a constant barrage of questions while Marc is reading our “red” at the same time. During this time, the limo is circling the block or finding a place to park while waiting. After Marc was through with us, Deb calls the Limo on her cell phone so that by the time we get to the street, the limo will be there.

Next appointment is at nine-thirty with Fred Knoll of Knoll Capital management about five blocks away; which takes about twenty minutes to get there. Up to the thirty-ninth floor. We arrived a little late so we were behind schedule already. Fred manages about \$40 million of other people’s money. The presentation took longer than usual because Fred kept interrupting with questions; I hate that. Now we are behind schedule a little more. I can’t tell if he is interested. Oh well, back to the limo.

We are running about twenty minutes late to our next meeting with EGS and Jonas Gerstal, a money manager. Jonas is a very polite and pleasant guy who has no idea what we do. However, he is a believer in Howard Brous and will be an investor. Back to the limo again.

We are very late for our eleven-thirty appointment with the American Heritage fund to meet with a couple of young guys from Germany and Switzerland. We managed to eat a little food at this stop. A little fruit and a cup of soup, then back to the limo. Deb’s on her cell phone constantly setting up more appointments and apologizing for our being late.

Next is our twelve-thirty appointment with PJ Socit of Potomac Capital Management, another large money manager. This guy was very sharp and asked some tough questions. However between Garry and me, he came to believe we knew what we were doing. Usually after the presentation, Deb outlines the deal and explains things like the number of shares along with forecasts of our future performance. She does a great job of not only the presentations, but also finding the limo, and keeping us on schedule as much as possible. This is a client of HD Brous, so Fred Hoch from HD Brous showed up. Fred is meeting us in Boston tomorrow also. Potomac was only on the fourteenth floor so I imagine they are not as big as the firms on the fortieth floor. Nice guy and I think he will buy. We have been handing out our new mouse pad giveaways and they are really well received. We managed to pick up about fifteen minutes on our schedule. And away

we go again to the limo. Thank goodness for the door to door service since it is bitter cold and the sidewalks are icy.

The next two money manager and fund manager are clients of Miller, Johnson, Kuhn of Minneapolis so we will meet up with Steve Austin of MJK. We are only a few minutes late for William Witter Company. We have an audience of three this time. Their conference room is on the fiftieth floor of a building overlooking Central Park with the George Washington Bridge in the distance. A breathtaking view! We did an eighteen minute presentation this time and are about back on schedule.

Our next meeting is in the same building with the Special Situations Fund, a \$3 billion fund manager. We met with Steven Shapiro, President of a subsidiary called Intrepid Capital Management. I think we made a hit with him, also.

We have a few problems with some legal issues, so our last stop is with Dorsey & Whitney, our law firm for this deal. We met with Barry Wade and his assistant that we had been working with for the past three months. Garry was on the phone checking on the audit, Deb and Barry were conferenced with the HD Brous lawyer in Phoenix, and I was changing airplane reservations. I have been also working on reservations for a similar trip next week. Tell you about that later. By about half past five we were through for the day and called for the limo for the last time. "Take us to La Guardia!" we all said. This took about an hour during which time we decided to check out the bar. We arrived at the airport at half past six and rushed to the gate to catch the earlier 7:00 flight instead of the 8:00 that we were originally scheduled on.

We did manage to get on the 7:00 that finally left the gate a half hour late. We finally took off for Boston, a thirty-eight minute flight. At Boston, there were traffic control problems, so at this time we are in a holding pattern. The plane is completely full and we were given cheese and crackers (our dinner). We may never get to Boston! What a long day so far!

January 27, 2000, a dark Thursday night about nine o'clock somewhere over the Atlantic, I am in an absolutely, completely filled USAir 727. I am sitting between an accountant and this cute chick. I think she was hitting on me, but not sure since I am out of practice. I had to tell her I was happily married. She seemed disappointed. Well we have been holding for about an hour and have been finally cleared for an approach into

Logan International, Boston. The landing was uneventful so we went off to recover our luggage that they made us check because the flight was packed. After getting the luggage, we went outside to get a cab. Temperature is about five degrees with a twenty mile an hour wind. Fortunately we found a cab right away or we would have frozen to death. Another cab report, this cab had the back floor full of old newspapers and some kind of gray crud. Not quite as dirty as Chicago cabs, but Deb pointed out that it was definitely a contender for the most gross cab award. By this time, we are pretty slaphappy and start chuckling over the condition of the cab. We arrived at the Wyndham Boston in about twenty minutes. The hotel turns out to be very nice and we each had a suite by some minor miracle. Garry and Deb met up with Steve Austin, (remember, the guy from MJK in Minnesota) who was staying in the Omni Hotel, and they went somewhere for a hamburger. After checking my email and writing a little, I went to bed and slept like a rock until six o'clock in the morning. Then back at it again. No coffeepot in the room, must be some stupid Boston law. Great shower for a hotel!

I had put one of those breakfast cards outside my door for delivery at half past six. The breakfast showed up right on time, along with well-needed coffee. Oh, I forgot, but our appointment was earlier than the schedule so I had to reschedule the limo before I went to bed. The Limo was on time when we went out the door; the cold wind hit us like a slap in the face with a cold mackerel. Another stretch limo like those the high school graduates take to the prom. Still no bowling alley, but there was a bar. The limo was a lifesaver with the chill factor something like sixty degrees below zero. Also, ice and snow everywhere. Our driver Jim, drove off for the first appointment at Putnam. Putnam is a money and fund manager handling like zillions of dollars. The VP we met with was at least twenty-three years old and was managing billions of dollars. Putnam does not allow the investment banker in the meeting, so Garry and I did our duty alone.

It was the same routine, call the limo to pick us up outside the door and travel to the next appointment. Along the way we picked up Fred from HD Brous again. Inside the limo was like a circus with the five passengers and four cell phones continuously operating. Deb is on the phone with the lawyers and setting up appointments for next week. Fred is juggling appointments since we had two appointments for the same time. Steve is on the phone with his office checking on appointments. Then I am rescheduling

the flights and limos for next week. Typically after reaching our destination, three cell phones are still in use while we are walking to the elevators. For engineering reasons that escape me, we find the cell phones do not work well when you are forty floors up.

Next Company is John Hancock, a very large fund manager. We have an extremely bright analyst at this meeting so we can zip through the presentation in about fifteen minutes. Wham bam, thank you maam, and we are out of there in twenty-five minutes. Some of these guys are frighteningly bright. Back to the limo. The chill factor has improved to about minus twenty-nine degrees.

Jim, our driver, has been doing road shows for five years and is a great asset since he knows what we are doing and he knows where to go. Another cell phone circus went on in the limo while going to the next place, Boston Partners. There were two guys this time, and again, very bright and knowledgeable, so the presentation is reduced because explanations are not necessary. At the beginning, we were told that they usually do not invest in small cap. (this means the size of the company calculated by multiplying the stock price by the number of shares is less than about \$250 million), however, they used up forty-five minutes of our time with questions, that we took to mean they became interested after hearing our story.

Back to the limo, etc, etc. We actually have an hour until the next appointment. We told Jim to drop us at a Good Italian restaurant. We ended up at Maggiorri's, a famous 100-year old Boston landmark. We had a real meal for a change. Next stop is Hori Capital with Calvin Hori, President. This is a small investor, only a measly thirty million dollars under management. He was an arrogant guy who didn't seem interested. I guess you can't win them all.

Longwood Partners is next, up to the forty-sixth floor. What a view! I was told Bob Davidson is a big hitter, meaning he invests large sums of money. He said his approach was to ask "penetrating" questions to make a "gut" decision. We got along well and he seemed to be impressed by the company. Deb has disappeared to be on the phone to solve some of the lingering NASDAQ problems and prod the lawyers into working a little faster.

Let me explain what is going on, all these visits serve multiple purposes. First, this is like a debutante in a coming out party; that is, name recognition for Radyne

Comstream. Second, we are trying to understand how much interest there is in the stock in order to decide on a price. Price determination will take place about the fifth of February by the company and the underwriter, HD Brous. Third, this is a sales call with the hope of getting commitments from the institutions. Fourth, we want to create a demand for the stock in the after-market to increase interest in the stock after the closing of this offering. Fifth, we hope to interest analysts in following the stock and writing favorable reports to interest other investors and increase the stock price.

At half past three we headed for our last appointment at Constitution Research. I kept calling it constipation research, but no one seems to have a sense of humor this late in the day. We have to get out by half past four to get to the airport in time to get our flight back to Phoenix that *we cannot miss!* We had moved this guy twice and couldn't get connected to confirm the appointment. As we approached his office, he came running out and said he had another appointment. He ran into the restroom with his briefcase. We decided to wait and ride down in the elevator with him so we could talk to him. After fifteen minutes, Fred decided to check up on him, but the restroom was empty. It turned out there was a back door in the bathroom that he had taken! I guess that would be a good exit if the SEC were on your ass.

While taking the elevator back down from the thirty-eighth floor, I calculated that we had covered more than a mile in vertical travel in elevators on this day. At least we will be certain of making the Airport on time. Jim dropped us off at the terminal and I paid the limo bill. In case you wondered, the limo cost about seventy dollars per hour (including Jim and tip). There is no way to do a road show without a limo. We went to the Admiral's club (the American Airlines Club) while waiting. Everyone is back on the phones again, shoring up appointments, making airplane reservations, hotel reservations and limo reservations for next week, beating on the lawyers again, checking emails, talking to Sandy, getting Melissa to get more presentation material ready for next week, calling our honeys, etc. It feels great to be heading back to Phoenix. We get in almost at midnight and head home. I have a golf tee-time at eight o'clock in the morning. I wonder what shape I'll be in to play golf.

I headed back to the airport on Superbowl Sunday at two o'clock. I feel like Willie Nelson. "On the road again" Is this dedication, or what! Missing the Superbowl.

At the airport, I meet Debra and Garry for our flight to Minneapolis. The flight was uneventful unless you consider trying to eat the airline non-meal. I know you are wondering about my golf game. I had one of the best rounds of my golf life. We are staying at the Hilton Marquette in downtown Minneapolis. The hotel arranged a car and the driver Norman was standing there as we got off the plane. Most guys in Minnesota are named Norman. The weather is about twenty degrees warmer than last week and no wind. Nice gal behind the counter who talks just like those people in the movie "Fargo". We were checked in and I hurried to my room to watch the last minute of the super bowl' apretty exciting finish. You have to love it, a big-busted peroxide blonde inherits the Rams from her 6th husband when he dies and wins the super bowl. Only in America!

The IPO is a colorful experience. I explained about the "red" Herrings. The states each have different sets of securities laws called "Blue" sky laws. I don't know why. Then the underwriter can sell an additional fifteen percent of the stock called the "green shoe". This name is derived from the first time this was done when the Green Shoe Company sold public stock.

Up at six o'clock for our half past seven meeting. I did the thing with the card on the door for breakfast again. We had a meeting at the hotel with Knappenberger/Bayer. Steve Austin joined us. Gayle Knappenberger had visited us in Phoenix in early January. Gayle had his analyst with him, Jill somebody. We did our twenty minute presentation, Jill never cracked a smile. In fact she told Deb that the comment about the call girls did not add any thing to the presentation. Debra pointed out to her that no one else had any problem with the call girl comment. (Meaning, "why don't you get a life?") She was referring to one of my slides where I point out the similarity between the internet and the California gold rush. I use that to point out that the only ones who made money in the gold rush were the infrastructure providers like Levi's and the service providers like call girls (This is when most people chuckle.). I also point out that we provide the infrastructure. We will come to find out later that they are going to buy some stock despite the call girl comment.

We are off for our next meeting about five blocks away. In downtown Minneapolis, they have built sky bridges on the second floors across the streets between buildings. These sky bridges are all over the downtown areas and are glass enclosed so

you don't have to go out into the cold. I guess they couldn't build them underground because the ground is frozen year round. To get to the next appointment, we went across about seven sky bridges and through six buildings. I felt a lot like a gerbil in heat must feel going through all those tubes. A nice meeting with David Hivebrook of IA Investors. He was very interested and kept us there too long. So, we are running late again.

Steve Austin, who lives in Minneapolis, had his car parked in the AIA building, so he dropped us off at the Kinnard building. He waited outside since Kinnard is a competitor of MJK. When we entered the conference room, there were about seventeen brokers/dealers/investment bankers eating box lunches that we had provided for them. Since we were late, I did the thirteen minute version of the presentation. Kinnard invited us in because a golfing friend of mine is the ex-president of Kinnard and his son is a VP there. There were good questions from this group. The negotiation with HD Brous will be interesting. Kinnard wants some stock, but they will only get some if they agree to provide analyst coverage and write analyst reports. By now, it is half past one, so we grabbed box lunches and ran for the car.

Next stop is Perkins Capital. We meet in the conference room with Richard Perkins, son Daniel, and big black dog Bo. Another presentation. Richard is an interesting guy. The conference has about thirty antique carved wood duck decoys and ten paintings on the walls of ducks, geese and swans in flight. As we were leaving, I suggested, quite wittily I might add, that perhaps he should add a few more ducks to the conference room. In case you don't know what decoys are, they are carved and painted ducks that are put on ponds to attract real ducks so you can shoot them, which is probably illegal today. He proudly took us to a back room where he had about five hundred carved duck decoys displayed. It was very interesting. As we were leaving, he told Steve that he would take some stock.

Then we headed for the airport for our flight to San Francisco. We should get there about half past seven o'clock. I am writing this stuff on the plane and my laptop is blinking to tell me the battery is almost on empty. I will let you know how things turned out after I get my battery charged. As Sandy would say "Bye Bye."

We landed in San Francisco around eight o'clock, our driver was waiting at the gate. We headed off to the Hyatt Embarcadero. The Hyatt Embarcadero is an impressive

hotel. The inside of the hotel looks like you are inside a hollow ten-story pyramid. The rooms all open onto balconies on the inside. There was a movie filmed here about twenty years ago. "High Anxiety" starring Mel Brooks. Yip Loi Lee, one of the company directors who live in the bay area, met us at the hotel. The five of us headed off for fisherman's wharf for a seafood dinner. We have to include Yip Loi in our pricing discussions since he is representing Singapore Technology. We made it to bed by midnight.

Our first appointment is at seven o'clock. Another breakfast in the room for me, then check out and check the bags at the hotel to be picked up later. We went out and jumped into a cab. We told the driver to take us to One Market Street. He turned around in his seat and stared at us in a strange manner. Then he pointed across the street and said, "It's right there!" Oops! Well, he had been waiting in line for a while and lost his place, so I said "Take us over there and I'll give you a big tip. Across the street for five dollars!"

The day was a blur of meetings again. First Capital Research, then at eight-thirty, Sterling Johnson. Dresdner RC million at ten o'clock, if you think it is boring giving the same presentation over and over, think about how boring it must be for Garry and Deb to listen to them. They are a little different each time because each person you present to is different. Some want to hear about the markets, some want to look at the financials, and some are more interested in evaluating the management. Deb and Steve Austin have been on the phones most of the morning. In addition to setting up appointments, they are talking to everyone that has listened to our presentation to get a commitment or indication of how much they want to buy and at what price. We will price the stock about Friday. The plan is to be "effective" on Monday, February seventh. This means that we have filed all the documents with the SEC and NASDAQ, and have been approved. All this time the lawyers are still billing us for problems that are still cropping up in the Blue-Sky issues. The new stock will begin trading on Tuesday. Another decision to be finalized along with the price is whether or not we are going to separate the warrant from the stock. If we decide to split those, then we will have trading symbols of RADN and another of RADNW. We argue frequently about pricing. There are a number of issues. The company wants the highest price. The underwriter likes a lower price so their investors are taking less risk. Then there is the current market price and activity to consider. If the

price is too high, the amount of trading activity could be curtailed in the future, so the long-term behavior of the stock is important.

And so we are off to our half past eleven meeting with Jim Callinan of RS Investment Management. We took a cab to the Fornou's Oven Restaurant. The cabs in San Francisco are pretty clean and don't qualify for the "most gross" award. At the restaurant, I told the matre'd that I thought Fornou in Italian is "Oven", he said that was correct-just like shrimp scampi which means shrimp-shrimp, so we ate in the Oven Oven Restaurant. Thank goodness we got to eat a real lunch for a change. Even though between bites I made our usual presentation, it was great. Then we were off to the next meeting. Steve Austin left to return to Minneapolis. At one o'clock we had a meeting with Proximity Funds with Geof Crosby, two o'clock with Botti Brown Asset Management with John Botti, then at three o'clock Columbus Capital with Matt Ockner. We got to talk a little golf for a while. That was a treat.

By this time, we thought we had about two million dollars in stock committed for the day. Our last appointment is at five o'clock at the Ritz Carlton. We decided to go the Ritz early and use the time to make some more phone calls before the meeting. We saw a cab and asked him to take us to the Ritz. He said that it was only 2two blocks away so we decided to walk. As it turns out, it was about eight blocks and almost all uphill. The Ritz sits on top of one of those big hills in San Francisco. The last block was a killer.

I made the presentation in the hotel bar along with harp music, nice ambiance. Then we tried to find a cab at rush hour. We walked three blocks downhill this time, found a cab, went back to the Hyatt for our bags, and headed to the airport.

At the airport, we checked in and went to the Admiral's Club, the club of American Airlines. Dinner consisted of snacks in the club while we are all connected up with laptops to read our email. No complaints since we had had a nice lunch. Our flight is a redeye at ten o'clock to New York, JFK. We are supposed to arrive at half past six in the morning. We are all settled in our seats and the flight is underway. Trying to sleep in airplane seats is like sleeping while lying on a bunch of big rocks. The morning will be arriving fast. Good night everyone. We cheated death again and landed safely at JFK.

Our driver found us and went off to get the car. We are grateful for this little service because it is very cold and the wind is blowing. After an hour drive into midtown

Manhattan, New York City, we arrive at the Intercontinental to check in. At check-in I find out the hotel rate is thirty dollars higher than the reservation. Is this a NY rip-off of an unsuspecting country boy from Arizona or a simple mistake? I will have to check with Lou at Bowers travel. We have a few hours before lunch and our first appointment. A couple of hours of sleep sound wonderful. The wake-up call arrived too soon. I checked my email to find out that Lou had called the hotel and had the rate taken care of. We ate a quick lunch in the hotel and went to get a cab. The reservation for another limo had gotten screwed up. Our first appointment is downtown.

New York City is made up of five Boroughs; Bronx, Brooklyn, Queens, Staten Island, and Manhattan. Manhattan is the borough people think of when they hear New York City. Manhattan is about eight miles long north to south and only two miles wide. The southern part is referred as downtown where you find the financial center; near Wall Street, the southern tip is known as the battery because of the guns that were placed there in the revolutionary war to shoot the hell out of the British. Thus, that leads to the engineering riddle, why are the lights in Central Park (Uptown) dimmer than the lights in Times Square (Midtown)? Our hotel is in midtown, and the northern part is the uptown. Although the distance from midtown to downtown is only four miles, because of the traffic, the trip can take thirty minutes.

Let me tell you about the cabs in NYC. First of all they are a lot cleaner than Chicago and are not in the “most gross” running. A few years ago, NYC got on this safety kick so all cabs have seat belts that are supposed to work. After getting in the cab, a tape plays a slightly amusing celebrity recording telling you to “belt up”. In this cab, the opera star Beverly Sills says “Lets keep tragedy on the opera stage, belt up!” Another cab had the voice of David Letterman, while another had Buddy Hacket. Before I forget, the answer to the engineering puzzle is “It is further from the battery.” Engineering humor is hard to find.

The last meeting of the day is about thirty-ninth street and Broadway. It is bitter cold, wind is blowing about twenty miles an hour, and we can't find a cab that is empty. We started walking north and had to duck into a department store to keep from freezing. We are at forty-second street, the start of Times Square and see a restaurant across the street. Deb is cold and running on empty so we headed to the Times Square Brewery.

During dinner, it was determined that Garry had never seen Times Square, country boy, etc.. After dinner we wanted to show Garry Times Square, went a block north into Times Square, still bitterly cold, found an empty cab, and told Garry to take a good look because we were heading to the hotel.

What a treat this evening, to get our calls, email, and other chores completed so we could get to sleep before midnight. I had an email from Lou; she called the hotel and straightened out the room rate. I don't know about the others, but I slept like a rock once more and only woke up when the wake-up call arrived at six o'clock.

I will skip the details of breakfast, except to point out that I had ordered from the card again. Hotels have preset menus on the cards with names like "Quick Start Breakfast" and "Light and Healthy". These are names designed by English major graduates from Columbia University so they can charge \$15.95 for a roll, coffee and a glass of orange juice. I must still be in their computer as a country bumpkin, because they forgot my orange juice. Is this a NY rip-off of an unsuspecting country boy from Arizona or a simple mistake? I called the room service and asked that they remove the note that I was an unsuspecting boob, so they sent up my orange juice. We met our limo and driver Steve in front of the hotel. Steve is the same driver as the one we had last week in New York. Same limo, too; no bowling alley.

It is cold as the devil with the temperature around twelve degrees. We reached our appointment twenty minutes early, and right next door was the Cosmos Coffee Shop so we stopped there to get warm. Apparently this is a favorite of the New York police because there are about a dozen of "New York's Finest" having coffee and getting warm. We are all getting a little grumpy and irritable by now, so we are starting to sound a lot like New Yorkers. We went next door for our eight o'clock meeting. Just like show people (which I guess we are), the show must go on. The meeting goes well, although I confess that all I can think about anymore is making the flight this evening and going home.

This presentation is about number thirty-six since Monday a week ago. There is a great temptation to stray from the truth and tell the investors what I know they really want to hear, but I resist, usually anyhow. There is no doubt that what we are doing is selling the merits of the company. I have a great deal of admiration for our sales people.

The best sales people always put themselves on the line. that is, selling yourself. The downside of selling yourself is the rejection you feel when you fail.

We have a little time before the next appointment, and Deb is getting frantic about all the details that have to be taken care of. We went back to Cosmos; still twelve cops in the restaurant, but I think they are different ones, though. Deb is on the phone for the next thirty minutes in the restaurant. Garry is on the phone to John Botti, one of the investors we presented to in San Francisco. He wants more details on our financials. After Garry is through, John says he will place a large order for our stock. Good work, Garry. Garry and I are trying to understand the lingo of New York. People here are in a hurry and abrupt, so there is an abbreviated sort of language. For example, instead of saying “Excuse me, but I didn’t understand the reason you said that or I didn’t understand the look you gave me.” They say “What! What!” There are a few more shortcuts that we never figured out.

Back to the limo. We have to scamper over black ice and black snow to get into the limo. Now we have to head to midtown for the next meeting. This one started out with the investor, John Callaghan of Deutsche Asset Management (I think he manages Nazi Money). Deb has gotten so busy collecting information about orders from investors and trying to get the lawyers to do their jobs that Garry and I are left with the task of making her presentation also. Usually, Deb introduces the company and follows the presentation with information on the offering. By now she could do our presentation word for word, and we can do hers. As a matter of fact, since she talks first, she frequently gives part of the company presentation. I get even by presenting some of her finishing-up statements.

The presentation went well and after awhile John (He really doesn’t manage Nazi money-that was a bad joke!) became interested. I am sure the Bob and Garry charm got through to him. We left there feeling pretty good that he had an interest in our company. There was another meeting either before or after the Nazi one but I can’t remember which or when or who, but I am sure we did a great job. Then we had to head to the hotel for a luncheon meeting. Good news on the way, one of the investors we had wowed in San Francisco doubled his order, and another wants to buy a large amount.

Fortunately, I had not checked out so Deb could get back on the email and coordinate all the closing effort in my room. Garry and I went to the luncheon meeting

with about twelve investors and a few brokers. I would like to say we had a pleasant lunch, but not so. They had a pleasant lunch while I was presenting. I figured that a lunch presentation should have a bit of humor. I start the presentation, called “the story” by pointing out that we are a low risk Internet-play in the market, because our major growth in the future is in providing satellite connectivity to the US for internet service providers in other countries. One bit I had used successfully before, particularly with older investors, which these were, was that some people did not think of us as an internet company because, 1. We had revenue, 2. We were profitable, and, 3. The CEO (me) is older than twenty-one years. No one laughed except for Garry; of course he has to laugh. Many of these investors have a limited sense of humor. Maybe I wasn’t funny? Naw! Run to the room. Get the luggage. Pry Deb off the phone and back to the limo. More black snow and black ice. And off to our very last appointment. We have to head back downtown with the traffic picking up. Our next appointment is in One Financial Center across from the World Trade Center where the terrorists set off the big bomb. We didn’t notice any terrorists with bombs when we got there. This appointment was with Lior Bregman of Oppenheimer, a \$300 billion company. We were on the thirty-ninth floor with a fantastic view overlooking New York Bay. The view included the Statue of Liberty, Ellis Island where Most immigrants arrived at the turn of the century, the Staten Island Ferries which connect Manhattan to Staten Island, the Verrazano Narrows Bridge which is the largest single suspension in the world and connects Staten Island to Brooklyn, across Brooklyn is Kennedy Airport, and directly below us was the Battery Park (please refer to engineering riddle!).

Lior is in the middle of a \$350 million deal and he has a cell phone with a microphone and earphone attached. He apologizes for the three interruptions during our meeting. Why would he see a little company like us? Lior has been an acquaintance of mine and the company for a number of years. He has a group that does an analyst report on satellite companies, and we are hoping he will give us some mention in his report which would be very worthwhile in creating interest in our stock. We have to cut the meeting short to fly off to the airport.

Back to the Limo. It is always a relief to find our limo that has become our refuge from the cold and the scary big city. We all hollered “Home James”. Not too original, but

the intent was pretty clear. It takes about an hour to travel to Kennedy Airport, about five miles as the crow flies, in New York it is more correct to say as the Pigeon flies. Manhattan is the home of two million people and 300 million pigeons.

We had an interesting “Small World Story” turn up. During our drive to the airport, Steve asked if we were related to the original Radyne on Long Island. We replied in the affirmative. He asked if we knew his friend Bob Petrucelli. Bob Petrucelli was at one time the VP of operations at Radyne. When we started EFData, Bob was our first sales rep and went on to build the most successful sales office that EFData ever had. Bob has recently parted company with EFData and is in talks with us for him to provide his services. In fact, Bob is scheduled to visit the company next week. We had a good laugh at this coincidence, as we are arriving at the terminal. The airplane is on time, and we are heading home. Some more meetings tomorrow that I will fill you in on later, oops, the computer is blinking again that the battery is empty. Conclusion will follow.

Nothing like sleeping in your own bed. We had two investor meetings today. Debra has arrived at work about the same time as I get there. Our first meeting is at ten o'clock with a Phoenix investor. The presentation goes well. Dave Koblinski is giving the tour of the building. There is still a lot of work to be done. The lawyers are cleaning up the last blue-sky details. There is a lot of phone work. Debra is collecting all of the orders and putting on a spreadsheet to analyze.

Today, we have to decide on the pricing. The institution orders usually have a price associated with it. For example, one of the investors might place an order for 100 thousand shares with the proviso that the price is below eight dollars. We also have to look at the volume of trading and collect the comments received by the HD Brous sales people. The other underwriters like Miller Johnson also have inputs. Overlaying this information is the calculations of a stock price based on comparable companies.

By lunch time, it is clear that the offering has been over subscribed, meaning that we have more orders than there are shares, meaning the road show was a great success, meaning Garry and I did a great job, was there ever any doubt? We decide to investigate increasing the size of the offering. This requires checking with the underwriters, checking with the lawyers to verify the legality with the SEC, NASDAQ, and blue sky. I need to talk to Singapore Technologies (ST) since they are the majority shareholder.

Another presentation is scheduled for half past two. The KPMG auditors have been invited. The auditors have been around the building for the past three weeks or so doing our annual audit. Since Radyne Comstream is a public company, we have an audit every year by a public audit firm. Our audit firm is KPMG. KPMG is also a partner in everything we do, a well-paid partner of course. They have the public obligation to check that we are not hosing the investors, that we are operating with integrity, and are conducting our business in a proper manner. KPMG gets involved with the audit committee of the Board of Directors. With every filing with the SEC and NASDAQ, KPMG has to write letters saying that they believe we are behaving in a civilized manner and the financial reports are reasonably accurate. These letters are called "Comfort Letters". They are called this because they are providing "Comfort", but not guaranteeing that everything is the up-and-up at the company.

Usually we pay about \$10 thousand for a comfort letter that says in general that "KPMG believes the financial reports are reasonably accurate, but if they are not correct, it must be the company management that did bad things because obviously KPMG did their job, and what the heck KPMG is really only human, at least most of us are human, so go sue the company, and what do you want for \$10 thousand anyway". Seriously before you get the wrong idea, we have a very good relationship with the auditors who are very nice people. On the accounting side, we work very closely with them, and if they read this, I want them to know that "We respect you!" We also have a Piper Jeffrey broker and a couple of Money managers at the meeting.. Debra has been on the phone and/or the computer so Garry and I conduct the meeting. Again, David does his duty with the building tour.

We have to set the price by four o'clock since there is a lot of work to be done. After a final look at the data, a call to Yip Loi Lee who is representing ST, and a final input by Howard Brous, we decide on a seven dollar price with a 20 percent increase in the number of shares to 2.4 million. With the green shoe, the total offering will be \$2.76 million. We will be raising about \$19 million. When we first started this offering, the number was expected to be about \$6 million. Since I plan to take complete credit for everything, I think I have earned my salary this month.

We send emails to everyone that is involved. The auditors start their calculations, Garry is doing his changes, and the lawyers and Debra are working on all the paper work. We have decided the effective date will be Monday and the new shares will begin trading on Tuesday when the market opens. This means the lawyers, auditors and Garry will be working this weekend. We have to file the revisions early Monday morning. Debra has to coordinate everything-perhaps orchestrate is a better word-plus she knows that a personal touch (whip?) is needed so she will be traveling on Sunday to be in New York on Monday. I, on the other hand, who have earned my pay this month as I do every month, clean up my desk and email and head home to my wife who I have neglected for the past two weeks.

Saturday, I received a copy of the press notice to be released Monday after the market closes. The Phoenix Radyne Comstream five-year-party Saturday night at the Top of the Rock in Tempe was a great success. It is fun to see the factory workers all dressed up for a change. And even more fun to have a lot of positive comments about the emails from the road show.

Back to the grind on Monday morning. The stock should start trading tomorrow on the NASDAQ small cap market. This brings an end to the Road Show Story. In ten days, we had traveled sixteen thousand miles in nine flights with four airlines. We hired ten taxis, six limos (none with bowling alleys) rode 2.6 miles vertically in elevators, saw the Golden Gate Bridge, Fisherman's Wharf, Statue of Liberty, Empire State Building, Times Square, Boston Harbor, Chicago Sears Tower, and of course the famous Foshea tower in Minneapolis (Twice). We had made forty presentations to seventy-two investors, brokers, underwriters, fund managers, money managers, and dealers, and sold nearly twenty million dollars of stock.

Tuesday morning, we can't wait to see what happens. The stock starts trading very actively and before no time it is up above nine dollars. By the end of the week, the stock is over fifteen dollars.

Closing is scheduled for Friday morning. Garry and I have to go down town to the Underwriter's lawyer's office at seven o'clock. In the conference room are Debra, Jere Friedman, lawyer, Jill, legal aide, Theresa Mulder, our legal aide from NY, Garry and me. A conference call is placed with Barry our NY lawyer, Howard Brous, American

Depository trust who has the stock, and American something, the clearing house for HD Brous. The clearing house has all the money. Also on line was Continental, our transfer agent. After checking with everyone that everything was in order, the clearinghouse announced they were transferring to Radyne Comstream the sum of \$17,301,400. At that, we hung up and waited about fifteen minutes. Then we checked with Citibank and they confirmed the money was in our account. Another call was placed to the same people. Once we verified the money was in our account, the American Depository Trust released the stock to Continental. At that point, the offering was closed. Of course we all congratulated each other. It was only half past eight-too early for any champagne.

It was a great adventure for me, and I know that Garry found it exciting. This is the end of the story, but is the rebirth of the company. We are now trading on the NASDAQ, we have money in the bank, our balance sheet is sound, and the company has renewed respect. Quite a trip!

CHAPTER 13

My partner Steve Eymann, the Chief Technical Officer and VP of engineering was a University of Nebraska graduate, and me being from Penn State, meant there was a competitiveness, particularly when the teams met on the football field. One day I got the idea to make Steve a business card showing him as CNO, which stood for Chief Knowledge Officer, because at Nebraska, the N stood for more than football, it stood for knowledge. He loved it and handed out the cards whenever he could.

Lou Dubin was one of the best practical jokers I have ever known. He joined Radyne from ETS where he worked for Tony Grimes as a system engineer, but his true calling was sales and marketing. When he moved to Phoenix, he was single. In the sales group that he joined, were a mother, Valerie Kane, and her Daughter, Stacey Kane who had worked for Radyne in New York. One evening, the Kane's invited Lou to their home for dinner. The Kane's had just bought a dog and while playing with the dog, Lou got scratched. A half an hour after Lou left, the Kane's received a call from the hospital, "Is this Mrs. Kane?" "Yes." "This is Doctor Sangi in the emergency room of the Good Samaritan Hospital. I Have a Mr. Dubin here and he is having a severe allergic reaction- he thinks from a dog scratch! I need you to bring the dog to the emergency room, immediately!" "OK, we will be there." About fifteen minutes later, Lou called the Kanes on their cell phone when they were half way to the hospital and told them it was a joke. Lou could put on great India-Indian accent for occasions like this.

Another time, Valerie was going to visit a customer in New Jersey-traveling by rental car for an hour from Newark Airport. When she arrived at her hotel, she had to pee very badly and rushed up to her room only to find the commode was clogged. She called the front desk and asked for another room. She was told there were no available rooms and a maintenance man was already on his way up to her room. Val then called Stacy and told her what happened. Stacy mentioned it to Lou who then called her room and said in

his Indian accent, "Mrs. Kane, this is the manager, Mr. Sangi. I hope the maintenance man is working on your toilet- is that right?" Valerie "Yes, he just arrived" "Wonderful. Now how do you want to pay for the repair-on your bill or credit card?" Valerie, who can have a foul mouth replied, "What the *#@% do you mean pay for it? It's your *#@Sing commode! And it was fucking broken when I got here!" The manager (Lou) said, "I'm sorry Mrs. Kane, but it is hotel policy that when you break something in the room the guest pays for it." Valerie's response was so vulgar it is not appropriate to repeat it here and it went on until Lou started laughing.

Of course, what sometimes comes around goes around. Lou had been doing a lot of international travel and didn't like to leave his new car at the airport. One morning he showed up at work with a ten year old white pickup truck. The white paint was chalky from age. I gave Audrey, the executive assistant, some money and she went out and bought four cans of water based paint-red, blue, green, and yellow along with seven or eight brushes.

While someone took Lou to lunch, the employees who had been his victims including me, proceeded to paint the truck from top to bottom. The tires were painted as well as all the chrome. After lunch, Lou returned through the front door, his truck was on the side, so he didn't see it. Someone emailed a picture of the painted truck which Lou got a big laugh out of because he thought someone had photo-shopped the colors on the truck. After another hour, someone told him that he had better check out the truck. When he came out to the parking lot, there were about fifty employees on their break to laugh at him. What happened that evening was funnier than the prank. Lou was going to the airport in the morning and was too embarrassed to take the truck the way it looked. After work he went to one of those hand car washes with the sprayers that you put two quarters in for five minutes. After one dollar, he had only cleaned one fender. A couple of doors away was a mini-mart where he tried to get five dollars in quarters. The clerk said their policy was to give change for only one dollar at a time. Lou had to make fifteen trips back to the mini-mart.

Lou and I went to Rio de Janeiro to sign our first million dollar contract with Embratel, the Brazilian Telephone Company. Lorraine went along as a tourist-our hotel was on the Copacabana beach. Lou and I went to Embratel with our Brazil Rep. and

signed the contract. That night, Lorraine and I went to dinner with the rep-Lou wanted to be on his own. I found out the next morning that Lou had found a night club with the name Club Help. He said the women were extremely attractive and very attentive. And after an hour he figured out that it was a whore house! The next day Lou headed home and Lorraine and I were walking along the Copacabana when I noticed the Club Help. The sidewalks in Rio are made of black and white stones about two inches square that form designs. I noticed a loose stone in the sidewalk so I took it-after mounting on a plaque, I presented it to Lou and told him that He would keep this forever, but if I gave him money, it would be gone quickly. Lou still has the plaque-and I did give him a bonus later.

CHAPTER 14

Another acquisition showed up one day. It was a company in San Diego close to Comstream and it would allow us to expand into another business area and consolidate in one building. Again, it seemed to me that the employees would appreciate an insider's view of what took place over the following week or so, so I wrote the following and it was sent to the employees on Monday April 9th, 2001.

Saga of The Tiernan Acquisition Or The Fastest Deal In The West

This all started by a call from George Mancuso, an executive at Tiernan Communications Inc. I had just returned from another trip on Wednesday the 4th of April and the call from George was on my voice recording. George had once worked for STS, and we had known each other for quite a long time. I called George in the afternoon to find out that Tiernan was looking for a buyer.

Tiernan Communications, Inc. located in San Diego was founded about eight years ago by Dr. Jim Tiernan. Jim was a technical expert in the digital TV area, and he correctly forecast a need for video compression equipment to convert analog TV to digital TV. The video compression equipment allows for a much larger number of TV channels on cable or DirecTV satellite than is possible with analog TV. The company captured a large part of the market initially, and I think sales were around twenty-five million dollars at its peak. The company kind of floundered and began developing internet related equipment with not much success. They forgot about the business that made the company successful in the first place, lost a lot of money, and ran out of cash. Enter a venture firm-Westar Capital with an investment of \$18 million. Jim Tiernan was pushed out of the company and The Scotland Group, a turnaround company, was hired to fix the company. In the mean time, the company received a loan from the Cupertino Bank for \$4.6 million with a guarantee of \$3 million from Westar. Last year Tiernan sold \$13

million in products and lost about \$9 million. All in all, this is a story not too different from the Comstream one.

One major difference was that the company was out of money, they were behind payments to the bank, and the employees were told that the doors were closing on Friday the 13th. After receiving the documents from the company that we asked for including financials, org. charts, and employee information, and after some discussions over the weekend with the company, we planned a trip to visit Tiernan.

Garry Kline, and I caught the America West 7:48 flight to San Diego Monday morning. Brian Duggan and Alex Mikhalkin met us at Tiernan. Over the weekend, I had made up a due-diligence list so we could spread out and gather as much information as we could in a short time. Steve Lagotta the CFO from Comstream was sick on Monday but showed up on Tuesday. We spent most of our time interviewing employees to try to understand if the products were still viable and whether the necessary people to build and test were all gone as well as looking at the books, the facility, test equipment, etc.

What we found was a reasonably sound core business making good margins. It was especially important to find so many loyal employees that were still there. We also met with Michel from Westar. Since Westar had guaranteed \$3 million of the bank loan and the assets of the company were worth at least \$3 million, it was clear that we would be negotiating with Westar since the bank would get their \$4.6 million no matter what. We found out that an Israeli company had been visiting the company for the past two months, but had not made a firm offer. The Israeli company was returning on Thursday to take another look.

There are two ways to buy a company. One is to buy all the stock of a company and then you own the corporation, and unfortunately, all the liabilities that go along with the corporation. In the case of Tiernan, the liabilities include two to four million dollars owed to creditors, plus perhaps some liabilities that we may not know about. The other way to buy a company is to purchase only the assets of the company. There are a number of ways to do this, but it has to be done carefully so you do not incur the liabilities anyway.

In the mean time, in parallel with everything else, we are communicating with our directors, keeping them informed, so that we can get their informed consent to go ahead. We returned to Phoenix late Tuesday night. Wednesday morning we met with our lawyer Steve Pidgeon at Snell and Wilmer and talked to our auditors at KPMG. We decided to make an offer for the company of \$3.5 million dollars. We arrived at this price by trying to bound the value of the assets to the seller and to us. On the low end, the company could close the doors and sell the assets getting at least three million dollars. For the high end, we thought that after a little cleanup, the company would be worth at least six million dollars on a stand-alone basis. If they could do ten million dollars in sales this year and make a little money, it should increase the market value of Radyne by ten million dollars or more. The assets of the company are actually worth about five million dollars. But, there are lots of problems to solve yet. We find out that because of our public status, we need to have audited numbers for Tiernan for three years, and have it completed in sixty days. There was no audit the past year, so Garry is on the phone with the Tiernan auditors at Ernst and Young to get them to agree and to get an estimate of cost. Steve Pidgeon has lined us up with Martin Taylor, the Snell and Wilmer bankruptcy attorney- a specialist in this type of transaction. Steve also wrote up a consent agreement to be signed by the Directors and Garry emailed that night.

The major concern is to figure out how to buy the assets of the company without picking up any liabilities of the company. We discussed a prepackaged bankruptcy and a foreclosure. Because of the time frame facing us of having to get something done by Friday, we opted for purchasing the note from the bank, which would make us the only secured creditor, and then foreclosing on the note, thus forcing the company into insolvency, and the assets would become ours. We formed a new corporation called Tiernan Radyne Comstream, Inc. that would be the holding company that we would move the assets into. For operating purposes, the company will be referred to as "Tiernan". By Wednesday night, after many phone calls, a meeting is set up with all the necessary parties in Westar's lawyer's office in Irvine, Ca. for Thursday morning. This would be very convenient because Martin Taylor, our bankruptcy lawyer is in Irvine also. Marty had to work late on Wednesday night to prepare all the documents. It was also

convenient because we could fly into Orange County airport, which is only five minutes from the meeting.

Thursday morning, Garry and I arrive at the airport and find our flight was cancelled. After a little scurrying around, we found a flight to Long Beach and arranged for a car and driver to get us to the meeting only an hour late. Upon arrival at the attorney's offices, we are told by Michel of Westar that we would negotiate first, and then they wanted to see what the Israeli company was offering.

The stage is set, the testosterone level is high. On our side, we have Garry, Martin, and me. On the other side, they have Michel the negotiator, an insolvency attorney.

The Westar attorney and another Westar partner are across the hall in another conference room with the two bank attorneys. That's necessary because there has to be an agreement with us and the bank, with us and Westar, and with the Bank and Westar.

The negotiating game begins with a long oration by Michel about what they are going to need and why. I give him a broadside by accusing him of a breach in integrity since he told me we had a deal the night before. I also used brinkmanship by telling him that we were not willing to wait for them to see what the Israeli's had to say. I told him we would either have a deal by 1:30, or I was heading to the airport and our offer would be withdrawn. Negotiations like this are very intense. First you have two guys going at it with their pride and ego interfering, and we have an audience of five other guys that are adding pressure. Michel's approach is to bring up a lot of detail, such that, if I accept and agree with his information, I will be in a corner. My approach is more emotional and I am not going to listen to any of his claims. Of course there has to be some give and take or the other party might do something foolish, like in our case, I would walk out, and for Michel, he would try to cut a deal with the Israelis because I offended him. After about an hour of arguing-they wanted us to pay the interest on the note, we pointed out the risk of needing the audit, etc, we arrived at a deal in principle at \$3.9 million. Westar called the Israelis in San Diego and told them they would have to leave the building and wait because we were close to a deal.

Really crappy sandwiches were brought in for lunch. Westar went off to negotiate with the bank while the attorneys started negotiating about what the legal agreements

would say. After a couple of more hours of the lawyers arguing about what each paragraph of the agreement meant, we seemed to be pretty close to signing. Garry and I changed our reservation from three o'clock to the America West 6:15 out of Orange County airport.

Everyone agreed on the necessity of informing the employees as soon as possible since the next day was when the doors were going to be closed. We arranged for a half past nine meeting the next morning with the Tiernan employees in San Diego. I called Sandy Cassel and she arranged for a team to go into Tiernan to rehire the Tiernan employees. Since the banks were already closed, we could not wire the money until the next day. At quarter of six, I signed our part of the agreements and Martin ran us to the airport. The lawyers would have to clean up the little details yet. The America West flight was late of course, so we arrived home late.

Sandy, Garry, and I catch the America West 7:48 to San Diego on the morning of Good Friday, April 13th. We were met at Tiernan by Brian Duggan, Jamie Palmer, the HR director in San Diego, Alex Mikhalkin, Steve Lagotta, and Tom Pavilonis, the Operations director in San Diego. Of course, I am told there are still a couple of problems, including the expected late arrival by the Tiernan President, Dave Aucherbach, who wants to tell the employees the news. I have an appointment in Phoenix at three o'clock so this is not good news. I sat down with Bruce Thacher, the CFO and we resolved the problems, and he agrees to assemble the employees at ten o'clock for a meeting.

By this time of, course, the employees have figured out what has taken place. After Bruce's introduction, I talked to the employees and went down a list of items to cover. They were very excited and upbeat and had numerous questions. Then Sandy and Jamie presented the employees with information on the benefits and answered more questions. Employment applications were handed out and the job of creating a new company was begun. There were still some small details on the agreements to be ironed out, so we won't be wiring our money until Monday.

This deal took eight days from the first telephone call until we took possession of the assets. Usually, these deals take from one to three months. I have to give a lot of credit to our attorneys, Steve Pidgeon and Martin Taylor. These guys were phenomenal in their understanding of the issues, their ability to get agreements cranked out rapidly,

and their pushing on the Westar lawyers to get this deal finished. I was also impressed with our employees who put in an extraordinary effort to get this accomplished-including working on a holiday. Now the real effort begins, building a new company, integrating Tiernan into our company, and making our new acquisition successful.

We had also acquired a small company called Armer Communications. Now that we had within the company, Radyne Corp, Comstream, MSE, Tiernan, and Armer, and we planned to do further acquisitions, we decide to simplify the company name and change it to Radyne Inc.

One of the companies I had looked at for an acquisition was Wegener who made satellite equipment used by radio broadcasters. Wagener, based near Atlanta was a public company with sales around twenty five million dollars and operating around or a little below breakeven. I believed we could reduce overhead costs by selling their products through our sales channel. We could eliminate about five hundred thousand dollars of the cost of being a public company as well as the top executive salaries. The company also owned land that was undervalued on their books. I met with the sixty-five year old CEO a couple of times-it was rumored that he was interested in retirement. He said he had no interest in selling the company and further more would not even mention it to his directors.

The company had been in business for over twenty years with dismal results. I had decided that the price we would offer should be of interest to their shareholders, so I pursued a hostile takeover. First Radyne bought one hundred shares of Wegener stock-it's required to own some stock in the company you are trying to acquire by making a tender offer. I then sent a letter to each of the directors, and followed it up with a filing with the SEC. In a hostile takeover, after filing your intent with the SEC you make a tender offer and communicate directly with the shareholders-and force a vote to accept your offer. The Wegener board decided to fight and hired an investment banker to value the company at a cost to the company of eight hundred thousand dollars and gave the executives change of control agreements creating contingent liabilities of well over one million dollars. All too frequently, the board and management wastes shareholder money to keep their jobs, and I believe this was one of these cases. The Wagener stock was around a dollar ten with little trading (no liquidity) happening and shareholders could not

sell their shares-so I thought a rational shareholder would jump at a price of one dollar fifty five. Unfortunately, combined with Wegener's Banker's valuation, the thinking was more like, "If Radyne is willing to pay 50 percent more than the market price, it must be worth much a great deal more than that." We couldn't get enough votes to force the board to sell the company. I was not willing to increase our offer and the takeover never happened. Unfortunately for the irrational shareholders Wegener continue to decline-the current share price (2011) is four cents.

CHAPTER 15

Those of you, who golf, know that there is no such thing as a Golf Cart Drivers license. We had an annual company golf outing for the golfing employees. After one of the outings, where after returning to work the next day and expressing how much fun we had, an executive (that will remain nameless to protect his embarrassment) and who did not golf, said he wanted to play in the golf outing the following year. I told him he would have to take lessons first. He took lessons and worked out on the driving range. As the golf outing date approached, the executive had taken lessons, but had never really played on a golf course. The week before the golf outing, I asked him if he had gotten a Golf Cart Drivers license. He said he had not, I told him not to worry, that I would arrange it. I called a pro I knew at one of the local golf courses and he arranged to have a cart available for the executive's test drive. I took the executive to the golf course along with some of the other guys to observe. The pro had the executive drive down the cart path with the golf cart, make u turns, and parallel-park. Then we presented him with a certificate at which time he knew he had been the brunt of a joke. I'm not so sure he appreciated it, but the rest of us had a good laugh.

Did you know that Casio makes a wrist watch that has a TV remote control built in? You can point it at the TV and change channel, volume, or on-off. When my good friend CJ gave it to me, I immediately thought about an application. Marty Howe was an acquaintance from Gainey Ranch Country Club who likes to sit at the bar in the members grill and watch sports. The members grill had three TVs and there were three remotes around the room. Marty could not tolerate anyone changing the channels or messing with the TV behind the bar in any way. So one summer afternoon when Marty was watching a Diamondback's game, and after I alerted everyone else in the bar including the bar tender, I sat next to Marty at the bar. My left wrist was in full view of the TV. I started randomly changing the channels-after which each time Marty would change the channel

back and look around the grill to see who was doing it. Of course he never suspected me since I had no remote (or so he thought). After tiring of channel changing, I would occasionally turn the TV off or the volume down. Marty, of course, was becoming more and more irritated. After about an hour, he went around the room and collected every remote. When that didn't help, he accused the six or so women who were sitting at a table of having a vibrator in their purse that was somehow changing the channels. After about two hours, I finally confessed to Marty that I was the one changing the channels-the incredulous look on his face made the joke worthwhile. That prank became part of the lore of Gainey Ranch and Bob Fitting.

A couple of years before, Bob McCollum, the former CEO of MSE had resigned from EFData and founded Comtech Communications in Phoenix, financed by, guess who, Fred Kornberg, again. There is probably a rule that says "Never hire an entrepreneur because once they get a taste of entrepreneurship, they always go back to it." A couple of years after Bob founded Comtech Communications, CMI changed their name to Adaptive Broadband Corporation and decided to sell off the EFData division, the result being that Comtech Telecommunications purchased my old company EFData around mid 2000 and merged it with Comtech Communications and named it Comtech EFData Corporation. Bob McCollum was named the president of the combined entity.

After the IPO in 2000, Singapore Technologies ended up with about 65 percent ownership of Radyne Stock. Frequently, public stock prices are suppressed (called a shelf) if you have a single large owner such as ST. Investors worry that one day the major shareholder might dump his shares causing the price to drop. ST understood that their large holding could be suppressing the stock and in 2004 agreed to sell their stock in a transaction called a PIPE. PIPE stands for Private Investment in Public Equity. Usually there are two ways to sell the company stock. The most common method is to file with the Securities and Exchange Commission (SEC) and have it approved thus allowing the stock to be sold to anyone. Typically, the approval takes a couple of months. Or the other method is to pre-sell the stock to qualified investors, usually hedge funds or mutual funds and then file with the SEC. Since there is some risk, usually time, the buyers expect a discount to the price.

In a similar manner to an IPO, an investment Banker is hired to sell the stock, and the CEO travels with the banker to his clients and makes the presentations. In this case it will be eight cities in seven days making fifty seven presentations with forty-three clients buying. I had decided to use Roth Capital of Newport Beach Roth was the largest PIPE firm in the country. Since Roth would be selling ST's stock, the deal was negotiated between Roth and ST. ST would be paying Roth's fee. I would be selling about \$90 million of stock.

Investment bankers are the quintessential well dressed bankers wearing pinstripe suits, Italian leather shoes, and one hundred dollar neck ties. Byron Roth, the CEO, and two of his top bankers came to Phoenix, after signing an agreement with ST, to meet me and tour the factory. I met them in the lobby wearing one of those redneck baseball caps turned backwards with the stringy hair hanging down to my shoulders. Byron was essentially speechless and said very little during the forty-five minute tour. At the end of the tour, we went to my office where I then removed the hat/hair to the shock of Byron. He confessed that all he had thought of since seeing me in the lobby was “How in the world are we going to sell \$90 million of stock with a CEO who looked like this?” Although his colleagues got a good laugh, I don't think Byron liked the joke at his expense. Many of his employees, though, enjoyed the joke and it was talked about at Roth Capital for years afterward.

The road show for the PIPE was more tiring than the IPO road show, I guess partly because I was sixty-nine years old. The first day was a Friday and I flew to Dallas where I met Byron and we saw three of his most important clients, all hedge fund managers. I made three presentations; we got three commitments to buy stock, and then returned to Phoenix. Sunday was off to Chicago, Chicago presentations Monday morning and then off to Minneapolis for Monday night presentations.

Monday night I had a late flight to San Francisco and took a taxi to the Omni Hotel, one of the finest hotels in San Fran. I had a meeting scheduled at six o'clock in the morning and arrived at the Hotel around two o'clock in the morning. I was only going to be in the hotel for less than four hours, so when the reservations clerk wanted to explain all the services and features “Pool on the 8th floor, Business office on 2nd floor, Spa on 3rd floor, blah blah blah”, I was not very interested. One of Byron's sales guys met me at the

first presentation, and after six presentations in the morning, we headed to the famous Tadich Grill, the oldest restaurant in San Francisco. The food was outstanding, but unfortunately I could only finish half of it and then we were on the move again. Three more presentations and then we headed for the airport.

Next stop was New York City for seventeen presentations on Wednesday and Thursday; the first at six o'clock in the morning on Wednesday. Then a car ride to Connecticut where many hedge funds had set up office. We took Amtrack to Boston Thursday night, and since we had barely eaten since San Francisco the stew served on the train was delicious. Boston is the last stop, six presentations then I get to go home. It was snowing in Boston. Around five o'clock I headed to Logan Airport for my America West Flight to Phoenix. At the gate, I could see my airplane was being worked on; the engine cowl was open, and you could see the agents were nervous. I was sure my flight would be canceled; I noticed an American Airlines Flight was leaving for Las Vegas. There were usually hourly flights from Las Vegas to Phoenix, and if I could get on the American flight, I might be able to get home that night and at least I would be away from the snowy east coast. Of course, as it turned out, the American flight had to be deiced and we arrived in Las Vegas around a quarter past one in the morning, fifteen minutes after the last flight to Phoenix. The next flight was at six o'clock in the morning. By the time I could get to a hotel, it would be after two o'clock so I decided to sleep in the airport. I finally got home about eight o'clock in the morning from one of the longest weeks of my life.

Monday, we priced the offering based on commitments, Roth's advice, and agreement from STS. I had sold all the ST stock for more than ninety-four million dollars. After expenses and the Roth Capital fee, ST would get around ninety million dollars. ST had invested around twenty-five million dollars in Radyne and we returned 90 million dollars after an average time of seven years. ST was very pleased and Madam Ho Ching sent me a beautiful letter of thanks.

One big advantage of having relationships with investment bankers is they put on investor conferences that you get invited to in order to sell the company stock. I think Roth Capital does an especially good job of it. His clients tend to be hedge funds and smaller mutual funds that are generally run by young managers. He holds two investor

conferences a year, a typical one I remember at the Fairmount Hotel in Newport, California where he had the Black Eyed Peas for evening entertainment one year and Snoop Dogg and The Pussycat Dolls another year, entertainment that appeals to the younger managers. During the day there are scheduled meetings with the institutional investors every thirty minutes, in three days you could have more than forty meetings with investors.

I had been making my own humorous wine labels for a few years for Christmas presents. I would buy wine and scrape off the original labels, then replace them with ones I printed from the computer. The label would say at the top "FITTING VINEYARDS", followed by the type of wine, for example "Shiraz 2007". The body would say "The grapes for this wine were grown on the backside of Camelback Mountain in Phoenix where an enema would be inserted. They were tended by Bob and picked at the peak of perfection. The grapes were crushed under Lorraine's gentle feet. The wine has a subtle hint of cactus and bullshit. The perfect accompaniment with Mac and Cheese." The bottom line said "The best fucking wine in Arizona!" They were a great hit and I also made labels for special occasions such as birthdays. When one of the members retired from the country club, his label said "These grapes were grown up on the hill by the #4 tee box where the guys urinate. A subtle hint of cactus and ammonia."

They were so popular I decided they might make a good sales tool. There was a company in Virginia called RSI, with about \$500 million in sales, that made big satellite antennas and bought products that Radyne made to include with their antennas, unfortunately they bought the competitor's products. I had been unable to penetrate the company to even give a sales pitch. After some research, I knew the CEO was Dick Thomas, his wife was Marie, and Dick was noted for his use of coarse language. I made some labels that said "Thomas Vineyards", the text on the label said "The grapes for this wine were grown next to the parking lot at RSI. They were tended by Dick, and picked at the peak of perfection. The grapes were crushed under Marie's gentle feet. The perfect accompaniment with spaghetti and meatballs." At the bottom it said in fine print "The best fucking wine in Virginia!" I bought three bottles of wine, scraped off the labels and glued Dick's labels on. Then I sent the three bottles by FedEx overnight; that was the time when it was exciting to get a FedEx package. The next day, I waited for a call I

knew would be coming after he received such an interesting gift. I was really crushed and disappointed when the call didn't come. But then at about nine-thirty-after midnight in Virginia, I got a call from Dick. He apologized for not calling earlier and said he had a board meeting and dinner that lasted until after midnight. He said that the wine was the best gift he ever received and he invited me for lunch the following week. Dick and I became friends and Radyne became his preferred supplier until he retired. Since that first label for Dick, the sales people and I made over one hundred labels for the customers that we believed would appreciate them.

At Gainey Ranch Country Club, there is a morning golf group run by Marty Howe and an afternoon group called the Miller group. One of the guys (I'll call him Adam Henry, (AH) in the Miller group was ousted, I heard because of some disagreement. Adam Henry decided he wanted to play with the morning group. In the morning group, there was a guy, (I'll call him Oscar Kimmel, OK). OK did not like AH and when he found out that AH would be playing in the morning, he was visibly upset, he told me at lunch time "I don't know what I'll do if he is put in my four-som, I don't like him and can't stand him!" Usually the pro-shop made up the golf groups. Another wonderful opportunity suddenly appeared! I hurried home and made up a screen name on my AOL account, AdamHenry@aol.com, from which I sent OK the following: "Dear Oscar, you may have heard that I am joining the morning group. I have always admired you, and have asked the pro-shop to team us together whenever possible. Yours Truly, Adam." I heard the next morning that Oscar, at dinner with some friends, was extremely upset. He told them, "I don't know what I'm going to do, yada, yada"

I also knew that OK was leaving town on Saturday, so I fired off another email from Adam Henry, "Dear Oscar, I want to invite you and Joan to dinner with Shirley and me on Wednesday next week so we can discuss playing together in the couple's tournament. Sincerely, Adam Henry" Oscar sent an email back that said "Am going out of town, perhaps we can talk when I get back." That evening Lorraine thought the joke had gone far enough. So I called Oscar and said "I heard you have been getting emails from Adam Henry." He started to explain and said " I don't know what I'm going to do, yada, yada....." and suddenly stopped and said, "Hey how did you know about

that?" at which point I began laughing. Then he knew he had been had! He said it was the best joke that anyone had ever played on him.

Garry Kline was the acting CFO when this happened. Garry hired an accountant (let's call him Bill) for the payables accounts; his job was to manage the money that we owed others. The accounts receivable clerk, Jill Lee, managed the moneys people owed us; hence the ethnic joke, "Did you hear about the Polish accountant that absconded with the accounts payable?" She acted as Bills supervisor for training. At any rate, Bill started work on a Monday morning, left for lunch and never came back. Garry was out of town on Monday and when he came to work on Tuesday, he was very upset and was afraid that something had happened to Bill. All Tuesday morning, Garry called Bill and left messages. Finally Bill called Garry (Only thing, it was Lou) who said that the reason he never came back was that Jill was hitting on him." Garry was astonished and went on for three days about the incident. Finally on the 4th day, Steve and I took Garry to lunch and explained that it was a joke. He was so convinced that it took all lunch hour to convince him.

CHAPTER 16

I had been looking at Xicom for another acquisition. Xicom was a company in Santa Clara, California that had been founded by Walt Wood, a Microwave Engineer. He had done a phenomenal job of growing the company and becoming one of the top companies providing high power amplifiers in the satellite industry; both commercial and military markets. It took a number of phone calls and emails before Walt agreed to talk to me, I know there were other interested parties but he probably chose to talk to me because he could relate to another entrepreneur.

I went to Xicom for a visit and was very impressed with the operation. Xicom was selling around forty-five million dollars per year of products. Walt and I shared a belief in similar cultures for the companies. It was clear to me that, although Walt barely made a profit, the potential for improvement was similar to MSE. Like MSE, there was the pressure to under-price because of cash concerns. One of the things I frequently noticed with private companies was that the accounting methods they used did not clearly show the costs of the company or comply with the requirements of a public company. In the case of Xicom, it appeared the product profit margin was too low, something that is hard to fix. Actually the profit margin was much higher than it appeared, because the repairs of units under warranty were charged to the cost of the product, and the warranty costs were excessive. Fixing the warranty costs is usually much easier than reducing product cost. I convinced Walt that he should sell the company to Radyne, and I would not interfere with the operation except to ask him to increase the prices of his products, and later I asked him to do more testing to lower the return rates. I think we offered around forty-five million dollars in cash and Walt accepted. Over the next year, the prices were increased, the returns from failures dropped, and the profit margin grew from twenty to thirty percent. Xicom sales also increased by more than 30 percent. It is a successful

acquisition when it takes no money to improve it and takes no work of the acquirer to manage it. The sales for Radyne had increased to more than \$160 million and the market cap was now around \$300 million.

Comtech Telecommunications, had a stock split, and since I had the stock that I had received more than twenty years earlier and couldn't sell, I was sent more stock by mail with the same statement on the back. I looked up the price and saw the stock was now worth more than \$200 thousand. I conferred with my attorney, and we decided to sue to force Comtech to buy the stock or allow me to sell it. Since the original contract under which I received the stock was more than twenty years old, the statute of limitations was well past, and the attorney found some obscure law in order to sue; so obscure I don't remember it any more. We decided on Federal court because it would be quicker and because if we lost, Comtech could not collect legal fees. On the court date, Fred Kornberg himself flew to Phoenix to go to court. I wondered why the CEO of a billion dollar company and with a reputation of not liking to travel would come to Phoenix. I concluded that Fred wanted to find a way to keep from paying me.

The Federal judge, probably not wanting to deal with our obscure law idea, decided to arbitrate the disagreement. We were in separate rooms and the judge would go from one to the other. As I recall, the first offer Fred made was around \$60 thousand, and I countered with around \$200 thousand. After returning with Fred's latest offer of around \$70 thousand, the judge pointed out to me that if I rejected this offer, Fred could walk away and I would have to go to trial. I was convinced that that was exactly what Fred would do so I accepted the last offer believing that Fred would have walked. It was \$70 thousand more than I thought I would ever get.

I had been having angina pains from my heart off and on for the past ten years and knew I would have to have heart surgery soon so I retired from the CEO job. The board hired Myron Wagner to take over as CEO, he had been an engineering manager at General Dynamics in Scottsdale.

I had a quadruple bypass at Mayo Hospital in Phoenix in May 2007. In June when I went to the Cardiologist's office at the Mayo Clinic in Scottsdale a month later for a follow-up, I had a heart attack. Guess what the cardiologist does when you have a heart attack in his office? He calls 911; there are no emergency facilities in the Mayo Clinic.

What happened was one of the bypasses clogged up. After an angiogram, it was decided that nothing could be done to reopen the clogged artery. The heart attack caused 5 percent damage to the heart, and there has been no noticeable problems since.

Hiring Myron as the CEO was the ultimate violation of the *First Rule of Survival*, we turned the company over to a stranger and in my opinion an incompetent. Myron was in way over his head, he may have grown into the job eventually, but that takes time the company could not afford. It is a tough job to be a CEO of a public company, in addition to being a manager of a business, the CEO must manage and direct the culture of the company, be an expert in finance and accounting rules, understand securities law, make sales presentations to investors, write and approve financial statements and press releases, conduct quarterly investor conferences, organize future strategy meetings, decide on the future direction for the company, earn the respect of the employees, manage and work with the board of directors, and dream of the future. The board, concerned about the direction of the company under Myron, decided to put the company on the market, and in August of 2008 it was sold, to guess who, Comtech Telecommunications and CEO Fred Kornberg. As I recall, the price paid was \$230 million, not too bad from essentially zero in thirteen short years!

Retirement has brought new opportunities for some practical jokes! I have a golfing friend, Bob Coles, who at the drop of a Democrat's name and particularly Obama, can rant for thirty minutes about, taxes, Obama's birth certificate, and other stuff he hears listening to Rush Limbaugh. He drives an SUV. I bought two "I Love Obama" bumper stickers and put one on his bumper and the other on a cardboard hinge I made. I took two pieces of cardboard about the same size as the bumper sticker and used duck tape as a hinge. The bumper sticker was glued to one of the pieces of cardboard. The hinged bumper sticker had that double sided sticky tape to hold it on the SUV. With Paul Shimps' help, I placed it on the top of the SUV so when the SUV was parked, the hinge closed flat from gravity and couldn't be seen; but when moving, the wind would open the hinge, the bumper sticker would pop up and drivers behind him could see "I Love Obama" The idea of the other bumper sticker was so that he would find it and stop looking for any more. This worked so well that Bob drove for a month without knowing

the “I Love Obama” was being displayed. I wanted to be sure he saw it before the wind tore it off so I took a picture and emailed it to him and our friends.

A friend of mine of Norwegian extraction, Jim Klugness, was traveling to Australia on Qantas Airlines. On my AOL account, that allows six or seven screen names, one of the screen names I set up was Qantas@AOL.COM. Jim's email was also AOL. When one AOL member emails another, the domain name AOL is often not used; so when Jim received my email, the from address was only “Qantas”. The subject line said: Qantas Alert for Travelers to Australia. In the body of the email, it said “Effective immediately, all passengers of Norwegian origin will be strip searched in Sidney Airport before allowed in the country.” Whether it took a millisecond or ten minutes, and I hope, a call to his travel agent, before Jim figured it out, I enjoyed the thought.

Life is good, pranks are plentiful, and I’m working on the *First Rule of Retirement*.