

Chapter V

A REMEMBERED TAKE-OFF

On July 12, 1993, Gloria said, "Let's drive up to look at where you flew that T-33 jet trainer off of NM 41 thirty-five years ago." So we drove east of Albuquerque, on US 40 to Moriarity, then north on NM 41 to a straight, 4500-foot-long stretch of road.

On July 10, 1958, the final days of the T-33 began when it overflowed Kirtland AFB at Albuquerque and had to make an emergency landing on the CAA auxiliary field on the high desert close to Otto, NM. Senior officers decided that the T-Bird should be flown off the highway rather than the too-short CAA field.

Capt. Saul Faktorow, our Flying Safety Officer, accomplished all required planning and arrangements. Master Sgt. Lewis J. Holth provided the necessary aircraft maintenance, including removal of the external fuel tanks and insuring a minimum safe internal fuel load. In addition, a Kirtland fire truck and ambulance were to be in place in the event of an accident during take-off.

On July 12, 1958, I made the take-off, as I'll describe below. On July 17, 1958, the eight-day saga of the aircraft ended when two officers from its home base took it off from Kirtland. They flew west for a couple of minutes and then the aircraft developed engine trouble. The aircrew ejected safely, and the T-33 exploded and crashed.

What follows are the details of my brief encounter with the doomed aircraft.

On July 11, 1958, I visited Base Operations to pick up my flight records prior to an assignment in Korea after taking survival training at Stead AFB, NV. While I was in Operations I learned about the fellows who had overflowed Kirtland and made the emergency landing at Otto. About that time Saul Faktorow came in and began complaining that he couldn't find a volunteer to fly the T-33 off of NM 41.

Interested, I asked Saul about the road. He told me that he had found a straight strip about 4500 feet long and 20 feet wide. In taking into consideration the highway's elevation above sea level, he had calculated a 4000-foot take-off roll if, and only if, the take-off was accomplished at the lowest possible temperature after it was light enough to see down the highway. Thus, he explained, the planned take-off time was 6 A.M.

I had been flying jets since August 1946 and had a zest for flying, so I volunteered, saying, "I'll do it."

On July 12, 1958, Saul and I arrived at the straight stretch of NM 41 and could barely make out the aircraft poised at the road's north end. The state police and our fire truck had already closed off the south end. As we drove north we came to a high-tension line running west to east across the highway. Next, he showed me that there was a relatively deep arroyo in the road.

I said, "When I come out of that arroyo, I will be at flying speed and I'll have to hold the aircraft down to keep from flying it into the high tension line." Saul agreed with me.

We came to another high tension line, but this one would be no problem because I figured there was no way I would be airborne at that point. Last but not least, there was a second arroyo, and the bird waited for me at the top north end of it.

Much to my surprise there was a group of Albuquerque newsmen and TV reporters on the east side of the road.

I asked Sgt. Holth to watch me and make sure that my preflight and starting procedures were correct. Later I learned that Saul Faktorow made a flying safety movie of the event. It included a scene of me walking to the west of the road to relieve myself! I was told later that upon showing that movie to pilots, Saul would say, "And Charlie told me that he wasn't nervous!"

Well, despite that I wasn't nervous, although when I was sitting in the cockpit, high above the road, I can assure you that road with its soft dirt shoulders looked a lot narrower than 20 feet. However, the time had come to go, not to hesitate.

I moved my throttle up to 100% and released my brakes. Seconds later the nose wheel started rolling right off the center line. I immediately kicked my left brake and the nose gear moved back to the centerline and remained there until just prior to take-off.

When I entered the final arroyo I thought I knew what to expect coming out of it. However, I didn't know that the dust my tail pipe blew up in the bottom of the arroyo would result in a positive reaction by the fire truck crew: they thought I was in trouble. So when I came out of the arroyo I not only saw the high tension line but also the fire truck: it was charging up the road toward me.

My reaction was to do a no-no. I started a tight, low, slow, left turn. To this day I do not know how I missed the wire, but I do know I wouldn't be writing this if I had hit that fire truck.

During the turn, I noticed a bright orange light on the right side of the instrument panel. After I started the aircraft, I had closed the canopy. Then the Sgt. jumped off the wing but I forgot to lock the canopy! Now I realize that Saul may have been right about my being nervous.

The big difference in NM 41 then and now is that it has been refurbished: the shoulders are asphalt and the arroyos no longer exist in the road. The other noticeable difference is that the high desert surrounding it is green now, not brown as it was then. Interestingly, ranchers in the area had been complaining loudly that the lack of rain was caused by the jet aircraft flying overhead. Little did they know they would one day see a jet using NM 41 for a runway!

Chapter VI

THE THING

I first met Major General Ernest A. Pinson, USAF, Ret. in 1947 when we were both students at the University of California, Berkeley. He was a major and I was a first lieutenant in the Army Air Corps. Although he already had a Ph.D. in Physiology, he earned his second Ph.D. in Nuclear Physics while he was at UC.

When I arrived at UC, I had been a jet fighter pilot in P-80s since August 1946. My previous education consisted of one year of business administration while I was on a football scholarship at the University of San Francisco, California. By the time I left the University of California in 1949 I had completed three years of credits for a degree in Nuclear Physics with above-average grades, but I had no degree. The reason for this is at that time the Army Air Corps limited assignments in a civilian institution to two years.

Despite the differences relative to rank and education, Pinson, our wives, and I became friends.

In 1953 I was at Wright-Patterson AFB. By that time I had earned an M.S. in Nuclear Engineering. I learned that Col. Pinson was planning to accomplish the first unshielded man penetrations of nuclear clouds at early times after detonation. He decided to make these flights after gathering data from experiments with rats flown in unmanned B-17 drones. Interested in his work, I called up Col. Pinson and volunteered to be the first unshielded man.

In August 1954, I went to work for Col. Pinson. He was heading up the Biophysics Division of the Research Directorate at Kirtland Air Force Base, New Mexico. I learned then that another captain had also volunteered to make the unshielded man penetrations. One day after I had arrived at Indian Springs AFB, north of Las Vegas, Nevada, Col. Pinson flew in and told me the other captain was resigning and that he, Pinson, was not going to look for another volunteer. Instead, he was going to make the flights himself. I was happy to hear his decision because he was probably one of the most often employed human guinea pigs the USAF has ever had.

Although we had been friends for over seven years, I had never worked for Col. Pinson, but initially, this lack of experience did not concern me. As the test series we participated in continued, though, the stress between us grew and our personal relationship deteriorated. The stress did not result from anger or fear, but it was primarily the result of a simple lack of sleep between shots.

By the time Operation TEAPOT was completed, I had made up my mind to ask Col. Pinson for permission to be transferred as soon as I completed the preliminary analysis of the data collected. When I made the request, it caused the only negative period of my Air Force career.

In August, 1959, I was assigned to AFOAT, the top USAF nuclear weapon office in the Pentagon. By that time I had spent three years assuring a nuclear weapon capability in USAF aircraft while assigned to the Development Directorate at Kirtland AFB. This was followed by one year in nuclear weapon operations running a Tactical Operations Center at a remote base where fighter aircraft were on alert in the Pacific.

In those days many of the fighter pilots on alert behind the fence (in the Pacific and Europe) would have had to fly one way missions if the flag went up! Why? An effective en-route, in-air refueling capability did not exist for USAF fighter-type aircraft at that time.

Because of the publicity I received about my assigned tasks in Operation TEAPOT, I was ordered by PACAF to brief all their alert personnel on that experience and also how to cope with the effects of Flash Dazzling.

I mentioned publicity above. The decision to publicize the unshielded man penetrations of nuclear clouds at early times after detonations was made by the DOD and AEC Test Managers. I had made four of the penetrations and Col. Pinson had made three of them. Unfortunately, Col. Pinson and Lt. Dalton W. McCullar (the pilot) exceeded their total authorized dose on their last penetration. What happened was the bottom of the tropopause was lower than expected and when their mushroom cloud hit the bottom of it, the cloud bloomed out and the men spent a long time flying through it.

Only the editor of *Aviation Week* and a nationally syndicated news media reporter were selected to conduct the interview of the unshielded man. The next task was to find an unshielded man to interview. Col. Pinson told me he didn't want to be the one because he thought the resulting publicity might have a negative effect on his career. Instead, he told me that I who would be the man interviewed.

The resulting interview was publicized by *Aviation Week*, a high percentage of the newspapers in the U.S., and a story in *Argosy*.

When I arrived at AFOAT in 1959, I was contacted by the USAF Public Relations people. They told me they had a drive on to get people who had a unique Cold War experience to write about it and then they would get it published. With the approval of my bosses, I wrote "The Thing" and the PR people sent it to

Reader's Digest. *Reader's Digest* responded favorably but the editor wanted me to revise it. By that time, though, I didn't want any more publicity, so I put it in a box where it has remained since the fall of 1959.

THE THING

The flight had to be successful. Our evaluation of data collected during the unmanned drone flights indicated that it would be, yet many military men and scientists were still skeptical. To actually prove a man could fly through a nuclear cloud very shortly after weapon detonation without subjecting himself to a critical dose of nuclear radiation, would require duplication of such flights by unprotected man. The information was vitally necessary. In the event of a nuclear war, the tactical situations would unquestionably require similar flights by our operational crews.

When was this? It was during one of the last 1955 nuclear weapon tests called Operation TEAPOT. The nuclear weapon detonations of that test series occurred below, on, and over the dry lake beds, located north of Las Vegas, Nevada. The details of what happened are still clearly etched in my memory, for I was scheduled to be the unprotected man.

The silver-grey dawn was creeping above the eastern horizon. Finally, I was alone. Sergeants James M. Pulliam and Dennis E. Brenk, who had helped me install the airborne instrumentation, had just left for breakfast. I was really beat. The shot had been scheduled to occur the day before, but had been canceled just before takeoff. The powers-that-be never permitted a nuclear detonation unless the prevailing winds were ideal with regard to the predicted radiological fallout pattern. As a result, I hadn't slept in over forty hours. I shut my eyes, but couldn't shut off the many thoughts which raced through my mind. I couldn't relax. The same feeling of apprehension, which I had experienced prior to each of my combat missions as a fighter pilot, was again a part of me.

"Captain, are you ready?"

I opened my eyes, and saw the grinning faces of our two crew chiefs, Airmen Bruce Gardner and Richard Wood.

"Yes, except for The Thing."

H-hour, minus forty-seven minutes. Time was dragging; in fact, the delay prior to takeoff seemed to be nearly as long as the seventy-two hours of no sleep prior to the first unshielded manned aircraft penetration of a nuclear cloud, which

had been accomplished a month before by Lt. Dalton W. "Dawg" McCullar, as pilot, and myself, as the unshielded technical observer. Although that flight had been a new experience, the time period had not been as critical. This time, we were going to twist the tiger's tail. We knew that the radiation within a nuclear cloud, though it has a completely different effect, is comparable to a hot metal which never cools. At time of detonation, it is hotter than the molten steel within a blast furnace. Seconds later, touching it would result in third degree burns. Minutes later, it can be picked up, but not held too long. This was going to be the earliest time penetration of a nuclear cloud!

Now, Lt Floyd H. Patterson, my pilot, and I waited in discomfort. Floyd's was due to the heavy, lead-glass, protective vest he wore. His only other partial shield was the lead plate which covered his cockpit seat. Luckily, I didn't have to wear the armour; there was only the physical irritation in my throat.

H-hour, minus forty-five minutes. The QF-80's, unmanned jet drones, and the DT-33's, manned jet control aircraft were now on the runway. Our planes, two T-33's, standard jet trainers of the Air Force, were scheduled to take off immediately after the drones and their manned mothers. At least we wouldn't be taking off into the black bottomless pit of night, for this was to be a daytime nuclear test.

"Charlie, look!"

"Where?"

"Over your left shoulder."

With a sinking feeling I saw the smoke and flames. One of the QF-80's had just crashed into the side of a mountain. Thank the Lord, it wasn't the manned control aircraft. We spotted her slowly turning back towards the field. We looked back at the runway and saw another drone starting its roll.

"Floyd, that bird is turning to the left."

Off of the runway and across the boondocks the drone skipped, every second gaining more speed. Its control ship had flamed-out on take-off. Then out of nowhere, the DT-33, which had lost its baby to the mountain, came across Indian Springs AFB on the deck. She was flying at close to stalling speed and yet her crew was slowly gaining control over the runaway orphan. At what seemed to be the last moment, the controller successfully picked the wayward one off the ground.

H-hour, minus five minutes. Five, four, three... The five-minute countdown had started and we were orbiting high over Sheep Range, our holding point. Off to

our right, flying in formation with us, was McCullar's plane. In the rear cockpit, I could see Col. Pinson adjusting the movie camera. They were not to penetrate the cloud with us, but were going to photograph the cloud and our entry into it. I looked back into my cockpit. Surrounding me was a myriad of switches and dials. I started to check each one for proper operation. When I looked at the stop watches which I held in each hand, I started to laugh.

"What's so funny, Charlie?"

"Nothing, Floyd. I just hope I remember what and when I am supposed to start or stop."

After a final check of all instrumentation we started the final wait and as we did, time seemed to slow down again. I was tired: tired of waiting; tired of the dryness of my lips; and tired of the feeling in the pit of my stomach. To top it off, the swallowing, which involuntarily followed each moistening of my lips, caused the irritation in my throat to become increasingly uncomfortable.

H-hour, minus five seconds. We were flying tangent to the shot tower. As our pulses quickened, we bowed our heads to protect our vision from the brilliant blue-white light soon to be released by the nuclear detonation. Four, three, two, one and then a shrill bleat. I started the two stop watches, and at the same time, two of the nuclear instruments. Then I raised my head and looked up at the sky. It was blue and not like the inside of a fluorescent light bulb which characterized pre-dawn shots. I turned my head to the right to look at the horizon opposite where the tower had been. The golden reflection of a pre-dawn fireball on its silver background was absent. Had it been a dud? I hoped not, because I had no desire to sweat it out again. Immediately I looked back to the left. From out of the brown desert floor below churned the nightmare of a nuclear detonation. Then the fireball began to cool. It was like a large red cinder filled with writhing snakes. From the red fireball, all of the colors of the spectrum emerged and from that, the dirty pinkish brown cloud, the top of the mushroom, our target of the day appeared. It was rapidly expanding and moving upward. From out of the bottom trailed a scorpion-like tail, which appeared to have its hooked claw stuck into the seared, lifeless desert below. Patterson turned the aircraft toward the cloud and advanced his throttle to one hundred percent. We had to be in position when the cloud reached its maximum altitude; time was running out.

Floyd was now guiding our bird toward the apparent center of the pinkish brown cloud, which was becoming redder every second. We knew that the most intense nuclear radiation field existed in the center of the cloud and it was only there that we could collect conclusive data. Since I was prepared to read and operate the nuclear instrumentation on both sides and in front of me, I stole a peek at the

cloud. It seemed to cover the entire sky in front of us. It was like a large thunderstorm. The motions within it were emphasized by its brick-red color. I forced my eyes back to the dials of my instruments.

"Locoweed One, this is Dragnet, where are you?"

"Dragnet, Locoweed One here, we are on our pre-penetration run."

"Roger, you are cleared for your penetration."

Suddenly a needle of one of the radiation dose rate meters began to move. It sped across the dial and then stopped and quivered on the maximum reading of the instrument. We were in the invisible nuclear radiation field which surrounds and permeates the interior of the entire visible cloud. Then Patterson said, "One." I flipped on three switches. Now we were in the actual cloud. There was a peculiar dry odor and out of the corners of my eyes I could see the cream of tomato soup which surrounded us. I was busy flipping switches, reading and recording, when suddenly I pitched forward. The aircraft was slowing down. Why? We were still in the cloud! Had we flamed out? Our predicted radiation dose had been based on a flight straight through the cloud at the maximum permissive speed of our aircraft. We hadn't planned to make time-consuming, descending, gliding turns down through the cloud.

"Floyd, what's wrong?"

"I had to throttle back to keep from exceeding the Mach number."

"Oh!"

Evidently Patterson didn't want to spend an excessive amount of time in our ionizing environment either, and so in his haste he had momentarily exceeded the speed limitation of Locoweed One. The following moments within the cloud seemed long. The odd smell, the reddish haze, and the position of needles on the dials of the instruments caused me to experience for the first time that day a thought which I didn't like. I started worrying that the tropopause may have caused our mushroom to bloop out like the last time that Col. Pinson and Lt. McCullar flew through a cloud.

I was about to speak up when Floyd said, "Two." I turned off some of the instrumentation. We were out of the visible cloud. Seconds later, we left behind the halo of nuclear radiation, invisible by day but a bluish blur during the hours of darkness.

We started our ear-popping descent. Patterson was again pushing our aircraft to the edge of its limitations. Although we were no longer in the cloud, or within its radiation field, our bodies were still being bombarded with penetrating gamma radiation. During the cloud passage our aircraft had become contaminated with radioactive particles. We were both ready to get back on the ground again and out of Locoweed One.

We had climbed out of our contaminated plane and were walking away from it when Patterson said, "Charlie."

"What?"

"You'd better pull The Thing out of your stomach."

The irritation which I had felt in my throat prior to take-off returned and instantly became a gag. I grabbed the end of the string, which I had held clenched in my teeth for nearly two hours, and started to pull. My lower esophagus had a tight hold on the thing and didn't want to let go. I bent over and then gave the string a good hard jerk. Out it came, and with it, the little liquid which had been in my stomach. The Thing was a plastic film container covered with wax. It was about one quarter of an inch thick and had a diameter of one half inch. It was an internal method of measuring the external nuclear radiation dose to which my body had been subjected. Pulling it out was the only unpleasant physical part of the entire project.

Evaluation of the data recorded by our seventy-two measuring devices in the aircraft indicated that our previous evaluation of the drone data had been valid. Our flight had been successful! The data we had gathered proved that a nuclear cloud was not as tough or dangerous as it appeared. The skeptics were wrong.

My only regret from this experience was losing a friendship which I had enjoyed for seven years. Despite that I am proud to have been a member of his team.

Chapter VII

DE SOTO PATROL WATCH OFFICER

On July 30, August 2 and 4 of 1964, the De Soto Patrol operated in the Gulf of Tonkin, which is the ocean area northeast of North Vietnam. What happened to that Pacific Fleet patrol on August 2 and 4, 1964 resulted in Congress giving President Lyndon Baines Johnson authority to order attacks on targets in North Vietnam. Thus, the De Soto Patrol became the focus point of a continuing controversy which lasted for years.

I acquired my first knowledge of the De Soto Patrol on the morning of August 3, 1964 when I read a news release by the Pacific Command at Camp H. M. Smith, Hawaii. It read,

"On August 2, 1964, the Maddox, a Pacific Fleet destroyer, was attacked by three North Vietnam torpedo boats in broad daylight. Pacific Fleet aircraft retaliated by damaging two of the torpedo boats and leaving the third one dead in the water."

The news release included a statement that the Maddox was in the Gulf of Tonkin to show the flag and for electronic counter measures collection purposes.

This statement was similar to the cover story our government used when a U-2 was shot down in Russia during 1959 and continued to use until the Paris Peace Conference when the Soviets informed the world of the facts about the U-2 incident. Thus, I assumed the Maddox might have been also involved in a highly classified operation!

On August 3, 1964, shortly after I arrived at my office in Camp H. M. Smith, which overlooks Pearl Harbor, a Navy captain entered and asked me to come to his office. After we arrived, he shut his door and said, "Tonight you are going to be our De Soto Patrol watch officer."

He proceeded to explain that I had been selected because I had the required clearance, i.e., Top Secret, Extremely Sensitive Information. Next he briefed me on the two previous patrols. On July 30, 1964, during a CIA 34A operation (I never learned what that was about), the Maddox had probed around the North Vietnam islands of Hon Vat and Hon Me in the Gulf of Tonkin where North Vietnam torpedo boats were known to be based. What he told about the patrol on August 2, 1964 was similar to the information I had read in the Pacific Command's news release.

The reason there was going to be a De Soto Patrol watch officer on the night of August 3 and 4, 1964 follows explained in a message from President Johnson:

"I have instructed the Navy:

- (1) to continue the patrols in the Gulf of Tonkin off the coast of North Vietnam;
- (2) to double the force by adding an additional destroyer to the one already on patrol;
- (3) to provide combat air patrol over the destroyers; and
- (4) to issue orders to the commanders of the combat aircraft and the two destroyers (a) to attack any force which attacks them in international waters, and (b) to attack with the objective of not only driving off the force but destroying it."

This was typical of how the President, our Commander in Chief, ran the Vietnam war during his remaining time in office. As a result of it, the De Soto Patrol of the Pacific Fleet was doubled in size and included the destroyer C. Turner Joy.

Later that afternoon I had an early dinner at home with Bonnie. Naturally, I did not tell her why I was going to be on duty that night and she didn't ask me. Then I returned to Camp H. M. Smith, which was named after a Marine general who was a hero during WW II and was still alive in August 1964.

I went to the Navy captain's office and he took me to the War Room where he introduced me to the people who were going to be on duty that night.

The War Room was like a small auditorium. Entry to it was controlled by an armed Marine guard. Once inside, I could see the fixed, banked, auditorium-type seats. In front of them was a large conference table surrounded by plush, leather chairs. On the front wall were numerous pertinent time zone clocks, etc.

At the rear of the War Room was a bullet-proof window next to a steel door, and access to what lay beyond it was controlled by an individual inside a small room. This man also controlled another steel door at the rear of his room. What was behind that door dictated the high degree of security: the area contained coding and decoding equipment and essential operators. Incidentally, this same War Room was used for President Johnson's week-long conference with South Vietnam leaders Ky and Thieu during February, 1966. The only visible difference then was that

every phone the President and his staff used at Camp H. M. Smith, or in their hotel down town, was white rather than whatever color they had been.

Sometime around midnight I decided to relax in one of the top row of auditorium-type seats. Shortly thereafter, a Navy man handed me a message from the Maddox which indicated, "Radar contact with some small, fast-moving craft. We have gone to general quarters, began evasive maneuvers, and started firing."

This was a positive indication that the De Soto Patrol might be attacked, so I asked the man who had brought the message if Admiral Sharp, Commander in Chief, Pacific Command, and his component commanders had been informed.

His reply was "Yes, they are coming to the War Room."

Later that morning I read another message which reflected a future confusion factor, i.e., "Because of a bad storm (poor visibility and sonar difficulties), no one aboard the Maddox or C. Turner Joy actually saw or detected North Vietnam torpedo boats or torpedoes!"

The first to arrive were Admiral Sharp and Admiral Moorer, Commander-in-Chief, Pacific Fleet. Next was Lt. General Krulak, the ranking Marine in the Pacific. Following them were General Beach, Commander-in-Chief, U.S. Army Pacific, and General Harris, Commander-in-Chief, Pacific Air Force. That room was full of brass! They were not confused nor did they debate whether or not the De Soto Patrol had been attacked; instead they started planning an air strike by Pacific Air Force's tactical fighter aircraft against North Vietnam torpedo boat and supporting POL facilities.

Later I learned that Lt. Col. Jim Hopkins, a friend of mine who I had taken fighter pilot training with back in 1944, lead the strike and was awarded the Air Force Cross for same.

After the plan was completed by our leaders in the Pacific, they sent it to the White House and Pentagon for approval. While they waited for that, the weather worsened over the planned routes and targets. The first response was that the CIA and State Department insisted that the routes to the targets be changed, but not because of the weather. Next, the President and his advisors wanted the timing over the planned targets changed so he could report the results of the strike at his next conference with the news media.

I don't know how the four-star Admirals and Generals felt, but being an ex-fighter pilot, I was concerned about the pilots who had to participate in the strike. To be honest with you, the whole night as the De Soto Patrol watch officer

was like the famous short camp fire story which starts off, "It was a dark and stormy night and I..."

Chapter VIII

DESCRIPTION OF MILITARY EXPERIENCE

September 1942 to July 1949: Duties of an Aviation Cadet, Flying Instructor Trainee, Basic Flying Instructor, Fighter Pilot Trainee, Combat Fighter Pilot, Evadee, Fighter Pilot Instructor/Supply Officer, Jet Fighter Pilot Instructor/Assistant Base Adjutant, and student at the University of California. Grade averages as a cadet and trainee were above 90%. During each assignment as a junior officer, was assigned increased responsibilities. While evading capture, became an active member of the underground organization. In 1946, was one of the five percent of the officers who competed and were selected for a commission in the Regular Army. As a flying instructor, gained considerable insight relative to motivating men with different backgrounds and personalities. Because of experience as an instructor and flying ability, became one of the first instructors in jet fighter-type aircraft. During flying career in the U.S. Air Force, was a fully qualified instructor for five of 22 years as a pilot. Thus, taught Flying Safety for five years and practiced it for 22 years. During two years at the University of California, earned approximately three years of credits and above-average grades.

July 1949 to June 1950: As a Physicist in the Biophysics Branch of the Aero Medical Laboratory, was responsible for: measuring, analyzing, and preparing scientific reports on sound fields around aircraft, missiles, engine test cells, missile launch pads and U.S. Air Force installations; recommending measures (safety and acoustic engineering) to effectively reduce those sound fields to safe levels (75%); making flight tests of special speech transducers (10%); and conducting physiological tests concerned with effects of sound on man (15%). Accomplishing sound surveys and the physiological tests afforded the opportunity of working with scientists, developing scientific reports which were understandable to the layman and gaining constructive knowledge in regard to Noise/Vibration Safety and Acoustic Engineering in a relatively short period of time.

June 1950 to July 1953: As an undergraduate at North Carolina State, was selected for membership in Tau Beta Pi and was on the Dean's and High Honors' lists. In June 1953, was awarded a Master of Science degree in Nuclear Engineering. Subject of thesis was "The Determination of the Q-Values for the (alpha, proton) Reactions on Boron by Means of Photographic Emulsions." This required constructing experimental arrangement and using a polonium-210 alpha-particle source under vacuum-type conditions. Since this required development of a "hot" laboratory and a safe/effective experimental arrangement, a bonus to graduate work was gaining a year of practical experience in Nuclear Radiation Safety.

July 1953 to August 1954: As Program Director for Guided Missiles, Special Weapons Branch, Wright Air Development Center, was responsible for monitoring the warhead capabilities of all guided missiles and B-58 Weapons Systems (25%). Duties involved frequent coordination and meetings with personnel from contractors, Sandia Corporation, Los Alamos Scientific Laboratory (LASL), Defense Atomic Support Agency (DASA), Weapon System Project Offices (WSPO's), Air Force Special Weapon Center, and higher headquarters (25%). This was the year that major technological advancements were made which revolutionized the development of nuclear weapons and guidance systems for missiles. On own initiative, wrote a paper in regard to how those breakthroughs could be applied to the ATLAS Weapon System to reduce its development time and submitted it to the Commander, Wright Air Development Center and the ATLAS WSPO. The recommendations in the paper coincided with those contained in studies by higher headquarters. Because of nuclear education and security clearances, performed much of the work normally required of the Warhead Officers for the BOMARC and B-58 Weapon Systems (50%). Thus, represented the BOMARC WSPO at a meeting during which the military characteristics for a new BOMARC warhead were developed. In attendance at the meetings were top level managers and engineers from Boeing and Sandia Corporation, senior scientists from LASL, and ranking officers from the U.S. Air Force and DASA. In addition, had equivalent experiences when representing the B-58 WSPO.

August 1954 to June 1955: Job in the Biophysics Division, Research Directorate, Air Force Special Weapons Center resulted from volunteering for and being selected to participate in the first unshielded man penetrations of nuclear clouds at early times after detonation. As Project Officer, was responsible for: preliminary planning of the experiment; obtaining test aircraft and instrumentation; operational planning of and training for the penetrations; placement and calibration of measuring devices; participating as the unshielded man in four of the seven penetrations accomplished; and preliminary analysis of the data collected (100%). Knowledge was gained relative to: how nuclear weapon tests in the atmosphere were conducted; the physiological and psychological aspects of nuclear weapon effects, decontamination; scientific and operational personnel working together; maintaining one's perspective in dealing with other people; and the safety of delivery aircrews in a dense nuclear target area.

June 1955 to August 1958: As Assistant Chief and then Chief of the Bomber Branch in the Development Directorate, was responsible for: assembling into bomber-type weapons systems the components required for a nuclear weapon capability; accomplishing the related development and test programming; chairing Joint Working Group meetings in which representatives of contractors, Sandia Corporation, Defense Atomic Support Agency (DASA) and Weapon System Project Offices (WSPOs) participated; coordinating appropriate contracts between the

contractors and U.S. Air Force; maintaining liaison with Atomic Energy Commission (AEC), DASA and interested elements of the U.S. Air Force; determining causes of nuclear weapon accidents/significant incidents and then developing and applying technical fixes to preclude similar accidents and incidents from occurring (70%). Thus, time was expended in doing the technical (mechanical and electrical) work normally required of a highly qualified Safety Engineer. Initially, attention was directed towards advanced bomber weapon systems, such as the nuclear-powered bomber. As Branch Chief, learned that the principles practiced as a flying instructor in regard to motivating people were equally effective in the management of project engineers. Personally involved in many crash programs, such as: modifying a special purpose aircraft for a high-altitude sampling capability; a safety study which changed the weapon handling and suspension concept of the U.S. Air Force; and modifying the suspension and release equipment in all bombers after an accident had occurred (15%). An example of performance under stress was taking appropriate action so that a new nuclear weapon capability was developed, tested and produced in nine months less time than a comparable capability had required in the past. During second year, on own initiative, accomplished a study which concluded that the time required for developing and testing the B-58 capability could be effectively reduced at a considerable saving by combining the related programs of the contractors and U.S. Air Force and conducting them as Kirtland Air Force Base. This concept was bought, and as an additional responsibility was appointed the B-58 Center Project Officer (15%). As such, was responsible for coordinating all details of the B-58 Pod development and test programs with the contractor, Sandia Corporation, DASA, Strategic Air Command (SAC), WSPO, and all other interested agencies in the U.S. Air Force. When the decision was made to develop the B-70, refined original concept and applied it to that weapon system. Thus, last effort in this job was planning the B-70/nuclear weapon development and test programs with top echelon people of the contractor, Sandia Corporation, Laboratories of the AEC, Strategic Air Command, and the WSPO.

August 1958 to August 1959: As Chief of the Tactical Operations Center for the 314th Air Division, was responsible for: managing center and supervising personnel assigned to it; command/control of nuclear capable units; maintaining and exercising the Nuclear Plot and Nuclear Alert Monitoring facilities; preparing, publishing and briefing supporting plans to Nuclear War Plans; and representing the Air Division in related meetings at higher headquarters (70%). On own initiative, developed, had approved, and distributed the first Nuclear Wartime Disaster Control Plan in that area of the world. In addition, spent about 25% of time with nuclear delivery and storage units observing their operations and recommending changes to enhance the safety and effectiveness of same. As a result, was selected by the Pacific Air Forces (PACAF) to be their technical representative in a safety study accomplished by the USAF-Nuclear Weapon System Safety Group. Although the U.S. Air Force did not have Nuclear Safety Officers at that time, did the work

which they accomplished after the title and associated responsibilities were established. In the middle of tour, was directed to develop a briefing which was to be provided to all nuclear delivery crews in PACAF. Subject of the briefing was "Weapons Effects and Route Planning" (published and distributed throughout the U.S. Air Force) (5%). In support of briefing, on own initiative, developed an interim fix and technique in regard to Flash Dazzling. Later, they were approved and applied throughout the U.S. Air Force and the Non-US Air Forces in NATO. For briefings in PACAF, was officially cited on three different occasions. During free-time, taught college algebra, spherical trigonometry and geometry for the University of Maryland.

August 1959 to May 1960: As Staff Coordinator in the Air Force Office of Atomic Energy, was responsible for monitoring nuclear warheads associated with Intercontinental Ballistic Missile Weapon Systems (40%). Assisted in those actions associated with nuclear weapon effects, nuclear weapon protection programs and evaluation of nuclear safety studies/proposed nuclear safety rules (40%). In addition, because of personally developed interim fix and technique in regard to protecting delivery air crews from the weapon effect of Flash Dazzling, was the official Air Staff briefer on that subject (20%).

May 1960 to August 1960: As an Action Officer in the Office of the Joint Chiefs of Staff (JCS), was responsible for developing, writing, coordinating (with Action Officers of the Services and other Joint Staff Directorates) and briefing the Director JCS and Chairman JCS on papers appearing on the JCS agenda (80%). This was just prior to the Paris Summit Conference. During it, was primary action officer on six different, technically complex JCS papers, such as: "Pre-Launch Inspection of Missile Payloads as a System to Monitor a Ban on High Altitude Nuclear Weapon Testing." In addition, participated extensively in the development of positions with regard to the "Draft Treaty on the discontinuance of Nuclear Weapon Tests." (20%).

August 1960 to July 1961: As a Project Officer in the Tactical Weapon System Branch of the USAF Directorate of Nuclear Safety Programs of the Air Force Logistics Command and those associated with Non-US NATO Air Forces; participating in Nuclear Safety Surveys and meetings of the U.S. Air Force USAF - Nuclear Weapon System Safety Group; writing articles which were published in the USAF Nuclear Safety Magazine; being Project Officer for Operational Reviews of Tactical Weapon Systems; and assisting in the development of the curricula and lesson plans of the USAF Nuclear Safety School (90%). This is the period of time when the USAF Nuclear Safety Program was being formulated, based on experience derived from the flying, explosive, personnel, ground and missile safety programs. Thus, it became the most comprehensive program of its type to be implemented throughout the USAF. During this year, became a fully qualified Nuclear Safety

Officer (AFSC - 1955). During assignment, the Air Staff requested that briefing on "Nuclear Cloud Penetrations and Flash Dazzling" be updated and given to the military headquarters in Europe and delivery units of the USAF and Non-US NATO Air Forces. The briefing was accomplished over 30 times (10%). During and on completion of this task, was officially cited on different occasions by five general officers. Because of the interest in briefing, it was again published and distributed throughout the USAF.

July 1961 to June 1964: As Project Officer in the Safety Rules Branch of the USAF Directorate of Nuclear Safety, was responsible for: developing proposed safety rules or changes thereto for U.S. Air Force (USAF) and Non-US NATO Air Force operated weapon systems; preparing memoranda to the Joint Chiefs of Staff, Secretary of Defense and President in regard to proposed safety rules; participating in nuclear safety surveys and operational reviews; formulating the Air Staff position on Air Staff, Defense Atomic Support Agency, Atomic Energy Commission and Department of Defense comments on proposed nuclear safety rules; advising senior officers on safety rule matters and the interpretation of their intent; and briefings on safety rules and operational concepts at USAF Safety Symposia at the headquarters of the operational commands of the Air Force. Prior to the establishment of the Safety Rules Branch, the USAF - Nuclear Weapon System Safety Group (NWSSG) drafted proposed nuclear safety rules. Therefore, on own initiative, originated a new concept for an orderly development of proposed nuclear safety rules. Thereafter, nuclear safety rules evolved from: reviewing operational concepts, nuclear safety analyses, service-to-service agreements, and technical arrangements with allied nations field checking with operational units; and safety studies accomplished by the USAF-NWSSG. During field checks of proposed nuclear safety rules developed with the assistance of operational personnel some of the weapon system configurations for Tactical Ferry, Deployment and Dispersal operations. Prior to that, there was only a standardized configuration for Tactical Ferry. Since the new configurations required new operational concepts, assisted the operational commands in the development of same. During this tour of duty, developed approximately 50 sets of proposed safety rules or changes thereto. Thus, participated in an equal number of safety studies accomplished by the USAF-NWSSG. One of the last tasks performed in this job was to rewrite the basic USAF regulation in regard to Nuclear Safety. Prior to departure, became a fully qualified Staff Safety Officer (AFSC - 1916). After departure, received an official citation which read in part: "During this period he made original, distinct, and outstanding contributions to the USAF and Non-US NATO Air Forces in his development of nuclear safety rules, which not only assured maximum nuclear safety in consonance with operational requirements, but also improved the peacetime operational flexibility of their weapon systems."

June 1964 to December 1964: As Commander in Chief Pacific (CINCPAC) Nuclear Safety Officer, was responsible for: CINCPAC peacetime nuclear operations, protection and safety/surety programs (65%); monitoring command/control devices and related operational policies/procedures (30%); Pacific Command (PACOM) Weapon Credits (number of specific nuclear weapon exercises authorized) (5%); chairing meetings with representatives of PACOM Component Commanders in regard to the above; reviewing and analyzing scientific/technical studies and directed military policies related to the above; being Team Chief of Combined CINCPAC - Component Commander Survey Teams; and developing related studies, policies and correspondence. At the only comparable Unified Command headquarters, a total of five technically qualified officers were assigned equivalent responsibilities. Served as chairman of a group tasked with producing a study pertaining to command/control devices, procedures and policies. On own initiative, reviewed all Department of Defense, JCS, CINCPAC, Service and Component Commander directives pertaining to other responsibilities of CINCPAC Nuclear Safety Officer. Based on that review, developed, had approved and published in one directive (CINCPAC Peacetime Nuclear Operations, Protection and Safety) all related CINCPAC policies, incorporating the best features of all other established nuclear protection and safety programs. Since it contained new concepts, the JCS directed that it be reviewed by the Services and Defense Atomic Support Agency. The review established that the concepts were within the scope of established policies. During the next two and a half years, was team Team Chief of many combined Nuclear Safety Survey Teams. The teams were comprised of officers from the Service Component Commands. As a result, gained comprehensive insight of the management realities concerned with the supervision of high-caliber technically qualified personnel of the Army, Navy, Marine Corps and Air Force. In addition, acquired unique knowledge of the safety programs of the Army, Navy and Air Force.

December 1964 to August 1967: As Chief of the Nuclear Operations and Safety Branch on the Commander in Chief Pacific Staff, was responsible for: managing the branch and supervising personnel assigned to it; Pacific Command (PACOM) nuclear weapons operations, protection and safety programs; maintaining and exercising the CINPAC Joint Nuclear Plot; chairing PACOM Single Integrated Operation Plan Force Application Meetings; preparing and submitting to the Joint Chiefs of Staff (JCS) reports on POLARIS operational Tests in the PACOM; representing the CINCPAC staff in meetings with the staffs of the Director JCS, Commander in Chief Atlantic, Chiefs of Military Services and Component Commanders of the PACOM; being Team Chief of Combined CINCPAC - Component Commanders of the PACOM; being Team Chief of Combined CINPAC - Component Commander Nuclear Weapon Operations, Protection and Safety Survey Teams; PACOM support of JTF-8 nuclear test readiness exercises in the Pacific; developing policy, correspondence and briefings in regard to the above; and coordinating on

regard to the above; and coordinating on studies, plans and correspondence in regard to command/control and dispersal of nuclear weapons (66%). In addition to the above, continued to accomplish the responsibilities of CINCPAC Nuclear Safety Officer (34%). As a result of the safety program which had been personally developed and safety surveys performed of PACOM operational units, the CINCPAC Nuclear Safety Program was considered by the Department of Defense to be outstanding. Officially cited many times, e.g., once by General Earle G. Wheeler (Chairman Joint Chiefs of Staff), twice by Admiral U.S.G. Sharp (Commander in Chief Pacific), and once by General Dwight E. Beach (Commander in Chief U.S. Army Pacific). The following is quoted in part from my Legion of Merit citation, received after departure: "Colonel Oldfield surveyed, combined and revitalized the nuclear operations protection and safety programs of the various component commanders in PACOM. He was instrumental in recommending actions to resolve many complex nuclear weapon problems of major importance to the Commander In Chief Pacific. His performance was highlighted by a singular capacity to achieve positive and beneficial results with the most economical use of manpower. The contributions made by him were of immeasurable value to the efficiency and war readiness of the Pacific Command."

August 1967 to August 1968. As Chief of the Technical Division of the staff of the legislatively established Military Liaison Committee (MLC) to the Atomic Energy Commission (AEC), responsible for: managing the division and supervising the personnel assigned to it; representing the Assistant to the Secretary of Defense (Atomic Energy) at meetings of the AEC-Department of Defense (DOD) Safeguard Committee; preparing the agenda for and attending bi-weekly meetings of the MLC; conducting formal policy level coordination of the related activities of the DOD and AEC management necessary to insure matching AEC capabilities for development and production with DOD requirements for all applications of nuclear energy; preparing implementing directives on nuclear materials and production for the President and the Secretary of Defense; developing communications with the Congressional Joint Committee on Atomic Energy; and accomplishing special tasks assigned by the Assistant Secretary of Defense (Atomic Energy) (60%). In addition was Chairman of the DOD Physical Security Standards Working Group (5%). This group developed new physical security standards applicable to U.S. nuclear weapons on a world-wide basis. During this period, personnel of the Technical Division accomplished one of the most significant safety studies ever to be published relative to the inherent safety of nuclear weapons. This study, plus two continuing studies in regard to safety in an accident environment required 35% of time.

Chapter IX

EXPERIENCE IN CIVILIAN JOBS

(As expressed in a letter to Col. Leonard J. Otten, Jr.)

September 24, 1980

Dear Len,

This is in answer to, "Write and tell me what you have been doing since you retired from the Air Force." That query from you has caused me to pause and reflect back over the past 12 years.

Prior to retiring I worked for Dr. Carl Walske, who was then Assistant Secretary of Defense for Atomic Energy. When I made my decision to start searching for a civilian job, Walske offered me his help in obtaining an opportunity for employment. Thus, I received job offers from Los Alamos Scientific Laboratory and EG&G (AEC's prime contractor for instrumentation and diagnostic work associated with the testing of nuclear devices). Since LASL seemed to function in a more stratified work/social environment than existed in the Air Force, I accepted the offer from EG&G to work on the staff of Dr. Galen Felt, their Executive Vice President.

On the day after Labor Day of 1968 I reported for work at the EG&G offices in Las Vegas, Nevada. Shortly after arrival I was informed that a 10% reduction-in-force was underway, as result of a cutback in their contract with the AEC. That was my introduction to a civilian job! Image, I could have spent 4½ more years in the stable and enjoyable life of the Air Force. Instead, I was starting an experience where there was going to be a 10% RIF every six months for the next 2½ years. By the time I received my notice I didn't have to do anything except pick up my pay. I had already emptied out my desk two months before!

EG&G hired me as a Scientific Executive to eventually work in a technical management position which was to develop during an anticipated company growth. Unfortunately, during my two years and eight months with them the growth curve when down instead of up. Therefore, I inherited the responsibilities of laid-off staff members. By the time I left, I had corporate staff responsibility for telecommunications, safety/security, purchasing/procurement and cost reduction programs.

Three months after I arrived in Las Vegas I received a call from the Department of Transportation in Washington, D.C. They offered me a GS-15 position in safety. I turning it down because I thought I owed EG&G something for giving me my first job in civilian life. That was a mistake which I have never repeated.

Functioning on the corporate staff of EG&G was an unusual, educational and boring experience. All the management people had gone through Sensitivity Training and they practiced T-Group techniques during their meetings and encounters with other employees. T-Group techniques are direct physical and indirect mental pressures to achieve results and relationships with other people. Every Friday we would have a staff meeting which would last all day. Afterwards, it would usually take up to three days to determine what little had been accomplished during that eight-hour session. Sometimes our staff meetings were held in a large room which was similar to what I thought was probably comparable to reception/selection room of a luxury-type whorehouse. The walls were covered with drapes. The rug was about 2 inches thick. All lighting was indirect. The background noise consisted of only muted classical music. On the floor were low, soft couches and large throw pillows. When I was in there I had difficulty restraining myself from yelling, "Stop the B.S.! Bring on the girls."

One day, six months after the President of EG&G had awarded me an option to buy shares of stock, my boss asked me if I had anything planned for lunch. I replied, "No." He then informed me that he had made reservations for us at his County Club. Since he had taken me there during my interview about three years before, I knew what he had on his mind. While we were drinking our second double, very dry martini an awkward silence developed. After it continued a couple of minutes, I said, "I know why we are here. You are going to tell me I am a part of the current RIF." He said, "I am glad that you realized it, because I didn't know how to tell you." To be honest with you, I was happy and relieved. A few months later he called me at home to find out why I hadn't stayed in contact with him. I said, "Why? What we had in common is past and has no relationship with my present, or future life."

The day after my final day with EG&G I was offered a better paying job with Holmes & Narver (another AEC contractor). I told them, "Thank you, but no thank you. I plan on taking a long vacation." Actually, as a result of my experience with EG&G, I had already made up my mind I would never again work for a company which was primarily dependent upon government contracts.

Some of the things I learned while working for EG&G follow:

- To dislike the games that many corporate people play with each other.
- Whereas loyalty was extremely important in the Air Force, it really doesn't count for much in civilian life, especially loyalty from an employee to his company.

For the next few weeks I did nothing except enjoy life with Bonnie and Cathy and party with our neighbors. They consisted of three Air Force families, an ex-movie starlet, a showgirl who was the girlfriend of a medical doctor, Woodie Douthett who was a retired Air Force Colonel, a dealer whose wife was a cocktail waitress, and a guy who owned an automobile agency.

I bought Bonnie two Scottish Terriers, Mac and Merrie Mischief, who were always falling in our pool. In the morning I would jog (while Bonnie walked the pups) and then exercise for about an hour. In the afternoon, I would sunbathe and swim in the pool. Usually, cocktail hour would start each day just prior to sunset in New York City.

Since this soon became a bore, the three of us went to visit Mike in Honolulu. At the time, he was a surfing bum who lived with two other guys and several girls (the fellows called them their housekeepers). The only piece of furniture in their home was a kitchen table, a couple of thousand dollars worth of stereo equipment, and several mattresses. During our visit we saw more of Oahu than we had seen during our three-year tour of duty over there. This was because Mike really knew where everything was located, including several hidden beauty spots.

By the time we returned to Las Vegas the recession of 1968-1972 had deepened. The hotel employees were on strike, the work force at the Nuclear Testing Site had been reduced by more than 50%, and the titanium production facility had been completely shut down. As a result, we decided to sell our so-called retirement home and buy a condominium. We lost money on the deal. However, we did love our little condo.

During this period, I realized I was a fool not to collect the unemployment compensation which I had coming to me. The first time I got into that line of people I looked around me and thought, "What in hell am I doing here?" At that moment, I went home and prepared a resume.

As a result, I had three interviews and job offers. I turned all of them down because I did not want to live/work in Los Angeles or Buffalo, New York. Fortunately, one day Claude De Lorenzo (formerly in the Reactor Division of DNS) called up and asked me if I wanted to go with him on a safety consulting job for Argonne National Laboratory. I said, "Yes!" Claude and I had a 60-day consulting contract. It was a good deal because we were paid 100 dollars per work day plus round trip tickets and expenses. Applying the principles we had learned at DNS we surveyed and then wrote a report which resulted in the reorganization of their entire safety organization and program. While I was at Argonne they offered me a job. I appreciated the gesture but turned it down because I thought negotiating for a job

while trying to determine what was actually wrong in their safety efforts might reduce probability of a objective effort on my part. Besides, I had absolutely no interest in living in the area around Chicago, Illinois. Evidently Claude did, because he was the head of their safety program from the spring of 1972 until he retired.

A few days after completion of our contract with Argonne the telephone rang. It was Dick Parker, a retired Colonel who had spent a good part of his career at Kirtland AFB. He has been laid off by NASA and was then working in the Executive Office of the White House. He asked me if I wanted to be a Management Analyst Consultant to President Nixon's Pay Board. Although I did not know what such a guy did I replied positively. Financially, it was the same arrangement that I had with Argonne. Being a consultant to an agency of the U.S. Government is a better deal over the short haul than being a Civil Service employee, because a retired military type does not have to give up any of his retirement pay. Besides, you receive full pay for each day you report to work whether you work 15 minutes or 15 hours.

So, I moved to Washington, D.C. where I rented a studio apartment on 16th and N. Streets. Except for coming home to Bonnie once a month (they gave me a round-trip to Las Vegas every 30 days), I lived there for four months. Time went by fast because I worked at least 10 hours per day seven days per week. Besides that, I had to go grocery shopping, cook my meals, clean the apartment and do my laundry (by hand). Parker had an apartment in the same building. Besides him, there were several other ex-aerospace industry people who worked on the Pay Board and lived as we did. Occasionally, we would gather in one of the apartments and eat/drink together. I can assure that living the life of an old, pseudo bachelor is for the birds and being surrounded by same is even worse. The majority of the other employees were blacks as is the majority of people who live in Washington, D.C. I enjoyed working with them. When I left, they threw a big party for me.

Every 30 days, the powers that be would offer me a Civil Service position. Since I had a good deal for myself, I would turn them down. Finally, because I hated the lonely life I led, I gave my 30 day notice to them. My final day with the Pay Board was the day after the Watergate incident was reported in the newspaper. After I arrived back in Las Vegas, I received a check for all of the overtime I had worked. This was a bonus, because my contract did not call for it.

While I was in Washington, Mike had returned home with two dogs. Since Merrie Mischief had given birth to three puppies, there was three people and seven dogs living in a two bedroom condominium. Bonnie nearly deserted the pack when Mike's Doberman gave birth to nine more pups. By the time I returned all twelve pups had been sold or given away. Bonnie, Cathy, Mac, Merrie and myself lived in

the apartment and Mike and his two dogs set up housekeeping in our two car garage.

During my final days on the Pay Board I had learned, that Bechtel was interested in hiring ex-military types with technical backgrounds. Thus, I submitted an application to Bechtel's office in Washington, D.C. before I left. About a month after I arrived back in Las Vegas I was interviewed and hired by Bechtel. We sold our home and rented an apartment for Cathy in Las Vegas, who was still a student at the University of Nevada. Then Bonnie, our two dogs and I moved back to the Bay Area. We bought a large four-bedroom home which had an attached three-car garage in Redwood Shores (located east of Belmont, California).

The headquarters of the Bechtel group of companies (all privately owned by the Bechtel family) is located at 50 Beale Street, close to the Embarcadero, in San Francisco. Bechtel is the largest engineering, management and construction organization of its type in the world. It has four other large office facilities in Texas, Maryland, Michigan and California. Plus, they had subheadquarters in Canada, France, England, Saudi Arabia, Algeria and Indonesia.

Initially I was the Assistant to the Manager of Engineering for the Scientific Development Group. Although I had a private office with a view of the Oakland-San Francisco Bay Bridge, I soon learned that it was not the job for me. The fellow I worked for wanted me to be his hatchet-man. One day I had one of the people he wanted to get rid of in my office. I heard someone snorting outside of my door. I looked up and saw my boss pacing back and forth in front of my office. After the soon-to-depart left my office, I went in to see Big Red (my boss). He yelled, "You came in the wrong way. You should have come in backwards because I am going to kick you in the ass." After hearing my explanation why the guy had been in my office, Big Red cooled off. However, I had made up my mind to stop working for him as soon as possible.

Instead of quitting, I did a formal and comprehensive study which proved conclusively that Big Red did not need an Assistant (Grade 28) but an Administrative Assistant (Grade 23). I then submitted the study to him. A couple of days later he called me in and informed me that he agreed with the conclusions in the study. I then handed him three different resumes which I had prepared and asked him to circulate them to different departments. That is the only way you can initiate a transfer within Bechtel. It is verboten to work such a deal for oneself; instead, transfers must be arranged between top management-level people. Two days later I accepted the position of Bechtel Area Safety Supervisor on the Alaska Pipeline Project. By accepting that job, my take home pay was more than doubled. Although Alaska is a part of the United States, you cannot get someone from the

Lower 48 to work during its long, severe winter environment without offering adequate compensation.

Bonnie and I sold our home in Redwood Shores. With the profit realized we bought our present condominium and one in Fairbanks, Alaska. One of the reasons I retired from the Air Force was because we were tired of moving. Despite that, we had bought five different homes in our first six years as civilians!

Although I am about to start writing about some of the most interesting parts of my work-life, I am going to have to be more brief. Otherwise, this long, boring letter is going to become a long, boring book.

In my opinion, Alaska is the last frontier of the United States. Its natural beauty, especially north of the Yukon, is breathtaking. Basically, from Fairbanks to the North Slope, there are only two seasons, winter and summer. Up there, winter starts in September and lasts through May. During the short summer the land comes to life with new growth and brilliant colors. In the field across from our home there were all kinds of wild berries and 23 different types of wild flowers. Also, for about two months after June 21 the days were 24 hours long. Naturally, for about two months after December 21 the nights were 24 hours long.

There are many rivers and thousands of lakes in Alaska. Despite the fact they freeze over with ten to fifteen feet of ice during the winter months, they abound with fish in the summer time. The wild life is fantastic. Wolves, fox, moose, caribou, sheep, goats, black bears, grizzly bears, etc. move about freely north of Fairbanks. Since many of them had never seen human beings prior to the start of the pipeline, they were only curious about the strange, two legged animals. Bears are dangerous, especially when they have their young with them. Despite that, no pipeliner was attacked by a bear. In the early and late summertime there were millions of water birds migrating respectively north and south. Down around Valdes you see thousands of eagles around the rivers where the salmon spawn during the late summertime. During the wintertime, the only birds you see are large black ravens. I don't know how they survive the low temperatures, but somehow they do.

I worked six days a week in the various workcamps. We had 19 camps. Each was named after a nearby location which had gotten its name during the gold rush days; names like Dead House, Happy Valley, Livengood and Coldfoot. In Fairbanks, many of the streets are named after the famous working women who operated there during the gold rush. I traveled between the camps either by air or pickup truck, depending upon the weather. I made many trips to and from Prudhoe Bay and Valdes. Fortunately, I was able to spend at least one day per week with Bonnie in our condominium which was located close to the University of Alaska.

During her stay in Alaska, Bonnie had an interesting and satisfying life. Why? Because she choose to remain active. A few of the wives withdrew to the confines of their homes. The impacts of the long, cold and dark winters can have disastrous effects on the withdrawn. Bonnie worked with exceptional children, she walked Mac (Merrie Mischief had died) three to four times a day in the dead of winter; she took courses in native culture and skin sewing at the University of Alaska; she participated in a Bible class; and she visited Prudhoe Bay, Kotzebue, Nome, Mount McKinley, and the work camp at Isabell Pass. While she was in Alaska, Bonnie gained many friends that she still has. Thanks to Bonnie, our Alaskan escapade was a real success.

My job in Alaska came to an end when Bechtel renegotiated their contract with Alaska Pipeline Service Company from a construction management contract to a service contract. We were happy. After 19 months both of us had seen all of Alaska that we wanted to see. Besides, we had no desire to spend our third winter up there. While we were there, Cathy had married and Mike had moved into our condominium in San Carlos.

After we came back to San Carlos, we shoved Mike out of our nest, and then started redecorating it. Because of redecorating I turned down job opportunities in the States and Iran. After that four month task was completed, Bechtel asked me to go to Sumatra, Indonsia. I accepted and it turning out to be the best job I have had since I left the Air Force.

The job was located at the Arun Gas Field, Lhoksukan (5° North of the Equator), in Ache Province, Sumatra, Indonesia. If you have a world atlas, you can spot it about 25 kilometers south of Lochseumawe. The Arun Gas Field was the richest one of its kind in the world, primarily because the gas is saturated with condensate (nearly pure naphtha) which does not need refining. From the 32 producing wells they got 15,000 barrels of condensate a day. The field is an extremely dangerous one to work because it is under 11,000 pounds per square inch of pressure. They nearly had some blowouts while I was there. Since then, they have had two which had to be capped by Red Adair and crew.

Our project was developing the Arun Gas Field. This consisted of constructing administrative and control buildings, wellstream cooler facilities (for cooling the gas and abstracting the condensate), generator and compressor structures (for generation of electricity and repressurizing the gas), and the interconnecting pipelines. Gas came out of the wells extremely hot and under high pressure. Then the pressure is reduced and the gas is cooled. As a result, the condensate and gas separate. The part of the gas which is repressurized is re-injected back down into the gas field. Thus, maintaining the pressure of the field enhances its productivity.

Our work force was made up of Americans, Japanese, Koreans, Frenchmen, Canadians, New Zealanders, Englishmen, Scotsmen, Australians, and over a one thousand Indonesians. I worked with them all. At times, my work experience were unbelievable.

My job was safety and security but as time went on I also assumed responsibilities in Personnel, Procurement, and Contract Administration. It was a great place to work, especially for the man who was willing to do more than his assigned responsibilities. Such an effort paid off because it made time go by fast and my next job I was appointed Project Services Manager.

From the arctic waste of the North Slope, via San Carlos, to the lush jungles of Northern Sumatra! As far as wildlife, what they didn't have in Alaska they had in Sumatra—elephants, tigers, snakes, crocodiles, lizards which were six feet long, monkeys, orangutangs, fruit bats with seven-foot wing spans, and all kinds of tropical birds. The native domesticated animals were the same as ours, plus water buffalos. All of the domesticated animals were left free to roam, so our dump trucks were constantly running them down. Although we didn't have to pay for the cats and dogs, every other animal had a price. In fact, a human being who had been killed cost only half as much as a water buffalo. Sad, but true!

There are more Moslems in Indonesia than in any other part of the world. The radical Moslems are in underground organizations, some of which are located in the mountains of the Ache Province. They are in hiding because Sukarno was and Suharto is a military-type dictator. Such individuals are not about to let a bunch of religious nuts take over their country. After all, the people who control places such as Indonesia are the ones that get the cream. Despite the efforts of Sukarno and Suharto the radical Moslems were growing in strength. Now, they come out of the hills and function as terrorists, destroying government property and killing non-Indonesians in order to draw attention to their cause.

The Achenese are small, brown and attractive people. When they are happy, their faces explode with joy. When they are angry, they want to destroy the source of their anger. I know, having experienced two serious attempts on my life.

The Achenese are unique. They are Achenese first, Moslems second, Sumatrans third, and lastly Indonesians. This is despite the fact they are governed in the reverse order, that is, the Army, the Police, Chamats (political leaders appointed by the government), and Village Leaders. Many of the Achenese live as they did a thousand years ago. True, they have bikes (I have seen families of five on a single bike), motorcycles, and a few ramshackle buses and trains. If one is U.S. expatriate type, he doesn't fool around with the girls! That is a very fast way to get chopped up. Of course, if an expatriate wants to marry a Jungle Bunny he starts negotiating

for her with a Village Leader and becomes a Moslem, which including circumcision, if not previously accomplished. Negotiating includes selection of one of four virgins and a pay-off of several thousand dollars. To leave the country without one's bride requires another pay-off. I know that it cost one guy over \$16,000 for just a few months of trying to teach his wife how to eat with a spoon.

Whereas Bechtel employees had adequate medical care, the Indonesians do not, especially those who live out in the boondocks. Even today, many Indonesians trust the practitioners of black magic rather than their poorly trained medical doctors, who are less qualified than most registered nurses in the U.S. This is a tragedy, especially when one considers the horrors of the tropical diseases which prevail in that part of the world.

Another sad thing about Indonesians is that a high percentage of them cannot read or write. Why? Because until 1977, it cost money to go to school. The higher the grade, the greater the cost of the schooling. Thus, only the children of the wealthy were being educated. Unfortunately, the majority of people had only sufficient funds for survival. Dictators like their colonial masters before them maintain their control by keeping the masses uneducated. However, the Indonesians have a tremendous desire to improve themselves and their standards of life. As a result, in 1977 Suharto, in fear of losing some of his control, finally agreed to provide free education for all of his people.

Although I had many friends while I was over there, the guy I was closest to was my driver, Muctar. He was an Achenese with wild hair and betel nut stained teeth. He might have weighted a 100 pounds, but I doubt it. He could not read or write but his inherent intelligence was on the brilliant side. When we met, we could only speak our respective native languages. Somehow, we learned to communicate with one another in a short period of time. Our language became a combination of Indonesian, Achenese and English. Since he was a linguist in comparison to me, the majority of our words were in English. Since I had over 100 villagers working as security men, Muctar acted as my interpreter with the other natives. Somehow he was always capable of understanding of what I wanted to transmit. Thank the Lord! We used to argue on occasion. In fact, after one such argument he refused to work for me for a couple days until he realized that his replacement was not doing the job for me that should be done. Muctar saved my life one day when a bunch of villagers got mad at me. If you ever had a group of wild eyed guys approaching you with their parangs (machetes) in the ready position you will know how it feels to have your skin start crawling. Muctar had two wives and children by them both. Thus, he maintained two separate residences in two different locations. If I ever go back to Sumatra I will visit Muctar. He was a friend!

Working outside during the majority of each day in the tropics is something else. However, one adapts to new physical environments relatively easy. The mornings over there were fantastic, the best I have ever encountered. From ten in the morning until four in the afternoon it was as hot as exploding firecrackers. Fortunately, winds from the Strait of Malacca would reach us late in the afternoon each day. Thus, our nights seems to be cool. It would also cool during and after rain storms. As the result of the blazing sun I lost 38 pounds and my hair bleached out. Darn it, neither change turned out to be permanent.

While I was out there, Bonnie went on a 22 day tour of Japan, Taiwan, Hong Kong, Bangkok, Singapore, Bali, Kuala Lumpur, Philippines, and Korea. We were together from Hong Kong through Bali. That was the best R&R which I took over there. My previous one had been to Kuda Beach in Bali. It was the one place I could go where my expenses would be less than my per diem. Besides, Kuda Beach is the most popular surfing beach in that part of the world and was considered to be a resort by Australians and Europeans. The first time I walked on Kuda Beach in swimming shorts I also learned it was an all nude beach. True, there was a few people wearing complete suits or the bottoms of bikinis. I spent eight days pretending to look into the eyes of the beach people.

Upon completion of my contract, I met Bonnie in Honolulu where we vacationed for two weeks. Then we went home where we visited Cathy and her family. We had become grandparents while I was in Indonesia. Then we visited Mike and his new wife. A lot had transpired during my 18 months away from home. Next, we took a car trip up through Northern California, Oregon and Washington. That part of the country is beautiful in the fall. After returning home, we decided to go on vacation to Puerto Vallarta, Mexico. When we returned from there, we decided it was time to stay home and rest.

The rest didn't last long, because Bechtel called me up. They told me that one of our people had been killed and another had been severely wounded by radical Moslems. They asked me if I would go back to Sumatra. Naturally, I replied affirmatively because the Bechtel employees over there were friends of mine. The next day I was on my way back to Sumatra. By then the Army had moved their Special Forces into the area and our people were on the edge of panic. When I walked into the recreation hall that first night no one could believe their eyes. They thought I was crazy to return. After about five weeks the situation more or less returned to normal. However, there was one exception-the laughter at the worksites and in the camp had departed for good. Two weeks later I returned home.

Eight days later I started working on the planning and procurement associated with a pipeline project in Hassi R'Mel, Algeria. By now it was February 1, 1978. I

told my bosses that I was willing to go, but only if Bonnie lived over there with me. They said, "No problem." On April 1, 1978, I departed for Algiers, Algeria with a promotion and pay raise in my pocket and a promise that Bonnie would be following me by the middle of August.

Romantic Algeria, at one time a bread basket of the Roman Empire, was controlled through the years by various European nations, the last of which was France. I don't know what the French did wrong in Algeria but whatever it was really screwed up the people of Algeria for at least the next 50 years. It turned out that the heroes of the Algerian revolution were all communists and evidently trained in Russia.

The people of Algeria now have communist type government modeled after the Soviet Union. The only competition that exists over there now is between the various departments of government. There is only one railroad, one airline, one bus line, one bank, one company building trucks, one etc., etc., etc. All of them are owned and controlled by the government. Russians were all over the place. The technical advisors to our client were all Russians. North of Hassi R'Mel was a MIG-23 base. Close by was an entire Russian community of military advisors and their families. One common aspect between the dictatorships of Algeria and Indonesia is that the top people get the cream and the little people get nothing.

When I was in Algeria, the success of the communist system to the masses was not apparent. Although the farms on the coast are mechanized, their productivity does not compare to similar ones in the United States. There is a critical housing shortage. Yet, there are more unfinished, high rise housing projects in Algeria than in any other place in the world. I don't know what the unemployment rate is but you can be assured there are a lot more guys standing around doing nothing in the streets of the cities and villages than there are working. The education system consists primarily of empty school buildings in the majority of towns and villages. True, the system functions to a degree in Algiers and the other major cities. Why is this so? Because the Algerian government still hasn't trained the necessary teachers to man the empty schools. When the French departed, the teachers departed with them.

Despite a hard-line, communist dictatorship, the French influence still persists. If you want to rent a privately owned building, there are two rents one of which is on top of the table and other below it. The one in the open is reasonable because it is heavily taxed by the government. The hidden one is extremely high and the owner insists that the payments be deposited in his Swiss bank account. I know because I spent months trying to rent office space in Algiers. There is a tremendous black market in money. Although illegal, you can easily get ten times the government rate by trading dollars with the various dealers. Of course, such dollars

must be smuggled into the country because every cent one brings into the country much be declared on entry. On departure, only official bank transactions are acceptable to explain the difference in cash on hand. Government and police officials are subject to bribery. Many of them do not hesitate to suggest a friendly gift for services to be rendered. My technique with the police was to say slowly and repeatedly, "I am an American, I do not speak or understand your language." They would start yelling louder and louder and I would smile and repeat my statement. Finally, they would give up in disgust and wave me on. There are two official languages — French and Arabic. Government officials will only speak in one of those languages. This is true, even if they are fluent in English. Since most foreigners do not speak Arabic, the common language with them is French. Thus, I spent the majority of my free time practicing French and keeping my mouth shut.

While I was over there the first time I primarily worked and lived at the Hotel de la Baie, a resort hotel on the beach a few miles west of Algiers. After a month or so, we had people at Arzew to receive our camp buildings, pipe, and construction equipment and material. Also we had people living at Ghardaia in the Sahara and working at Hassi R'Mel preparing the camp site. This was a relatively horrible time period. We had a contract with the government, but the National Bank had not approved it. Thus, we could not have a payroll and we were constantly on the edge of going broke. Bechtel threatened to pull out and the government kept promising us that the National Bank would soon approve our contract. Although we finally managed to get our supply ships unloaded, customs refused to clear the incoming material. Imagine a year later we still hadn't cleared everything through customs. We were learning the hard way the results of the competition/conflicts between the various departments of the government. In July I learned that Bonnie would not be coming over because she was having difficulty passing her physical. So I gave my notice and returned home. Surprisingly, eight months later Bechtel asked me to return for the final three months of job. With Bonnie's permission, I returned to Algeria.

This was during the spring of 1979. Initially, my time was divided between Hassi R'Mel, Arzew, Hotel de la Baie and Algiers. Thus, I spent many hours driving on the dangerous roads between those locations. In fact, I drove over 5,000 miles each month. We worked 10 hours per day seven days per week which is normal for an overseas construction job. However, the pay was good because I was grossing \$8,000 per month.

After I returned from Algeria, Bonnie and I went on a tour of Europe. Since then, we haven't done anything. During the past week I have been informed that Bechtel is going to ask me to go on another construction project in Algeria. Despite the money and the opportunity to work again with friends of mine, right now I don't think I will accept the offer.

Well, Len you asked me, "What I had been doing since I left the Air Force?"
I hope this letter hasn't bored you to death.

Sincerely,

Charlie Oldfield

Chapter X

WRAP-UP

Writing the story of one's life is a difficult task, especially when you are not a professional writer; primarily, it is based on the memory of a 75-year-old man; and last but not least, when your memory reopens old wounds, which you have to face up to again. The title was easy, despite the fact I have never won a prize in my life. Why? I was lucky to have: been married to Bonnie Adele Spangenberg for 49 years, eight months and 21 days; been a father to Michael Charles Oldfield and Catherine Adele Oldfield; been a grandfather to Chuck Dunbar and Greg Dunbar; and a new companion in life, Gloria Elizabeth Otten. Despite my handicaps, "I WAS LUCKY" is a true and private story for my loved ones.

I had no desire to write another war story, despite the fact of being a fighter pilot was an exciting and proud experience for me. The first three chapters cover the first 21 years of my life. The next four chapters cover somewhat different experiences which I had in the Army Air Corps and the United States Air Force. Chapter VIII was abstracted from my official military records in 1968. Chapter IX is a copy of a letter I wrote to Col. Leonard J. Otten, Jr., a friend of mine who was the husband of Gloria E. Otten. He passed away on September 24, 1990.

Before I start a diatribe about what I think is wrong in our country today let me say, "I am proud to be a citizen of the United States and prefer living here rather than in any other country in the world." No, I am not going to suggest that the Republican revolution in the House of Representatives should be passed by the Senate and the President. Why not? When Gingrich started his show and tell act by flashing a plastic card, I decided to read it. I was surprised, because it was obvious that Gingrich and his cohorts thought they could get away with treating the taxpayers like village idiots. On January 5, 1996, 760,000 federal employees had not been paid since December 16, 1995. Why not? Because congressmen and senators of both parties have been playing politics for the past several months. After all, they and their staffs have always been paid. Their attitude is like the French Empress who was told that the French people didn't have any bread to eat. She replied, "Let them eat cake!" When I was a child I was taught to respect elected officials and I did. Unfortunately, after observing the records of politicians for over 50 years, I only respect a few Republicans and a few Democrats.

There is a number of things I don't appreciate in today's United States and they are: that a high percentage of qualified and able voters don't vote; the overall morals of our people are now at the lowest ebb in the past 75 years; the importance of self discipline is not understood, or practiced by the majority of our people; crooked public officials; politicians who are in the back pocket of some lobby, such

as the NRA; racists; groups which are against certain established religions; news media which are no longer objective in their reporting; talk show hosts who are rabble rousers; writers and publishers who produce kiss and tell books; and, bums who do not provide adequate support for the children they fathered.

Since I have not covered in detail the majority of my life, I have not mentioned old friends, such as: Artie and Vera Floodquist; John and Shirley Walsh; John and Agnes Griffin; Ed and Shirley Leslie; Irv and Mary Williams; Gus and Wilma Jean Sonnenberg; John and Marty Guilliams; John and Winnie Des Jardines; Chick Allison; Olga Widnes; Fran Shoemaker; Elaine Ursua; Rochelle Oldfield; and John R. Perrott. To those I haven't listed, please blame my memory.

I have always considered the radical left fringe of people, or the radical right fringe of people as a threat to our country. During my youth, that was the role of the radical left. Now, with the Oklahoma City murder bombing, the threat is from the radical right which may include the militias of some states. Any organization which plans to overthrow the Government of the United States should be eliminated.

God Bless and Protect all of you.