

**(Adapted for the 40th Bomb Group Association by Roger Etherington)
(used by permission)**

The War Years

**The Experiences of a B-29 Flight Engineer in World War II
By
Paul W. Hunter**

Dedicated to:

Helen, my wife of 50 years, our five children and five grandchildren, in the hope that this account of a few events of World War II will help them to understand and appreciate the part my friends and I had in that effort.

Acknowledgments:

My sincere thanks to Helen for her advice and the first rewrite. Also to J. Ivan Potts Jr., for his example, advice and encouragement.

Published: November 1999

Note:

The following memoir, originally published by Paul Hunter in 1999 is a fascinating and well-written account of his experiences during World War II. Paul wrote these memoirs primarily to share them with his family. A limited number of copies were also made available to members of the 40th Bomb Group Association and to the Pima Air Museum.

These memoirs are now being published on the 40th Bomb Group Association Web Site, with permission.

September 2003

CONTENTS

Chapter 1	Preparing For War
Chapter 2	The Private
Chapter 3	The Cadet
Chapter 4	The Student Officer
Chapter 5	40th Bomb Group At Pratt
Chapter 6	Moving Overseas
Chapter 7	India
Chapter 8	Tinian
Chapter 9	The War Ends

CHAPTER I

PREPARING FOR WAR

December 7, 1941, was a Sunday like many others on the farm in Labette County, Kansas. We got up early, milked the cows by hand and fed them and the calves, hogs, horses and chickens. Breakfast was always ample, usually eggs or pancakes, ham or sausage, and oatmeal. Then it was off to Center Bethel Church for Sunday School and Church.

My mother's Sunday dinners (served at noon) were always plentiful and consisted almost entirely of home-grown and preserved vegetables, fruit, meat and home-baked bread, with pie or cake for dessert

The day's tranquility was broken in late afternoon when word came over the radio that the Japanese had attacked Pearl Harbor. Why would the Japs attack us? And where was Pearl Harbor? We didn't know, but I believe we knew that our world had been drastically changed that day, and that more changes would rapidly follow.

Of course, we knew we were in a world at war. Hitler's troops had been blitzing Europe for over two years. Our own Congress had passed a military draft law in late summer of 1940. Cousin Arnet Hiatt was the first man called up by Labette County Draft Board No. 1, even though he would soon pass the 38-year upper age limit. Glenn Harshaw, who had become sister Mildred's husband in May, had joined a National Guard unit at Coffeyville and had been on active duty near Little Rock, Arkansas, since early in the year. Mildred had spent the summer with him, but was now filling her teaching contract at Fairview School east of Parsons, Kansas.

Our national policy was to supply England and its allies with war materials. One result of that effort was the building of the Kansas Ordnance Plant southeast of Parsons. The first announcement came about June 1. Seventeen-thousand acres of land were condemned and construction started almost immediately. Production of artillery shells started in late winter. Many friends and relatives living in the affected area had in little more than three months bought farms elsewhere, moved, and started life over again. Our family had spent a considerable amount of time looking for a new location as the original plan would have taken all of the home farm east of the railroad tracks, leaving no cultivated land to operate there. That didn't come about, as the final plant boundaries left the farm intact, but included half of the Barrier farm and all of the Campbell, Pell and Carter farms to the north. So we were quite aware of preparations for war. We certainly didn't expect it to come to us so suddenly and with such disastrous results.

On December 8, President Franklin D. Roosevelt delivered his well-known "Day of Infamy" speech to Congress, followed by our declaration of war against Japan. Germany and Italy then declared war on us and on December 11, we declared war on them.

Some friends my age had expressed pacifist leanings. I had no such feelings, and felt that if Uncle Sam called me to serve, I would be ready. The draft was soon expanded to ages 20 through 44, so of course I registered. I could have asked for a farm deferment, but did not.

In April when Mildred's school was out for the year, I went with her in their 1935 Ford to meet Glenn at Camp Roberts, California; then rode the bus home. Dad had just taken the mumps when we left. I had them after I got home. Somewhere in the desert in Arizona the pulley on the end of the car's crankshaft broke, leaving us without generator or water pumps. We nursed the car along some 35 miles to the nearest repair shop and got another pulley put on. Another hour down the road, the spot-welds on the new pulley broke, so we nursed the car along another 30-odd miles to another shop. They couldn't get another pulley until the next day. I asked if they couldn't weld it together again, and they agreed to try. That welded pulley was still on the car when they traded it seven years later

Glenn urged me to try for pilot training in the Air Corps. That training required 20-20 uncorrected eyesight. I had worn glasses since age 10, so I didn't try. Later I wished I had tried for it. A couple of times later on, I was able to pass the 20-20 eye test.

The letter was dated July 22, 1942. "Greetings...."Followed by instructions to report to Labette County Draft Board No. I on August 4, 1942, for examination and, if accepted, induction into the Army.

On August 4, more than 40 of us gathered at the draft board office in Altamont, Kansas, along with many family members and friends. Included in the group were high school classmates Paul Eichhorn and Bob Hours, plus perhaps a dozen others I knew. We walked to the Frisco train station and boarded a train heading west. An odd way to get to Fort Leavenworth, I thought. We changed trains in Fredonia, Emporia, and Kansas City, arriving at Fort Leavenworth late in the day. Next morning, processing started. Stark naked physical exams and short-arm inspections were new experiences for all of us. By mid-afternoon, most of us were told we had passed, and were told to go home, get our affairs in order, and report again to our draft board on August 19. The train ride home was on the Katy from Kansas City, a much more direct route than the day before.

The next two weeks flew by There were several farewell parties and dates with a half-dozen different girls. The most memorable was with Betty Warren, whom I had met at the National 4-H Congress 2 1/2 years before. The Warren farm was west of Garnett, Kansas. The last half mile was a dirt road. Heavy rain had fallen that afternoon. The Warrens had no phone, so I stopped at the neighbors' home on the corner. They told me I would never get down the mud road and offered to lend me a pony. I accepted and rode down to the house. What could we do for the evening? Only visit with Betty's parents and younger sister. I took the pony back, put him in the barn and drove home. I was sure I wanted to see Betty again.

CHAPTER II

THE PRIVATE

August 19, we reported again to the draft board. This time it was in Oswego at the Katy train station. For reasons unknown to me, I had been put in charge of the men for the trip. They were all well-behaved, and there were no problems. Our \$50 a month pay started that day. That was quite a raise from \$21 a few months earlier.

The next day processing started again. Uniforms were issued, and the clothes we had worn there were sent home. We had a quick physical, apparently to see if we had contracted a venereal disease in the past two weeks. We were asked if we would object to serving in the Air Corps. Of course I answered no, but thought the chances of an Air Corps assignment were slim. We had PE every day, and twice had drill instruction. We were anxious for shipping orders to our next assignment, and mine came quickly. August 24, along with a few hundred others, I was on a train headed west. Bob Houts was in the group. Otherwise, I knew no one.

Two days later, we got off the train in Salt Lake City and went by Army truck to an Air Corps basic training base near Kearns, Utah. Processing there consumed about four days and included GCT (IQ) and aptitude testing to see if we qualified for any of the various technical schools the Air Corps used to train its personnel. Following the tests I was told I could have my choice of training schools, as I had passed all the tests. Airplane mechanics school was my first choice. I felt my two years of auto mechanics in high school and two years of engineering courses in junior college would serve me well, which they did.

One of the tests I recall was for radio operators and consisted of Morse code signals. We were to mark "plus" if two signals sounded alike, "minus" if they did not. All of them sounded alike to me, so I marked pluses for a while, then minuses, thinking they couldn't all be alike. A red-haired guy named Peterson in my barracks had told me he would give anything to go to radio operators' school. The poor guy didn't pass, but I did. So who said life is fair?

The base at Kearns was a work in progress, with much construction still going on. It appeared to me things were poorly organized. I blamed that on the newness of the base and construction confusion. Later I concluded I had been naive. It seemed poor organization was typical of most Air Corps bases to which I was assigned.

One evening I went with a barracks mate to the PX (Post Exchange) for some toothpaste. He handed the buxom clerk a \$5 bill. She handed back a few cents of small change and four silver dollars. That wasn't unusual in Utah in 1942. He looked at the change in his hand and said, "Damn those silver dollars! I've got so many of them in my pockets now, my pants hang 2 inches too low."

The buxom gal leaned a little closer and said, "That's nothin', Buddy. Less than that would pull mine clear off." Neither of us asked her how much less.

One morning about a dozen of us from my barracks were assigned to KP (Kitchen Police) at the officers' mess. We met a truck at the appointed time and were taken to a small mess hall that served only lunch. Someone told the cook in charge of us that we had had no breakfast. He informed us we should have eaten already as he didn't do breakfasts. Of course no one had told us. After mumbling awhile, he went into the cooler and sliced round steaks off a side of beef. Soon we were having a steak-and-egg breakfast.

Shortly before the officers started arriving at noon, someone shoved a baker's hat on my head and said, "You're a waiter." With no more instruction than that, I managed to serve food and drinks to my table without spilling anything on anyone, which was good enough for me.

After 10 days at Kearns, I found my name on a list to be shipped to Lincoln, Nebraska, to go to airplane mechanics' school. Once on a shipping order, you were excused from any formations or detail assignments. So I could loaf until time to go to the train. Basic training? I may have had two days of what might be considered basic military training. Did I care? No. I was ready to leave Kearns' blowing sand and go to the next phase, wherever or whatever it might be.

This time the train headed east, getting us to Lincoln two days later. The base there was new, but construction was nearly complete. Housing was in hundreds of barracks we called tarpaper shacks. Each barracks was built on a 20-by-100-foot concrete slab. The walls had a 2-by-4 studding every 8 feet, with two horizontal nail ties between. These were covered on the outside with a 1/2-inch-thick tarpaper product similar to that used under the siding on houses today. The studding was bare on the inside. How these flimsy walls held up the tarpaper roofs, carrying a snow load, I don't know. Heating was by three Warm Morning coal stoves spaced 25 feet apart down the middle of the barracks. The first cold days showed poor planning of stove locations. The end bunks were over 20 feet from a stove. All others were 12 1/2 feet or less. Many of the guys had no experience firing a stove, resulting in much smoke and air pollution from the thousands of stoves in use.

A central latrine served each block of barracks. To the right of the door were 20 identical toilet stools with no partitions between. To the left were an equal number of hang-on-the-wall urinals. Across from all these were the lavatories and mirrors. Behind all this was the shower room with 20 or more shower heads and again no partitions. Where was the privacy in the life of a private?

Four days after arrival at Lincoln, we started AM (airplane mechanics) school, which was set up in the hangars near the runways and over a 1/2-mile march from the barracks. School was divided into two-week phases such as structures, controls, engines, propellers, instruments, etc. Most instructors were airmen who had some schooling but were short on hands-on experience. Some civilian teachers had been recruited. I gathered most of them may have been good teachers but didn't know much about airplanes. Among them were a former coach at my high school at Altamont, Kansas, and a young lady who had been a year ahead of me in high school. I didn't happen to draw either of them as a teacher, but did visit coach Kimmerer and his family a couple of times.

Need for AM school graduates was so great that they soon went to two shifts and later to three shifts daily. On the night shifts, I had trouble staying awake and concentrating. Coffee seemed to help some, and my consumption increased. Cigarettes seemed to help, too. My occasional cigarette of pre-war days soon became a pack a day and went up from there.

Most weekends we could go into town. I believe I saw all the University of Nebraska's home football games that fall. Nebraska's 1940 team had lost to Stanford in the Rose Bowl; however, the 1942 team did not play at that level. One weekend I hitchhiked with Dean Law to his home near York, Nebraska. His dad had been hurt ill a corn-picker accident that fall and was still house-bound. I was able to help Dean catch up on a few things around the farm.

The mess hall cooks went all out to serve a great Thanksgiving dinner. For some reason the leftover turkey was kept until Sunday evening, then served alongside the usual Sunday evening cold cuts. I like turkey, hot or cold, but somehow that cold turkey did not look appetizing, so I ate cold cuts. Next day, I learned about 800 men had been hauled to the base hospital Sunday night. All available stomach pumps were in use all night. The mess halls were short on refrigeration, and the turkey just hadn't kept that long.

In early December, Dad, Mother and my brother, Harlan, age 9, came by train to Lincoln and spent the weekend in a downtown hotel with me. It was surely good to see them, especially since I had no idea when I might get any leave time to go home. I wrote to them regularly, and Mother wrote often. Our only phone contact had to be from a pay phone on the base.

A barracks mate, Dan Rasmussen, and I accepted an invitation through the Red Cross to spend Christmas with the Paul Versaw family near Lincoln. I believe there were five children, the oldest a married son a little older than I was. The family had lost their farm in the '30s and were living in a rented farm house. They didn't have much to share but were anxious to make two airmen's Christmas Day a little brighter, which we appreciated.

Around Christmas time, I was notified to appear before the cadet board for an interview. After some inquiry, I learned that a few top graduates of AM school were being offered the opportunity to go to cadet school to become Air Corps engineering officers. Engineering officers were in charge of aircraft maintenance in the Air Corps tactical squadrons. The possibility sounded good to me, so I arrived at the cadet board office at the appointed time with uniform clean and shoes and brass shining. Interview questions had to do with leadership

experience and appeared to be designed to see how well I could think on my feet. I left the interview feeling it had gone well. However, the five officers on the cadet board had given no clue as to their findings. Several days later, I received notice that I had passed and would be eligible for transfer to cadet school on completion of AM school.

January- 7, 1943, was scheduled to be our last day of classes. We were happy to be finishing, because we had heard rumors that an additional phase was to be added, which would consist of living in tents and working on airplanes for two weeks. Doing this in the Nebraska winter was almost enough to make you consider deserting. The day was cloudy and cold as we crunched our way through the snow, marching to the school hangar for the 4 pm. class. I hadn't felt well all day but surely didn't want to miss the last class. An hour or so into the class session, the instructor told me to go sit in his office until I felt better. I have a vague recollection of an ambulance ride to the hospital. I woke up to see a nurse standing beside me. She said I had meningitis and had been out of it for over four days. About a dozen other men were in the ward, which was quarantined. Each of us had our own room and was told not to leave our room or have any contact with the other patients. As I began to recover, however, I did have brief contact with some of the other patients. Otherwise, I saw only the doctors, nurses, and orderlies who cared for me during my four-week stay in the hospital.

Treatment was with one of the new sulfa drugs. Little was known of side effects except for possible kidney damage. I was told I must consume four quarts of liquid (mostly water and fruit juices) a day. All liquid intake and output was measured and the output tested daily to be sure the drug was being washed through. At the end of the four-week quarantine, I was feeling well and was sure I had completely recovered.

February. 13, I was dismissed from the hospital, and two days later I was given a 15-day convalescent leave and caught the train for home. Dad stared at me, apparently in disbelief that I could look so well after having meningitis.

A highlight of the visit home was getting to see my first niece, Phyllis Harshaw, born February. 10. Six weeks later, she and her mother returned to California to meet her dad. Glenn, and stay there until he moved to the Pacific.

I was able to see both of the girls I had been corresponding with, Betty Warren and Ruby Robinson. No, they didn't know about each other. Ruby was five years younger than I. By the time I returned to Lincoln, I concluded I probably wouldn't see her again, but I had different feelings for Betty.

On the train ride back to Lincoln on March 2, I pondered several questions. Had I been given credit for finishing AM school? If not, had the rumored additional phase been added to the school, and, if so, would I have to take it to finish? Had my absence upset my opportunity to go to cadet school? Next morning I inquired at the squadron day room (office) and was told to go to the school office to find out. I had gone perhaps a half block in that direction when I heard someone calling my name. An orderly from the squadron day room told me I was wanted on the phone. It was the sergeant at the cadet board office. He asked if I had recovered and was feeling all right, then told me he was making up the shipping orders for the next group to go to cadet school and my name would be on it. So all my questions were answered, and I had nothing to do but loaf until I was shipped out.

CHAPTER III

THE CADET

Three days later, I was given a piece of paper appointing me an Aviation Cadet along with shipping orders to Boca Raton, Florida, for basic training. Also included was a 50 percent raise to \$75 a month. Also on the shipment were an instructor from the AM school and five other recent AM school graduates. We had Pullman accommodations from Lincoln to Chicago. There we were told no Pullman berths were available until the next day. It was our first day as cadets. We wondered what punishment awaited us if we were late to our first post and our only excuse was refusal to ride coach. So, we rode coach from Chicago to Boca Raton, sitting on our baggage the first few hours because the train was that crowded. The second evening when returning from the dining car, a first lieutenant stood up, reached out his hand and said, "Hello, Paul." It was Cecil Tackett, who was a year ahead of me in high school and junior college. He was then flying submarine patrol from a Florida base. Later he flew B-29s from Saipan.

Living quarters at Boca Raton were quite a contrast to the tarpaper shacks at Lincoln. We were housed in the Boca Raton Club, which the Air Corps had taken over for the duration of the war. It was a luxury hotel built in the '20s and operated as a private (members only) club. Of course, all the fine furniture had been stored. Rather than two people in a large room, we had eight sleeping in bunk beds. Meals were in the hotel dining room. We ate from metal trays, not from the hotel's fine china and silver. Each room did have a large, private bath, which was quite a luxury in the Air Corps.

Training consisted of much marching and short-order drill and classes in military history, tactics, and officer conduct. I was finally getting the basic training I had missed in Utah. A few Sundays I walked the three or four blocks to the beach for sun and swimming, my first time in salt water.

Training at Boca Raton was scheduled for six weeks. Toward the end of the fifth week, my name appeared as a supernumerary on the next shipment to Yale University. Supernumeraries were listed to fill in any dropouts from the shipping list. I was packed and ready, but wasn't needed. However, it did excuse me from drills and classes for a week. I was able to enjoy the Florida weather and the beach while trying to stay out of sight.

April 17 started another train ride, this time in a Pullman. I was impressed by the sight of the capitol in Washington, DC, and by the tremendous crowds in Grand Central Station in New York City.

The Air Corps had taken over some space at Yale University to house the cadet engineering school. Housing was in some of the quadrangles that had housed Yale students. My roommates on the third floor were P.K. Birdwell, Chuck Kremets, E.L. (Sammy) Baw, and Eldred (Bump) Hadley, who was with me in the 45th squadron later. All were former AM school instructors with several years of military experience. The first three were comedians of questionable sanity. Most of our time in quarters was hilarious.

Hadley's wife and year-old son had come to New Haven to spend what time they could with him. One Sunday he invited John Miller and me to spend Sunday with them.

His wife served us a delicious dinner in spite of food rationing. I was impressed that Bump asked the blessing before we ate.

Engineering classes were mostly an in-depth repeat of AM school with somewhat better-qualified instructors. We did get more instructions on officer conduct, proper uniforms, etc. Three evenings a week we stood retreat down at New Haven Commons, so-called because in earlier times it was a common pasture for the residents' family cows. The other three evenings we had two hours of PE in the new Yale gym. Usually we ran a mile for a warm-up, either on the outdoor track on the roof or the indoor track around the gym. Then we did calisthenics for the balance of the time or calisthenics followed by an hour of swimming, all of the time in the water going all out. There was no time at poolside. The only Yale staff we ever saw were the PE instructors, headed by a gray-haired man who was tough as nails and had a tongue that cut like a knife if he thought you were doing less than your best. He was a recognized authority on physical fitness. He had written several books on it.

A few of the cadets actually had attended Yale University. I had at least a nodding acquaintance with two of them. We usually referred to them as "legitimate sons of Yale." Need I say where that placed the rest of us?

Meals were served in one of the Yale cafeterias and were prepared by Yale staff: Because the cost was so high, they deducted \$13 monthly from our \$75-a-month pay to offset some of the cost. Most of us thought the deduction was illegal, but the food was so good (far better than at any of my other Air Corps locations) that we didn't complain.

Glen Miller was then in charge of Air Corps bands. He recruited many of the better musicians of the day by promising them a place in one of his bands if they would enlist. His favorite band was the one at Yale. I recall only two names - Ray McKinley on drums and Tony Bennett doing vocals - but others had similar abilities. Weekdays they played in the cafeteria during the noon meal, then played for retreat in late afternoon. At retreat they came very close to swinging the "Star Spangled Banner." It was hard to imagine being treated to a daily concert of such good music.

Because officers had to furnish their own uniforms, we spent several Saturday evenings (the only time stores were open while we were off duty) shopping for uniforms. As most of us had no money to spend, things were put on layaway until we got our uniform allowance.

June 14 was the big day. In the commissioning ceremony, we were made second lieutenants, and our gold bars were pinned on by the next man in line or by a family member for those fortunate enough to have a family member present. Also we were honorably discharged to "receive commission as second lieutenant," drew our pay up to date, and our \$250 uniform allowance. Effective that day, our pay was doubled to \$150 a month. Before getting our final paperwork, we had to show receipts from the clothing stores showing payment for our uniforms. Officer Candidate Schools of that time took 90 days to complete, and their graduates were often called "90-day wonders." I always claimed not to be a "90-day wonder." My cadet time was 101 days.

CHAPTER IV

THE STUDENT OFFICER

Midway through our time at Yale, we were made aware of a new program involving a new airplane, the B-29. If we applied and qualified, we could train to be flight engineers on the B-29s. Duties of a flight engineer were sketchy, but here was my chance to fly, so I applied. The only testing I recall was a decompression chamber test given at Westover Field, Massachusetts. I still have no idea what that test had to do with becoming a flight engineer.

Bob Schumacher, a farm boy from the Scottsbluff, Nebraska, area was the only other one I knew from cadet school who was accepted for B-29 school. We decided to travel together to Seattle, Washington. We went by train to New York, then flew to Chicago so he would have time to spend a few hours with a girlfriend. It was my first airplane ride. I was headed to training as a member of a flight crew, and I got airsick. I blamed it on too much celebration the night before and hoped it would never happen again. It did not, but several times I was squeamish enough to be glad when a flight ended.

We rode the train the rest of the way to Seattle, and on the way, we met the other seven officers who would make up our class at the Boeing plant. Two first lieutenants had transferred from other branches of the Army to go through Air Corps engineering school. All except Bob and me had college engineering degrees and had gone through a longer course at Yale than Bob and I.

We arrived in Seattle in summer uniforms, of course. We were soon told that winter uniforms were in order the year round in that area. Also we learned there was no housing for us and no mess hall. We were on our own for lodging and meals. With Red Cross help, Bob and I rented a room in a private home in the north part of Seattle. A few blocks west was the bay, and three or four blocks east was Lake Washington, a large freshwater lake. Our landladies were a mother and daughter, both widows, probably in their mid-80s and mid-60s. They were fine people and very good to us. We had breakfast privileges there. We soon learned the public transportation system to go the 10 miles or so to school at the Renton, Washington, Boeing plant.

Besides the nine officers, about 20 enlisted men were also in the class. Most of them had several years of experience in aircraft maintenance. A few then went on through flight engineers' school, were commissioned as flight officers, and flew as flight engineers. Most, however, returned to their squadrons as crew chiefs or line chiefs. Our instructors were Boeing employees whose job was to teach us the details of the B-29 airplane.

The enlisted men were housed in an abandoned National Youth Administration (an FDR make-work program) building and had limited military supervision. We officers had almost none. On weekends, two student officers were assigned as officer of the guard and officer of the day. About a month after arrival there, my turn came as OG, which proved to be rather quiet and uneventful. Four weeks later I was OD, and G.M (Bud) Etherington OG. (Later Bud and I served in the same squadron and became good friends.) This time Murphy's Law took over and almost everything that could go wrong did, including a power outage. By morning, however, we had all the drunks back in bed and first aid applied to those bruised and bloodied in fistfights.

Other weekends we could enjoy swimming in Lake Washington or fishing for salmon in the bay. No one I knew caught any salmon. One weekend all of us officers took the boat ride to Victoria, BC, for a few hours of sightseeing. Fourth of July weekend, all of us went up to Mount Rainier for skiing or sightseeing. I didn't try the skis. It was shirtsleeve weather on the mountain so the snow was slushy. John Eckman, a classmate who lived in Seattle, and his wife made all the arrangements for us to go there.

August 27 was graduation from B-29 school and the start of another train ride. August 30 we arrived at Smoky Hill Army Air Base (SHAAB) at Salina, Kansas. It was my first assignment to Bachelor Officers' Quarters (BOQ). My tiny room afforded some privacy but was quite austere. Officers' mess was operated by a detachment of black airmen who did an excellent job of preparing and serving food. This and much worse was the plight of blacks in the segregated services of WWII.

In a few days our processing was completed, but the next flight engineers' class did not start until September 13, so they gave all of us three days off. Several of my acquaintances spent the time in Kansas City. I went home for a quick visit with family and Betty Warren.

Classes went fairly well considering the fact that the school had no B-29s in which to train us. Training was in classrooms or in a converted B-24 with engineers' control panels supposedly resembling those in a B-29. It stretched my imagination to find much resemblance. Included in classwork were studies of the theory of flight, the GALCIT (Guggenheim Aeronautical Laboratory, California Institute of Technology) chart, and Mercator projector maps. That was a far cry from high school or junior college physics classes!

I wrote Betty that after school on Friday, October 1, I would go to Kansas City, rent a car, and drive down to see her. However, on Thursday afternoon I was hurrying to catch a ride on a truck and twisted my ankle on the edge of a duck walk. I had always had ankle problems and wanted to go on with the class. The rest of the men insisted I go for X-rays, which I did. The X-rays showed no fracture, but they taped the ankle and admitted me to the hospital. As the Warrens had no phone, the best I could do was write, explain why I didn't get there as planned, and hope I wasn't too far down in the doghouse.

I had no problem walking so I walked to the bathroom, the mess hall, etc. On Monday morning, Captain Round, the MD in charge of the ward, told me he had rechecked the X-rays and that I had a chipped bone in my ankle. They put on a cast from my toes to my knee, handed me a pair of crutches, and told me I would probably be in the hospital three weeks.

In the next bed was Jim Vaughan, who was in the meningitis ward at Lincoln while I was and was now in flight engineers' school. Jim was a talented artist who had worked for MGM Studios before entering service. He had broken a leg a few days before.

Jim thought my situation was hilarious. He came up with a sheet of paper about 3-by-5 feet and some crayons. Soon he had drawn a cartoon of me standing at the foot of my bed and carrying a tray of dirty dishes. Captain Round was nearby and said, "By the way, Hunter, you had better go to bed. Your leg is broken." Jim taped the cartoon to the wall behind my bed. Word spread throughout the hospital, and for a few days we had a stream of visitors coming to see the cartoon. Fortunately, Captain Round was a good sport and had a good laugh along with everyone else.

After several days, Jim and I were walking pretty well on our crutches. Things were dull in the hospital, so we decided to go into town. At the main gate the bus stopped for the MPs to check passes. Officers normally didn't need passes; their ID was enough. Two MPs, about 6-feet-4 and weighing about 250 pounds each, carrying rifles, entered the bus and walked directly to Jim and me.

"Lieutenant Vaughan?"

"Yes."

"Lieutenant Hunter?"

"Yes."

"You are under arrest. Come with us."

In the guard shack, we learned that hospital patients were not allowed off the base without special passes signed by the hospital administration. It seemed someone had alerted the MPs that we had no such passes. It appeared the MPs had no experience in arresting officers. We soon persuaded them that we should return to the hospital and not be taken to the guardhouse. I think they were happy to get us off their hands.

Word of our problem raced ahead of us to the hospital. We were greeted with "Here come the jailbirds" and worse. We learned the MPs had been alerted by a nurse sometimes referred to as the "Blonde Bomber." It was rumored she was drawing insurance payments from two husbands who had died in combat and was looking for a third, so perhaps we should have excused her bad attitude.

In 30 minutes or less, we had passes signed by the head of the hospital, his deputy, and Captain Round. Then it was back on the bus for another try.

The first person we saw on the bus was the Blonde Bomber. As we passed her heading toward empty seats, Jim snapped her a Nazi-style salute and said, "Zeig Heil!" Two different MPs boarded the bus, checked our passes along with all the others, and we headed on to Salina. An hour or so after our arrival, we were standing on the sidewalk wondering what to do next when I was quite surprised to see Loree Schoffner and her friend Elsie Wood approaching. I had got to know Loree at 4-H Encampments at the state fair. She was a native of Saline County, and she and Elsie were both working at a Salina bank. They accepted our invitation to dinner. Loree told me she was engaged to a guy who was in the Army, but that didn't deter the two of them from going with us to dinner or a movie three or four more times before we left Salina. They were nice, attractive young women and provided us a welcome diversion to sitting around the hospital.

In about three weeks my cast was off, and I headed home for a 15-day convalescent leave. I was able to help Dad a little with his farm work. A visit with Betty and her family showed I had been forgiven for not showing up earlier in the month.

It had been rumored throughout my time at SHAAB that the flight engineers' school would be moved, probably to Denver. Before the end of my leave, orders came stating that the move had been made and that I should report to Lowry Field, Denver.

After arriving by train early one evening, I caught a cab to go to the base. When we stopped for a red light, there was Jim Vaughan standing on the corner. He soon persuaded me to come with him, as it was too late to check in at the base. When we went to the base around 11 o'clock, the housing office was closed, so we found a building marked BOQ (Bachelors Officers' Quarters), found two empty beds and fell into them. Next morning we explained the situation to the civilian young lady at the housing office and asked if we couldn't stay where we had spent the night. She said no, that was for permanent party officers and student officers couldn't stay there. Jim tried to argue politely with her, but the young lady became quite irate and gave us a dressing down that would have put many drill sergeants to shame. As we left the building to go move our things, Jim said, "There is only one thing I can think of that would make a woman that mad. That is if her husband is in China and she just got a letter from him and he says it isn't so."

It was soon back to classes. I had had one flight at Salina in an AT-22. Flying soon started at Lowry, all in a converted B-24, now designated a C-87. On these flights the plane was full of student flight engineers, but only two at a time could get in the cockpit to get any training. One such flight was an RON (remain overnight) to Austin, Texas. Next morning there was a low overcast and light rain. After some delay the pilot decided to take off but to try to stay under the clouds. This put us just above the scrub oaks and mesquite. Two student flight engineers were in the cockpit with instructions to watch for tall windmills. Was this the kind of flying I was training for?

On his way to Denver, Jim Vaughan had met Dot Riley, a United Airlines stewardess. He learned that she and all the other stewardesses stayed at the Cosmopolitan Hotel between flights. A few nights after our arrival, Dot was in town, and we met her and another stewardess and took them to the Park Lane Hotel for dinner. Jim had made friends with Larry, a waiter there. Larry served us the best steaks in the house. Soon we were acquainted with most of UAL's stewardesses and could call on any free evening and arrange for dates. With a few hours' notice, Larry would lay back the choicest steaks and serve them to us. We got some really dirty looks from high-ranking officers whose dates were not nearly as attractive as ours and were served steaks half the size of ours. Perhaps it was well my time in Denver was short. A second lieutenant's pay could not support that kind of living for very long.

December 6 was graduation from flight engineers' school. Pilots, navigators, and bombardiers had their own wings designating their specialties: we had none, so we were authorized to wear observers' wings - wings with an "O" in the middle. I had a total of 41 hours of flying time. Actual in-flight training was minimal. Most of the time I was simply riding along. I realized I had much to learn "hands on" before I could do the job as a flight engineer.

I left Lowry December 10 with orders for 10 days' delay en route (leave), and assignment to the 40th Bomb Group, Pratt Army Air Base, Pratt, Kansas.

I arrived home December 11 in time for sister Phoebe Carol's wedding to Kelley Johnson. The ceremony was in our parents' living room with only immediate family members present. I had asked Betty to come for the event, but she declined. I always imagined her parents talked her out of coming. I did see her the following weekend. She was then teaching at a rural school north of Garnett.

CHAPTER V

40th BOMB GROUP AT PRATT

On December 21, I reported to the 40th Bomb Group headquarters and was assigned to the 45th Bomb Squadron. At squadron headquarters I met the commanding officer, Major Oscar Schaaf, and was assigned to Captain Jasper Woodruff's crew. I soon met the other crew members and learned another flight engineer, Lieutenant Blosser, was already a member of the crew. I later learned Woodruff and his crew were dissatisfied with Blosser and had requested another flight engineer. In a few weeks Blosser was transferred out to a replacement training center. I stayed. I never knew the basis for the decision, and I didn't inquire.

I felt I was fortunate to be on Woodruff's crew. He had been at Hickam Field, Hawaii, during the Pearl Harbor attack. He then flew B-17s in the South Pacific for several months. Later he and his crew were forced to ditch (make a water landing) in a B-17 and spent seven days in life rafts before being rescued. He said the search probably would have been abandoned much sooner if Major General Nathan Twining, CO of the 13th Air Force, had not been with them as a passenger, so the search continued until they were found.

My BOQ at Pratt was a tarpaper shack like those at Lincoln but divided into small rooms, with two officers in each room. Snow covered the ground all winter, and a bone-chilling wind blew constantly. The town was poorly equipped to accommodate all the people. Wives who came with their husbands were fortunate to find a small basement room to live in. Kansas was a dry state, much to the dislike of many. Liquor for the officers' and enlisted men's clubs was brought in on any plane that had landed where it was available.

Wichita was a popular place for weekends. Many young women were there in defense and related jobs. Many of them were available for pickup dates.

The morning of Christmas Eve was full of activity. Every flyable airplane was headed somewhere, loaded with men who could get home for Christmas. I heard that a fellow I knew slightly from cadet school was driving to Pittsburg, Kansas. I found him and asked for a ride to Parsons. He said, "Sure, but I just got my car up here from Dallas. I only had an 'A' gas ration card and lost it. I know where I can fill up here without gas coupons. Can you help me find some gas on that end?" I had no idea where to buy bootleg gas in the Parsons area, but told him I would try. I thought if all else failed, Dad's barrel of tractor gas would do. I ran into Bump Hadley, one of my roommates at Yale and now an engineering officer in my squadron and invited him to come with us. He accepted.

The car was a 1938 Buick, one of the biggest models with a straight eight engine, and a real gas hog. As we rode through the Flint Hills, it became apparent our tankfull of gas would not get us to Parsons. I knew no one in the area, but knew we had to try something. We pulled into a Phillips station at the northwest corner of the town square in Fredonia, told the attendant we were trying to get home to Parsons for Christmas and needed 5 gallons of gas to get there. Without a word he walked back into the station. I wondered if he were going to call the law, so I followed. He told whoever was on the phone that three young men in uniform were there and repeated our story. After a pause I heard him say, "It'll be all right then to let them have the gas? Okay. Thanks." Curious, I asked whom he had called. "Oh, that was the head of the rationing board," was his answer. I have no idea who headed the rationing board, but I am still grateful to him.

Coming in to Parsons from the west, I suggested we try the Roper station on West Main. It was a local, cutthroat station, suspected of shady dealings. We told the attendant there our story. He merely shrugged his shoulders and filled up the tank. Now we knew where to stop on the return trip.

No one was home when we arrived, so Bump and I drove Dad's pickup to Center Bethel Church and saw the last of the Christmas program. Next day we had Christmas dinner with Uncle Raymond Campbell's family. It was good to spend Christmas with family. I wondered when the opportunity would come again.

Back in Pratt, on December 30, I flew as second flight engineer with Captain Matthews' crew. Joe Herbert was first flight engineer. Finally, a flight on a B-29! And finally, some of the hands-on training I knew I must have.

Each of the four squadrons in the 40th had 15 flying crews and had two B-29s for training. With many maintenance problems and cold weather engine starting problems, a training flight in a B-29 was rare. Most of our training was in B-17s. I remember one cold morning seeing Major John Seeley, operations officer, come into the hangar coffee shop, clap his hands and say, "It's a great day. All four engines on both those B-29s are running!" My log for January showed 44 hours, 25 minutes of flying time, only three hours, five minutes of that in B-29s. One of the B-17 flights included dropping some practice bombs off the California coast. We developed a problem in one of the engines and landed at March Field, Riverside, California, for repairs. I was grateful for the help of Hank Pisterzi, tail gunner, who was an experienced airplane mechanic. I also managed to get to Pasadena to spend one night with Aunt Floy Homing and her family.

February was better, with 47 hours, five minutes of flying time, 25% of it in B-29s. Late in the month, we were flown to the Boeing plant in Wichita to pick up a new B-29. I watched as Woodruff signed for the plane. It cost \$1,203,084. Later on with increased production, the cost was reduced to about two-thirds of a million per plane.

One reason for slow production of B-29s was that changes in design were constantly being made, slowing the process. To speed things up, the design was frozen, with changes to be made at modification centers. We flew our new plane to the center at Birmingham, Ala. After two nights at the "T.J.," the Thomas Jefferson Hotel, a plane was ready for us to fly to Oklahoma City for further modification. We taxied out on a narrow taxiway and were told by the tower to do the engine checks there. Woodruff objected, as the outboard propellers were over loose rocks beside the taxiway. The tower insisted, so engine checks were started. Sure enough, the No. 1 propeller picked up some rocks, putting large dents in the propeller blades. A new propeller had to be installed.

Finally we were off for an uneventful flight to Oklahoma City. The base at Pratt was to send a plane there for us. However, the weather closed down at both places. We spent four days in a downtown hotel, checking in every morning at the base. At last we were told the weather was expected to improve by afternoon, so we could fly a modified plane to Pratt.

We climbed to 7,000 feet, cleared the clouds and flew in beautiful sunshine. As we approached Pratt, the clouds broke away, and there before us were the town and the base in bright sunshine. Co-pilot Bill Clay, a former motorcycle cop in Miami, Florida, and the roughest-talking man I ever knew, called for landing instructions and got them. Then the tower called back and asked, "What is the ceiling up there?" We could see the town in bright sunshine, and they were asking, "What is the ceiling?!"

Bill almost exploded into the mike. "What's the ceiling? Why in the h--- don't you G- D--- bastards look out the window?" Since then when I see a goof by a weatherman, I want to ask Bill's question. "Why don't you look out the window?"

I managed to get home for a few hours one weekend in February. I was sure it would be my last visit for quite some time as all indications were that our move overseas was imminent.

While home the papers were signed for me to buy what we referred to as the "Kennedy" place. It was 120 acres, which formed a T with the "Molesworth" place, which Dad had bought a few years earlier. Aunt Nellie Johnson had bought the property earlier, and Dad and I had farmed it. Now she sold it to me so she could buy a larger farm near Altamont. I was elated to know that now the bank and I owned a farm!

Air Corps Commanding General "Hap" Arnold visited the four Kansas B-29 bases in early March. Most of our maintenance personnel had already started the move overseas. When Arnold saw how far our airplanes were from being combat ready, he left two orders, 1. All men were to get leave time before going overseas. 2. Nothing would stand in the way of getting the planes ready to move overseas on schedule. The first order was ignored. No one got leave time. The second was carried out without regard for weather, personnel, or cost, in what became known as the "Battle of Pratt."

We were part of the 58th Bomb Wing, which had four groups, four squadrons to a group. Each squadron had 15 flight crews but only nine airplanes. Early expectations were that the planes would be in the air much of the time, hence the need for so many crews. But no one realized the almost unbeatable maintenance problems,

mostly engine problems, that would face us. Fifteen planes and nine crews would have been a much more workable ratio. Woodruff's crew was one of the six in the squadron without an airplane to fly overseas. We left by troop train March 12 for our embarkation point at Camp Patrick Henry, near Newport News, Virginia.

By that time, the "Battle of Pratt" had begun. Each of the nine planes per squadron got four new engines with the latest modifications, plus about 50 other modifications, some major, some minor. With only flight crews and a skeleton maintenance force still on the base, what seemed like hordes of Boeing employees and representatives of our suppliers were brought in. All worked together around the clock, battling the cold, fatigue, and parts delays and got the job done. April 1, most of the planes headed for India via Maine, the Azores, North Africa, and the Middle East.

CHAPTER VI

MOVING OVERSEAS

We spent about a week at Camp Patrick Henry. On March 23, we boarded the liberty ship Newton D. Baker. Crew members told us they had brought a load of Italian prisoners to the States and hadn't had time to clean up the ship before we boarded. A look around left no doubt as to their truthfulness. Bunks were hammocks hung four deep in the officers' quarters, five deep in the enlisted men's quarters. It soon was discovered that supplies were on board to feed us, but the ship's crew had no cooks to prepare it. Our officers in charge started pointing fingers and issuing threats. Finally several men admitted spending some time in Army kitchens. They were our cooks. We had two meals a day, oatmeal for breakfast and beef stew in the evening, every day. One morning I went through the galley just as a wave upset a table full of diced beef ready for that evening's stew. All of it went onto the dirty galley deck. Somehow the stew that evening was not very appetizing.

We were part of a 100-ship convoy. Our position was the last ship on the right (starboard) rear (stern) of the convoy. It appeared to us that our ship was lagging out of position much of the time. We were escorted by four or five small DE's (destroyer escort vessels). One afternoon one of them drew up alongside and blared over its speaker system, "Baker, Baker. Your assigned position is 100 yards from the nearest vessel. Your position is now 500 yards. The need to keep proper position should be apparent to any intelligent officer. I assume you have intelligent officers aboard." The vessel sped away. We passengers felt just the right words had been used.

Four days out, we hit a storm that lasted four days. Speed of the entire convoy was limited to the speed of the landing ships in the convoy, about 8 or 9 knots. During the height of the storm, we were down to about half that speed. We were seldom allowed on deck, but when we were, we could see that the waves were so high that when we were in the bottom of the trough between waves, we couldn't see the other ships. When I was in my hammock at night, the ship rolled so badly I thought it would roll on over. I was never seasick to the vomiting stage, but felt queasy most of those four days.

One afternoon a submarine alert was sounded. I was on deck and saw some depth charges fired. We never knew if there actually was a sub or whether it was a false alarm.

We had time while on board ship for playing a lot of cards. I appreciated getting better acquainted with my own crew mates as well as with others I had hardly known at all.

One bright morning our ship dropped away from the convoy and headed south. We were told the other ships were going through the Straits of Gibraltar and into the Mediterranean Sea. Next day on April 10, we docked at the port at Casablanca, Morocco. We had been on the ship 18 days.

Our base there was a way station for personnel moving in almost any direction. We lived in tents. Conditions were at least tolerable. During our 11 days there, we went into the city several times. Of course, we had to go to Rick's Place, made famous by the movie "Casablanca" Riding to and from town in Army trucks, we saw Arab kids alongside most of the time, begging and yelling, "American sonnybeech, cigarette." Those were probably the only English words they knew.

Finally our turn came to move on to our operational base. ATC (Air Transport Command) was running something of a shuttle service, moving two spare engines and 12 men on each C-46 flight. The C-46 was a twin engine cargo plane. It was the biggest that ATC had in use at that time. We had refueling stops and crew changes at Tripoli, Tunisia; Cairo, Egypt; Baghdad, Iraq; and Karachi, India. At Karachi, trouble developed with the plane. We waited all day for repairs to be made. The day was like the hottest days in Kansas in August. We asked the ATC crew if it would be that hot where we were going. They said, "When you get there, you will wish you were back here in Karachi."

CHAPTER VII

INDIA

We landed at our base at Chakulia, India, about 4 in the morning, April 24. The temperature was near 100 degrees. Home was to be a thatch-roofed building with mud-plastered walls. There were window and door openings but nothing hung in them. Snakes and varmints could wander in and out. There was no electricity and no running water. The latrine (toilet facilities) was half a block away, and bring your own paper. Water for showers was pumped by hand into an elevated tank. If the native pumper didn't show up or got tired, there was no water.

The mess halls were handicapped by the heat and lack of refrigeration. The food was not very tasty, and the heat took away our appetites. Almost everyone developed a severe case of diarrhea in his first week there; with many it was a recurring problem. Men from several barracks had to come past our barracks to get to the latrine. It was a common sight to see a guy hurry past, dressed only in shoes and GI brown boxer shorts, toilet paper in one hand, holding on tightly, hoping he would get there in time. Then you might see him give up and relax. You would know he was too late.

Early on we were advised to hire a "wallah," a houseboy. He usually served about four officers. He was expected to sweep the floor, make the beds, shine the shoes and take the laundry to someone who beat the dirt out on the rocks along the river. My first wallah was Sadesh, a man in his 30s with a wife and family. I don't recall what we paid him, but it was a pittance by American standards.

A wide variety of supplies could be purchased at the "gook" store, an Indian-operated store on the base. In theory, at least, the base provost marshal set the prices for the merchandise. If you argued over a price, all you would hear was "Provost Marshal! Provost Marshal!" Later the provost marshal was court-martialed for accepting bribes from the store owners. Before the end of the summer, the "gook" store burned and was never rebuilt. Later I flew with a gunner who admitted to me that he and two buddies got so disturbed at the store people the night of the fire that they walked out, lit cigarettes-and tossed them up on the thatched roof, then walked back to their barracks.

Our airplanes encountered many difficulties en route to India. Most of them did get there, and no men were lost on the way. The planes required much repair and maintenance work. We on the combat crews were expected to work with the maintenance crews most of the time. Workdays were from 6 until 11 in the morning and 3 until 8 at night. The temperatures at mid-day were always above 100 degrees. Some days they got to 120. The Indians said, "Only mad dogs and Englishmen go out in the sun between 11 and 3 o'clock."

We were told advance bases were being built for us near Chengtu, China. Ours was to be at Hsingching, designated A-1. We could reach targets in Japan from there. From India, only targets in Burma, Thailand and the Malay Peninsula were being reached.

Supplying the bases in China became quite a logistical problem. Logistics refers to getting the necessary supplies to the right place at the right time. Japan controlled eastern China, Burma and all of southeast Asia. The Chinese communists controlled central China, and the Chinese Republic under Chiang Kai-Shek had western China. Our diplomatic relations were only with the Chinese Republic. The nearest available seaport to our Chinese bases was Calcutta, India, with the Himalaya Mountains (The Hump) in between. All supplies had to be flown in or go by truck on the Burma Road, which was constantly under attack.

ATC was supposed to fly our supplies to China, except for bombs, which we would take on our way to fly missions from China. But ATC was woefully short of planes and manpower to do the job. About May 1, we started hauling gasoline to China ourselves. A typical flight would leave India with 6,500 gallons of gas, fly to A-1, off-load 600 gallons, then fly back to India the next day with just enough reserve fuel so that the engines would not run out of gas when the nose was pointed down on final approach. Was it efficient? Far from it. I have no idea of the actual cost of fuel delivered that way. It must have been horrendous. Worst of all, we lost several crews and planes on these flights over The Hump.

The Hump was known for having the world's worst flying conditions. We had to fly between the higher peaks. We couldn't fly over them. Most of the time we flew in clouds or just above them. When in the clouds, we could only hope we were on course and flying between the mountains and not into one. We all learned to have a fear of and respect for The Hump. On only two or three occasions were the clouds broken enough to see the ground. Then we could look down or around us at rugged, spectacular beauty.

I made three Hump trips in May. The first was as the second flight engineer with Matthews' crew. The next was with Woodruff and crew, plus John Petras as second engineer. The third trip I was the only engineer on board. At last the powers that be thought I was capable of doing the job by myself!

The 58th Wing flew its first combat mission June 5 to Bangkok, Thailand. It was something of a shakedown mission. It took about eight hours for the round trip. Later missions to targets farther away averaged twice that long. Soon all flyable planes went to China for our first mission against the Japanese mainland. The target was the steel works at Yawata. Defenses were heavy and losses were high. I did not fly any of the early combat missions.

On June 19, we were scheduled for another gasoline flight over The Hump. Operations sergeant Doug Ferguson was with us as a passenger. On plane No. 326, soon after takeoff, No. 4 engine was losing oil badly. We landed to investigate. It appeared the oil tank had merely been overfilled, so we refilled the gas tanks and took off again. About four hours later, we leveled off at 23,000 feet to cross the highest part of the Hump route. Just then we lost power on the No. 2 engine. The emergency remedies I tried didn't work, so we tried to feather the propeller. This consists of turning the propeller blades edgewise into the direction of flight, stopping rotation and eliminating most of the drag. This didn't work either. The remaining three engines didn't furnish enough power to maintain altitude. We had one more mountain range to cross, with peaks of 19,000 to 25,000 feet in the area. The bomb bay tanks of gasoline were dropped to reduce weight.

A break in the clouds allowed the navigator to identify the town below us as Hsi-Chang. Emergency information showed a 4,700-foot runway there. The field altitude was 6,000 feet. We were discussing whether to bail out or to try to land when No. 3 engine started throwing oil and smoking. The immediate decision was to land. With the field altitude of 6,000 feet, the short runway, and our lack of power, there could be no second chance. On landing, we skidded along the grassy runway until we hit a small ditch, where the plane plowed through Chinese laborers still working on the runway. There the nose wheel collapsed and the nose scraped against rough rocks until we ground to a halt. The nose was ripped and battered so badly that the pilot and co-pilot had trouble getting their feet untangled from the controls. Fortunately, no one on board was hurt except for a few minor scrapes and bruises.

As we got out of the plane, we were amazed to see an American Air Corps sergeant waiting for us. He and three men under him were running a weather station there. The sergeant had heard us and had run out to try to wave us off from landing. His immediate question was, "Why did you land this plane here?" The Chinese workers crowded around us, apparently quite angry. Nine workers had been killed. The pilot and co-pilot had been able to see that the workers had made no attempt to get out of our way as we approached them. When asked, "Why didn't you get out of the way?" someone appeared who could speak a little English and answered, "We thought you would turn."

Within 30 minutes, a black 1940 Buick pulled up. A distinguished-looking man got out and introduced himself through an interpreter as Lieutenant General Chang du Lon, Army of the Chinese Republic. He, too, seemed quite disturbed at our intrusion and the death of the workers. When Woodruff told him, "This airplane bombed Japan four days ago," his attitude changed dramatically, and he began to smile. After surveying the situation, he ordered 50-gallon drums to be rolled up and the plane's gasoline tanks to be emptied into them to reduce the fire hazard, he said. We had no doubt a more pressing need was fuel for his Buick and the half-dozen or so late 1930s Dodge trucks the army had in the area. As far as we could learn, these were the only motor vehicles in the valley.

The trucks were then burning "jing-baw juice," a rice alcohol derivative also used as a cheap liquor.

The American weathermen, with some Chinese help, provided us with beds in the barracks building where they lived. The beds were made of wood with something like a very light comforter laid over them where a mattress should have been. As right gunner Ed Hornyia said, "It sure was thoughtful of the Chinese to make these beds of soft pine." Before leaving, all of us had bed bug bites. Meals were prepared by the weathermen's-Chinese cook and were similar to those served at A-1. Usually we had potatoes or rice, cabbage and pork, all of them boiled. All water and food had to be boiled to avoid spreading dysentery.

A couple of days after landing, we were invited to dinner at the home of General Chang du Lon. The home had been designed by American architects and had served as Madam Chiang Kai-Shek's summer home. It was a nice frame home but certainly not palatial. The 12 of us, plus the four weathermen, were seated between Chinese guests. All conversation was through an American-educated schoolteacher, Daniel Dong, who served as interpreter. He seemed to be the only Chinaman there who spoke fluent English. The general's wife and three of their children were among the guests. Lady guests were seated at a separate table.

Three wine cups were placed in front of each guest. One contained jing-baw juice, the local rice wine: one had local grape wine: and one had wine produced at the nearby French Catholic Mission. Later in the evening it appeared all the cups were being refilled with jing-baw juice. The priest from the mission was a guest. A 12-course dinner was served and included such delicacies as pickled pig stomachs and year-old eggs.

Probably as a result of too much wine, someone suggested the Chinese be our guests the next evening and they accepted. How could we entertain them? Some C-rations were in the plane. We shared them. The weathermen added some supplies, including silverware. We enjoyed watching our guests handle silverware as clumsily as we had handled chopsticks the night before. They were good sports and brought enough wine for everyone. They seemed to understand our situation. We all enjoyed the evening.

The next night we were guests of the provincial general in charge of the area. -As a provincial general, he ranked much lower than the Nationalist general. His home and the meal showed it. Only jing-baw juice was served and only six food courses. They were mostly boiled eggs, boiled pig stomachs and boiled chicken stomachs.

A week after our landing at Hsi-Chang, an ATC C-46 landed to bring supplies to the weathermen and to take us out. A very abrasive, officious major got off the plane and started ordering everyone around, including the Chinese. After some heated words, Woodruff was able to persuade him that the Chinese were in charge and that the best thing we could do was to leave. We were taken to Kunming, where we spent one day in the city. It was my only time to visit a sizable Chinese city. Next day ATC took us back to Chakulia, where Woodruff and I were required to file detailed reports of the problems leading to the crash landing and the damage done by it.

It was good to be back to get clean clothes. Thankfully the temperature at Hsi-Chang was pleasant so we could more nearly tolerate the lack of showers and changes of clothes. It did help that the Chinese took us swimming in a nearby lake. Swimming was in the nude, which seemed to be normal for our hosts. Women working in a field nearby got very little work done. They appeared to spend their time looking, pointing and talking together.

In India plans were made to repair No. 326 and return it to flying status. There was some speculation as to what crew would fly it out of Hsi-Chang. The altitude, the short runway (if finished) and the surrounding high mountains made the task formidable.

Engineering Officer George Lundquist and crew chief Telemachus Mavrofrides (better known as Murphy) from the 45th squadron and 19 mechanics of varying specialties plus one cook from the 28th service squadron were sent to Hsi-Chang. They were to remove and replace all four engines and propellers, repair the minor damage to wings and flaps, and remove the nose section forward of the front bomb bay. They were to label each wire, cable, and tube so they could be installed in a new nose section. A B-29 had 5 miles of electrical wiring, so they were assigned quite a task.

At the overhaul depot in India, a nose section was split in halves. When word came from Lundquist that his crew was ready, the halves were wheeled out to a C-46 for transport to Hsi-Chang. Someone had miscalculated. There was no way half a nose section would go through the cargo doors of a C-46. Back to the drawing boards.

Another nose section was split into thirds and wheeled out to a C-46. Another miscalculation. A third of a nose section wouldn't go through the cargo doors either.

More consultations were held. The crew at Hsi-Chang was ordered to remove the new engines and propellers they had installed, ship them back to India, and then return. When 45th squadron crews last flew over the area, the remains of No. 326 were still visible beside the unfinished runway at Hsi-Chang.

Lundquist and his crew reported they were not warmly received at Hsi-Chang at first. However, when one of the crew who was trained as a medic was able to supply the general with enough antibiotics to cure his social disease, the general became their friend and things went much better for them.

The whole episode about No. 326 was the subject of the 40th Bomb Group *Memories* issue No. 16, dated July 1987 and titled, "Forced Landing at the Turning Point." Information was supplied by Woodruff, Hank Pisterzi and me from the flight crew and George Lundquist and Art Riebe of the salvage crew.

At Chakulia, operations slowed during July due to the monsoon rains. The area averaged 60 inches of rain a year. Fifty-nine of it came in about 60 days from mid-July to mid-September. Flying our Hump route took us over miles and miles of flood waters. In the middle of the monsoon, it rained every day, sometimes all day. We had moved into a new barracks area in late June. Every barracks had about an 8-foot porch across the front. On rainy days, the porches were shelters for card games. With all the humidity, a new deck of cards would be like limp rags after an afternoon's play. I even learned a few of the fundamentals of bridge. The monsoons brought one welcome change, however. The severe heat was broken, and temperatures were at least tolerable the rest of our stay. In mid-winter, a jacket was welcome while walking to breakfast. Afternoon temperatures were in the low 80s with low humidity.

Woodruff was not well accepted by the higher brass in the 40th group. He was the only pilot in the group with previous combat experience, which probably led to some jealousy. Also, he was outspoken when he thought things were unfair or leading in the wrong direction. He had been led to believe he would soon command a squadron in the 40th; now it appeared that time would never come.

Woodruff also had a personal problem. He had been in Hawaii during the Pearl Harbor attack, then had flown B-17s in the Pacific. His wife, Carolyn, along with other servicemen's dependents, returned to the States in February 1942. After her return, she found she was pregnant and gave birth to their oldest son, Barry, while Woody was still overseas. While Woody was in Pratt, Carolyn and Barry were there with him. I met them once at the officers' club.

Now she faced the prospect of giving birth to their second child with Woody again overseas. He requested a transfer back to the States, but it was denied. He was offered a transfer to the Air Transport Command in India. He accepted it. He flew The Hump in C-46s and C-54s for several months, then returned to the States after their second son was born.

Woody's transfer left all of us on his crew without a crew assignment. For some months, we flew as fill-ins for crew members who for some reason were unable to fly. I had six Hump flights in July and August. On one, a General Craigie rode with us on our return trip. It seemed never to fail that when some high brass were present, something went wrong. This time the right landing gear failed to come up, but the landing gear doors tried to close. Two attempts to lower the gear, then raise it again failed to solve the problem, so we flew over The Hump with the right gear down. After clearing The Hump, we discovered we were badly off course. The navigator had failed to compensate for the drag caused by the gear being down on one side. Also, the extra drag caused higher than normal fuel consumption so we had to land at a fighter base to refuel. The landing gear doors had been bent, so they dragged against the tires as we went down the runway. While the plane was being refueled, we took the landing gear doors off and put them in the bomb bay, then flew on to Chakulia. There the plane was jacked up, the gear problem corrected, and new tires and landing gear doors installed. General Craigie was a good sport. He thanked us for the ride and told us we had handled the situation well.

Sometime in late summer, orders came down that squadron commanders would no longer have their own crews. This was a blow to our CO, Major Schaaf, who loved to fly. He put together a crew to fly with him on a mission

from China to bomb the steel works at Anshan, Manchuria, on September 8. It was my first combat mission. I was glad to get it behind me at last. The flight went well.

During our return we were able to fly alongside a disabled airplane until it could land at the first available base near Hanchang, China for repairs. This was something we were always instructed to do. We could provide firepower against Jap fighter pilots, who were always looking for crippled planes to attack. Also we could provide communications if the crippled plane's radio was knocked out.

Apparently my work pleased Major Schaaf as I flew with him several times in the next few months. His recommendation for my promotion to first lieutenant referred several times to that Anshan flight.

Reconnaissance photos taken several days after that mission showed the smelters at the steel mill were being torn down. Our bombing had been effective. Later intelligence information indicated no air raid sirens had warned of our attack, so the slave laborers had fled en masse. By the time they could be persuaded to return, the fires in the smelters had gone out. The steel in them had hardened, and the only way to get them back in production was to tear them down and rebuild. Even in war it seems luck or fate can take some odd turns in the road.

Around October 1, most of what had been Woodruff's crew were assigned to fly with John Martin, who had been Major Schaaf's co-pilot. John was very capable and personable. It was a good feeling to have a crew assignment again. Our first bombing mission was to Omura, Japan, on October 25. Returning late in the day, our fuel was running low so we landed at a fighter base some 40 or 50 miles short of our base at A-1 in China.

We requested only enough fuel to take us on to A-1 for two reasons: One, the fighter base had limited fuel storage, and we didn't want to run them short of fuel, and .two, their runway was only 2,000 feet long, so it was necessary to keep our takeoff weight as light as possible. Normally, runways for B-29s were at least 8,000 feet long. Next morning it appeared every man on the base was there to watch us take off. We taxied to the end of the runway, ran the engines to full power, and John released the brakes. We seemed to shoot down the runway and eased off the ground with nearly half the short runway still in front of us. After refueling at A-1, we returned to the base in India.

We were at the bottom of a top-heavy chain of command. Hap Arnold, commanding general of the Air Corps, kept command of the 20th Air Force, which was to contain all the B-29 tactical units. Twentieth Air Force had only one Bomber Command, the 20th, and the 20th Bomber Command had only one wing, the 58th, which was ours. In early fall, General Curtis LeMay came from the 8th Air Force, based in England, to command the 20th Bomber Command. He almost immediately visited each group and laid out some new rules and tactics.

As LeMay stood before us outlining his plans, he said, "There will be no evasive action over the target. After bombs are dropped, you will maintain straight level flight until strike photos are taken." This sounded like unnecessary added risk. Groans could be heard all over the room. The groans didn't last long. LeMay simply would not tolerate them. His voice and his looks left no doubt his orders would be followed to the letter. All crews were now required to fly practice missions, dropping practice bombs in the Bay of Bengal. Lead crews were designated, and they flew even more practice missions. Lead crews were to lead the formations on all missions. This put added pressure on the lead crew navigator to get the formation to the target, and on the bombardier to hit the target, as all other bombs were to be dropped when the bombs were seen to drop from the lead plane.

LeMay was said to have smiled three times while in India. Of course, he was at a disadvantage. He had had some sort of facial paralysis. When he smiled, it showed on only one side of his face. When he talked, most of the movement was with only one side of his lips.

I saw him smile once. On one mission to Japan, no lead crews got to the rendezvous point. A large group of planes was circling, waiting for a lead plane to show up. Finally, a crew gave that up and headed for the target. Immediately all the other planes fell into position around them. We went over the target in a 21-ship formation, with excellent bombing results. When we were getting out of the plane back at A-1, a jeep approached with General LeMay aboard.

He said, "Who is pilot of this plane?"

Ray Elliott stepped forward and saluted. "I am, sir."

"Did you bomb in that 21-ship formation?"

"Yes, sir."

The general smiled. "Nice work, lieutenant."

The jeep drove away.

Most of us had doubted LeMay's tactics and greatly disliked his rough, gruff, demeanor. As months went by, our bombing accuracy improved. We became a much more efficient outfit. Grudgingly, we had to admit he had been right. If we were to defeat Japan, he had shown us how to do it.

In a ceremony in late November, I was one of a long line who was promoted to 1st lieutenant. I was happy to receive it and felt it was well deserved. My pay went up to \$166.67 per month. All of us on flying status drew an additional 50 percent flying pay and now a 10 percent overseas pay for a total of \$275 a month. What was there to spend it on at the base in India? Not much, unless you gambled or bought a lot of drinks at the officers' club. I was having a \$25 bond deducted each month, as well as a \$100 allotment sent to my account at the Commercial Bank of Parsons.

Pay in India was in rupees, the local currency. A rupee was worth about 32 cents. Somehow a pocketful of rupee notes and annas (coins) didn't seem to have much value.

In early December, we were assigned to a mission to Mukden, Manchuria. Most of these China missions required about 15 hours of flying time. Takeoff was between 2 and 3 o'clock in the morning. We bombed in the daylight and were back landing before dark. This day we were to rendezvous with other planes soon after daylight, get into formation, fly on to the target, drop the bombs and return. When daylight came, the windows in the cockpit were frosted over so badly that we could see nothing. Obviously we could not fly formation or find the target unless we could get rid of the frost. We were flying one of the older planes. On these models, the only known way to get rid of frost was to depressurize the cabin, put on oxygen masks and open the pilot and co-pilot windows. This was done and the frost was soon gone. We got into formation and climbed to about 20,000 feet. The outside air temperature was 48 degrees below zero Fahrenheit, and the air speed indicators read 195 miles per hour. We had never heard of wind chill index, but it had to be much below the minus 48 degrees air temperature. We had no way to heat the cabin while it was depressurized.

We found the target, dropped the bombs and turned back toward A-1. Some two hours later, we were down to about an hour's supply of oxygen. We were flying in bright sunshine, so I suggested to John Martin that we pressurize the cabin and see if frost would form again. After five hours of frigid temperatures, he welcomed the idea. The pilots closed their windows. I turned the cabin pressure system on, and we were soon warm. We had no further icing problems. Navigator Tom Brennan had found it necessary to remove a heavy glove in order to write in his log and had slightly frosted one finger. Otherwise, we had no casualties.

Our base at A-1 was in a valley beautiful and green in summer but in winter almost always covered with clouds from about 5,000 to 8,000 or 9,000 feet. It was common to have to circle the field and wait our turn for instrument let-down to the field. The clouds kept the temperature just above freezing, but the humidity made it bone chilling. A barracks for 30 or 40 men would have one small charcoal burner, which warmed, not heated, a circle about 5 feet wide.

We did have warm showers. The shower building had a large vat heated by a wood fire. The shower room had about 20 wooden buckets of about 3-gallon capacity hung by ropes on overhead poles. Protruding from the bottom of each bucket was a metal sprinkler head similar to that of a garden sprinkler can. When your turn came to shower, one of the Chinese attendants would lower a bucket, fill it with warm water and pull it, back up to

about 6 feet high, and you could stand under the sprinkler head and enjoy your shower until the bucket was empty.

Meals in China were provided by the Chinese on a reverse lend-lease arrangement. All of the food was locally grown except coffee, which had to be flown in. All fruit, meat, vegetables, and water had to be boiled. Even the tasty locally grown tangerines were dipped in boiling water to prevent us from getting dysentery. The fields had been fertilized with "night soil" (human feces) for so many centuries that everything grown there was thoroughly contaminated with dysentery-causing bacteria. The Chinese had lived with the problem for so many generations that they were immune.

Breakfasts always included fried or boiled eggs (egg-ess, the Chinese called them) with rice, boiled pork and coffee or hot tea. Noon and evening meals were usually rice, boiled cabbage, boiled pork or water buffalo with hot tea or coffee. Not much variety, but we were usually in China only a few days at a time, so we didn't mind. I came to enjoy the hot tea. I have never found tea anywhere else to equal it in flavor.

The small fields near A-1 were tilled by hand or with water buffalo pulling a plow or small harrow. I was amazed to see them plow or till the rice paddies with several inches of water standing in them. Rice plants were grown to about a foot tall in beds, then transplanted by hand into the water-covered paddies.

Hillsides surrounding the valley and some of the gentler slopes in The Hump had level, bench-type terraces, some of which had been built about the time Christ walked on earth. I had had some exposure to Kansas-style terrace building my last three years at home on the farm. Surely, I thought, if they can terrace fields and till them for centuries, we in America can do a better job of conserving our soil than we are doing now. No doubt this thinking helped to develop the conservation ethic that has guided many of my activities since.

December 14, 1944 proved to be the blackest day in the 40th Bomb Group history. The mission was to Rangoon, Burma, and should have been a "milk run" (safe trip) as the target was only about four hours away and defenses in that area were usually not heavy. Because of the short distance, gasoline tanks would not have to be entirely filled so a heavier load of bombs could be carried. Bombs were to be 1,000-pounders, with the possibility of adding some 500-pounders to bring takeoff weight up to the normal 134,000 pounds. Our ordnance officers objected to the mixed load, saying there was a possibility the trajectories of the different-sized bombs could cause them to collide in the air. They had no proof it would happen, but feared it could.

Research since WWII has shown that at that time there was something of a "bragging rights" competition among the four group commanders in the 58th Wing, each hoping to say his group had dropped the most bombs on the target. Our CO, Colonel Blanchard, was eager for the top spot after every mission. His orders, after hearing the fears of the ordnance people, were "Go with the mixed load."

Shortly after the bombs were dropped, the ordnance people's fears materialized. An explosion under the formation blew the formation apart. Only one 40th Group plane was able to fly back to Chakulia. Four planes were lost, and the others, badly damaged, managed to land at other bases. Seventeen men were dead, six wounded and 29 became prisoners of war at Rangoon, where they stayed until the British took the area back from Japan in mid-May 1945. I didn't fly the mission, but was well acquainted with several of those who became prisoners of war. All of this sadness caused by wishing to haul a few more pounds of bombs!

On Christmas Eve, the Red Cross organized a Christmas program at the base theater. I was impressed at the talent they were able to pull together. As the final number, Ned Baugh, who later became a tent mate and good friend, sang the Lord's Prayer. I have never heard it sung more beautifully. It had great meaning for this lonely airman, halfway around the world from home on Christmas Eve.

On Christmas night, the Japs tried to interrupt our celebration by sending over a single plane that dropped a few small bombs. We considered it a nuisance raid as very little damage was done. Had it happened the previous night while everyone was at the theater, it could have been chaotic.

I was happy to receive several Christmas packages from home. My landladies from Seattle sent a couple of books. One of them was "Lost Horizons." I felt I could relate to the book. Hsi-Chang, where we crash-landed

No. 326 could have been Shangri-La had it been a few thousand feet higher. Certainly it was in the right area of the world for it.

In contrast to the summer heat, winter in our part of India was almost enjoyable. Mornings were cool, but many were down to wearing shorts while working in the afternoons. Our split workdays were no longer necessary. Most of us became well tanned. Meals improved some, too, and the cooler weather improved our appetites enough that most of us stopped losing weight. Captain Rod Wriston had become mess officer in addition to his pilot's duties. He really tried to make improvements. Rod was a West Pointer who was humble enough to take the mess officer's job. Most of us would have avoided it like the plague.

During our year in India, we received one reverse lend-lease shipment of beef from Australia. It was very good. We were told we got some beef from the sacred cows that were slaughtered after they were 12 years old. Most of what passed for beef chewed like it was far past its 12th birthday. We were served a lot of mutton. I cannot recall ever seeing a sheep, but saw thousands of goats. I thought I knew where our mutton came from.

At around this time, Col. Schaaf called me in and told me that due to some personnel changes the remaining enlisted men from Woodruff's crew and I would no longer be flying with John Martin. Another period without a crew assignment was a discouraging prospect. I suggested to Col. Schaaf it might help our morale if he gave us three days off to go to Calcutta. He agreed. I was in Calcutta four or five times. It was a welcome diversion from life at Chakulia. The allies had taken over the Grand Hotel in Calcutta as a place for officers to stay and another hotel not far away for the enlisted men. The hotel was always crowded. Bunks were jammed together in the rooms. You had no choice as to roommates. They might be British, Australian, South African or most anything else. The rooms did have bathrooms with flush toilets. It appeared that water for the toilets was pumped directly from the Hoogly River. Bath water looked clean, but we doubted its purity.

Sightseeing in Calcutta brought many contrasts. At one extreme was the Jain Temple with beautiful, ornate statuary, adorned with gold and jewels. Outside we were immediately surrounded by filth, beggars, and street people, sacred cows, and stench that could be almost overwhelming. On an early morning stroll, we could count the street people who had not survived the night. Soon crews would pick up the bodies and take them to "Nimboli Ghat," the burning garden on the river bank. There wood was stacked. A body was placed on top, and the wood set on fire. When only ashes remained, they were scraped together and scattered in the river. Up and down the river, people were bathing and washing their clothes.

The British said the Hoogly River was the rectum (not the word they used) of the universe and Calcutta was a hundred miles up it. Standing on the river bank at the burning garden confirmed the idea.

To get around in the city, we walked or rode rickshaws or taxis. A few of the cabs were 1939 Chevrolet sedans, but most were 1928 Oakland Touring cars. All were right-hand drive. Battery-operated horns were illegal, so all were equipped with bulb squawkers. Drivers always had one hand on the squawker bulb, constantly squeezing. Most drivers wore turbans and had long beards flowing in the wind. A cab ride was quite an experience, down streets jammed with pedestrians, rickshaws, carts drawn by man or ox, sacred cows, army trucks, taxis with horns squawking, and the driver yelling (we assumed cursing) at everyone.

Shopping was also a unique experience. Most shops were small and family operated. Haggling over price was the expected thing. At the New Market, the shops sold everything from jewelry to fresh fish. In the meat market area, the meat hung out in the open. It was covered with flies, and buzzards were flying overhead. Only a chicken wire screen prevented them from dropping down and grabbing the meat they wanted.

On one Calcutta stay, I bought a set of hand-carved ivory napkin rings and sent them to my mother as a Christmas gift. The jewelry shops had many beautiful gems from that part of the world. I bought a ring set with a star sapphire and two star rubies and sent it to Betty Warren.

One of the pleasant experiences of a visit to Calcutta was to go to another hotel, whose name I do not recall, to listen to Teddy Wetherford and his band. They played stateside music of the day and did it rather well. Band members were Indians except for Wetherford, who was an American Negro. It was rumored he had fled the

States to escape a kidnapping rap. It seemed logical he had some good reason for leaving. After we left India, a bubonic plague epidemic hit the Calcutta area and Wetherford died of the plague.

Transportation to and from Calcutta was on the Bengal Nagpur Railroad. Passenger cars were divided into compartments with entry only from the side. Trains were always crowded with people jammed into the compartments, and some people hung onto the outside. With frequent stops, the 80-mile trip took about eight hours.

Back at Chakulia, preparations were under way for the group's second of six missions to Singapore. I flew four of the six, missing the first and the last. I was to fly with Col. Schaaf. The plane we were to fly had just had two new engines installed. These engine changes or cylinder changes were quite frequent. Not only was the B-29 a new airplane, the Wright R-3350 engines were also new and had not been tested by heavy use. Instead of the expected life of several thousand hours, they were doing well to last 200 hours. Four of the 18 cylinders on the engines ran hotter than the others. They were not getting enough oil to the valve stems to keep them lubricated under the extreme heat. As a result, the stems would burn in two. The valve head usually went through the piston, resulting in engine failure. Sometimes bad valves could be found during ground inspection. If so, only those cylinders needed to be changed. More often, engine failure occurred during flight, and the entire engine had to be changed when we got back to base. Our engineering officers wrote many URs (Unsatisfactory Reports) about the problems, usually-with suggestions for a remedy. Finally late in 1944, we started getting new engines with crossover tubes installed to supply more oil to the rocker boxes on the four hot-running cylinders. We estimated this simple change; which we had recommended several times, cost no more than \$20 per engine and at least doubled the life of the engines. Sadly, however, we lost more men and planes to engine failure than to enemy action.

After each engine change, we were required to fly the plane one hour to check out everything in flight. Then the ground crew checked everything again, and we went back up for three hours, during which many of the gauges were recalibrated. Usually these flights were referred to as "slow time" flights. Airspeed indicators were calibrated by flying both ways along a 10-mile straight stretch of railroad track. This was done at low altitude, so we tried to get it done in early morning before heating caused enough turbulence to mess up the calibration.

Co-pilot on these check flights and the mission was Major Weber, who had just come to the squadron as pilot of a replacement crew. It was standard procedure that the pilot of a replacement crew flew a mission as a co-pilot with an experienced crew; then an experienced pilot flew as co-pilot with the new crew on a mission. Then they were on their own. This was to be Weber's check ride.

The crew chief, Telemachus Mavrofrides, was to go with us on the two check flights. One of my duties was to fill out a loading (crew) list for each flight. If a man had no middle initial, the letters NMI, in parenthesis, were used in place of the middle initial. In Mavrofrides' case, he was always listed as Mavrofrides, Telemachus (NMI). We usually called him "Murphy."

As we prepared for the first slow-time flight, the crew, except Col. Schaaf, were doing their respective parts of the pre-flight inspection when Major Weber noticed the right wing flap appeared to be slightly extended and asked me about it. I was aware of the situation. The flap appeared to be about a half-inch short of being fully retracted. It had always been that way. There seemed to be no practical way to correct it. I called, "Murphy, come over here a minute," and let him discuss the situation with Weber.

Soon Col. Schaaf drove up in his jeep. He asked if we were about ready and told Weber to have crew inspection, and he would be back soon for takeoff. Weber lined up the crew, took my loading list and started calling roll. When he got to Mavrofrides, he stammered a few times, then Mavrofrides stepped out and said, "Mavrofrides, sir." Weber looked up, said, "Oh, you're Murphy," and went on with roll call.

The slow-time flights were completed. Early on January 11, we were headed for Singapore. These flights usually took about 18 hours and covered about 4,200 miles round trip. The longest bombing raid of the war was flown on August 10, 1944, from China Bay, Ceylon (now Sri Lanka), to oil refineries at Palembang, Sumatra. Flying time was over 20 hours. Because of the high fuel requirement for these long flights, they could carry only 4,000 pounds of bombs. It was a high price to pay for delivering so few bombs.

This flight went well. We logged 16 hours and 50 minutes from the start of the takeoff roll to touchdown back at Chakulia. In all that time, Major Weber never stirred from his seat. How the man had bladder capacity enough to endure that many hours I still cannot imagine.

Primary targets at Singapore were two dry docks. One was the usual type of dry dock built, as part of the port facilities. The other was a floating dry dock that had been built in Scotland and towed to its location in Singapore harbor. When the British abandoned the area to the Japanese, they opened the valves and allowed it to sink. The Japs soon floated it again and were using both docks for ship repair. After the battle of the Philippine Sea, the remnants of the Japanese fleet, including two battleships, limped to an anchorage 60 miles off Singapore and were waiting their turn to get into the dry docks for repair. Our job was to damage or destroy the docks to prevent the fleet from being repaired and returning to combat.

This required precision bombing at its best. By late February, the job was done. The floating dry dock and the ship in it were on the bottom of the harbor and the other dock was damaged so heavily it appeared it would be months before it could be made usable again. Dick Seebach, squadron bombardier in the 45th, was credited with getting the bombs on target to sink the floating dock. The remaining two missions to Singapore, both flown in March, were aimed at destroying the huge quantity of supplies stored in the dock area.

Sunday, January 14, 1945, was another tragic day for the 40th. Ordnance crews were unloading fragmentation bombs from one of the planes. These bombs were made in clusters and held together by steel bands. Apparently one of these bands broke, dropping a cluster onto the concrete hardstand, where it exploded, as it was built to do. This caused a domino effect, and more and more bombs exploded, setting fire to the plane and damaging others. Father Adler, our chaplain, happened by about that time and pulled several wounded men to safety. He later received the soldier's medal for his heroic efforts. The explosion resulted in nine dead, 21 wounded, three airplanes destroyed and several others damaged.

Briefing for combat missions followed a definite pattern. All crews scheduled for the mission met together for the general briefing. There we learned our target, the predicted weather over the target, defenses to be expected, our bombing altitude and air speed. Also pointed out on huge maps were the predicted weather en route, the rendezvous point to get into formation, and the initial point (IP) where we were to make the final turn and then fly straight and level to the target. On many missions, secondary and tertiary targets were also pointed out. Those could be bombed if the crew couldn't make it all the way to the primary target.

Usually the Group CO opened the briefing. Major Lou Scherck, group intelligence officer, told us the details, and the group weatherman predicted the weather. Father Adler, our chaplain, gave us a few encouraging remarks and led us in repeating the "Our Father," he called it, which is the Lord's Prayer.

At one briefing, I noticed that the young Jewish man standing next to me repeated the prayer with us. I asked him about it, explaining that we were taught it was a prayer of Christ. Since he didn't believe in Christ, how did he know the prayer? He was nonchalant about it, saying, "I don't know, but it is in our teaching somewhere." I doubted he was that good a student of his religion, but have never known if he was correct or not.

Next, each crew member went to his specialty briefing. Our flight engineers' discussion usually centered on stretching our gasoline supply to get to the target and return. Each crew member got details of his part of flying a successful mission. From there, we went to the mess hall to eat, then to the plane for pre-flight inspection and takeoff.

A mission to the docks at Saigon on January 27, 1945, was almost as long as those to Singapore as we logged 15 hours, 40 minutes. It proved to be my last flight with Col. Schaaf. At last I received what was to be my final crew assignment. My new pilot, Raymond S. Elliott, had come to India with the original group, flying as a co-pilot for Major Glass. In June 1945 that crew, with another co-pilot replacing Ray Elliott was lost over The Hump. Later word came that a graves registration team had located the wreckage. The team listed the names of those bodies that had been "identified, buried, and graves marked." Ray's name was on the list. Presumably identification was made from his name on his parachute or some other item in the plane. I don't know if the grave marker was ever corrected, or if it is still there over someone else's remains.

Ray had later been assigned some men from a replacement crew and sent to another base to fly B-24s, which had been converted to tankers to haul gasoline over The Hump. It had been rough duty. In addition to the usual hazards of Hump flight, the airplanes were not well maintained, and those in charge seemed to care little for the welfare of their personnel.

Shortly after Ray and crew returned from flying these converted B-24s hauling gasoline, I was assigned to their crew as flight engineer. Other crew members were Kenneth Dothage, co-pilot; Ed Adamson, navigator; Wait Roberts, bombardier; George Hippie, radio; Chuck Henning, top gunner; Ike Barnes and Harold Taden, side gunners; Delbert Glover, tail gunner; and Ben Beck, radar.

Our most memorable mission was to Singapore on March 2, 1945. The target was the dock area. We got into a four-plane formation as directed. On the bomb run, we could see flak ahead and right on our level. The flak bounced us around but did not appear to have done us serious damage. We had been told the Japs did not have radar. We were sure they did. Flak could not have been that accurate unless it was radar-controlled and probably came from Jap navy ships in the area. After the bombs were dropped, we were hit by fire from a lone Jap fighter coming in from ahead and above us. We lost power on two engines. Radioman George Hippie was wounded. I could see the hydraulic tank behind the navigator's head was leaking. My efforts to restore power to No. 2 and 3 engines failed. On hunch or gut feeling, I advised Ray to feather the No. 2 engine but let No. 3 run at reduced power. This proved to have been the right thing to do. The supercharger was out on No. 3. At a lower altitude, we were able to hold cruise power on it. I knew that if we made it back, we would need hydraulic fluid to operate the brakes. I happened to have gum in my mouth and was sure Ray would have. I asked him for it and almost reached into his mouth for it, then worked the gum into the gash in the hydraulic tank. It stopped the leak.

We had made a 180-degree turn away from the target. A glance out the side window showed our bombing had been effective. A huge smoke cloud had risen from the target area and had reached our level. We surmised it was largely from burning crude oil and cotton.

George Hippie had a bullet hole in his left cheek. What damage had been done inside his head we did not know, but he was unconscious. Some of the crew had moved him through the tunnel to the rear crew compartment, got his bleeding stopped, and were giving him plasma and morphine. We knew of nothing else we could do. Charlie Allison was flying with us as radar operator. He had also trained as a radio operator, so he took over our communications.

We were soon down to 10,000 feet altitude, which presented a bad situation. Normally on the return flight we very gradually lost altitude, using long glides to stretch our precious gasoline supply. Our base at Chakulia was about 2,000 miles away. Nearest emergency base was at Akyab Island, maybe an hour closer. A rescue submarine was supposed to be under us in the Bay of Bengal, but if we had to land in the ocean, could it find us? If we did land in the ocean, we knew George's chances were slim to none. The best answer appeared to be to get to Akyab, if possible. In emergencies such as this, it was imperative to reduce weight as much as possible. Eric Buzza was our bombardier in place of Walt Roberts, who had been ill. He took charge of weight reduction.

Also on board as an observer was a man from wing headquarters whose name I do not recall. The empty bomb bay tanks were dropped, and flak vests and anything else that we would no longer need were tossed into the bomb bays. This time one set of bomb bay doors did not open. Buzza was horrified when he saw the man from wing headquarters jumping on the bomb bay doors to try to jar them open. Had he succeeded, the fellow would surely have gone out along with the excess baggage. The problem was soon corrected, the baggage dropped, and everyone back inside the crew compartments.

I was able to transfer the gasoline from the No. 2 tanks to the other tanks. With minimal cruise power on three engines and a very slow loss of altitude, we were able to stretch our gasoline supply to about the limit. It was a long, slow, worrisome ride, but we located Akyab about sundown and touched down at dusk.

The British had taken the island from the Japs less than a month before. To make a runway, they had merely knocked down the ridges between the rice paddies, put up a few markers, and started flying fighter planes from the strip. My concern about the brakes now appeared unnecessary. Dust on the runway was so thick it slowed us

enough we really didn't need brakes. We had made it!! We were on the ground with George the only casualty. We had logged 191/2 hours since takeoff at Chakulia.

An ambulance was there quickly. That night George was flown to the military hospital in Calcutta, where one of the top eye surgeons from Britain cared for him. The Jap equivalent of a .50-caliber slug had gone through his left cheek missing his teeth (his mouth must have been wide open), and lodged behind his right eye, severing the optic nerve. The slug must have been almost spent; otherwise it would have gone on through his head and killed him instantly. He had no sight in it, but the eye was not removed. Doctors here marveled at the fact he still had the eye. Apparently the British doctor was one of the few in the world who could have done such a job. We were able to visit George in the hospital a couple of weeks later. He was soon returned to the States and medically discharged. When he died of cancer at age 50, he still had the eye.

Exit from the front cockpit was down a ladder in the nose wheel well beside my engineer's seat. Going down the ladder there at Akyab, I discovered a jagged hole 4 or 5 inches across, about a foot below where I had been sitting. I was sure then that if I had ever been wounded, I knew exactly what part of my anatomy would have taken the hit.

The British treated us like celebrities, supplying us with food, drink and beds. Next morning we were able to take inventory of the parts needed to make the repairs necessary to get us back to Chakulia and sent word for the parts to be sent to us. Primary concern was to have all four engines running. Flak and fighter damage and the ailing supercharger could wait to be repaired at Chakulia. The crew chief and assistant crew chief soon arrived, bringing with them tools and repair parts.

Refueling presented another problem. At Chakulia it was done from a semi hauling several thousand gallons of fuel. The British "petrol" trucks held 350 gallons. We needed about 2,000 gallons, so it took several trips. Our fuel trucks had filters to remove any impurities (especially water). The British didn't have them. They came up with some chamois similar to what I had used at home for polishing the car, and all the fuel was strained through them. It was a slow process, but it worked. The third day after landing at Akyab, repairs were complete, and we flew back to Chakulia. This proved to be our last combat flight from India.

The 73rd Wing had followed us through training at the Kansas B-29 bases, then moved to Saipan Island in the Marianas and started combat operations in November 1944. They could bomb Tokyo and other eastern Japan targets from there. We could not reach them from China. The Marines had taken the island from the Japanese shortly before, then went on to take Tinian and Guam in the same island chain. As additional B-29 units were trained and equipped, they moved to these islands. It had been rumored for some time that we would move there and join them. Most of our efforts in late March and early April were directed at preparations for such a move. Most of the ground personnel left by ship from Calcutta in late March, going to Tinian Island by way of Australia.

News came of the death of President Roosevelt on April 12. With my conservative upbringing, I had never been an admirer of his. Harry Truman had become president, which caused me to wonder. When I was a boy, my dad had subscribed to the Kansas City Star when he thought he could afford it. I had read in the Star of the Pendergast machine and its control of Kansas City and Missouri politics. Truman, I knew, was in office with the support of that corrupt machine. Could he, with that background, lead the country and the world to victory in the war and in establishing the peace afterward? Those doubts stayed with me.

April 16, 1945, we got the official word. Our next base would be West Field, Tinian. Early on April 20, we were on our way. On board were our usual 11-man crew; plus the crew chief and assistant crew chief; squadron commander Major Marvin Goodwin; and three officers from group headquarters for a total of 17 men, plus all our personal baggage and tools for emergency repairs should they be necessary. Major Goodwin rode in the front cockpit. The other extra men were in the rear crew compartment.

A little over five hours later, we landed at Luliang, China, for refueling. The single runway was 11,000 feet long, but the altitude was, to the best of my memory, over 6,000 feet. The thin air at that altitude made takeoff precarious. We knew the first B-29 to make the takeoff had had to dump everything in the bomb bays just off the end of the runway to stay airborne. We had left Chakulia at our usual 134,000 pounds but loaded only

enough gasoline to bring us up to 128,000 pounds for the takeoff. Adding to the problems was a rather strong crosswind. Major Goodwin had decided he would pilot the takeoff.

The plane we were flying had become more or less a permanent assignment for our crew. Every plane seemed to have its own oddball characteristics. It helped to know them. On this plane the throttle lock didn't always hold the No. 4 throttle. With the throttles wide open on the takeoff roll, it would sometimes slip back, reducing power on that engine. Ray and I understood that on takeoff I would keep one hand on the throttles and hold No. 4 open if it started to slip. This was a workable solution to the problem, but we forgot to tell Major Goodwin about it. When our turn came, we stopped at the end of the runway, applied full power, and Goodwin released the brakes. Soon after we started rolling, I felt No. 4 throttle ease back. I jammed it open. Soon it eased back again. Again I jammed it open. About that time, I heard Goodwin say something like, "What the h---?" and I felt him hit the right brake. Then I realized he had pulled back the No. 4 throttle to compensate for the crosswind. Because I had jammed it open again, he had to use the right brake to keep us on the runway. If I had seen a hole 2 inches in diameter, I believe I would have tried to crawl through it. Would my goof prevent us from getting off"? The next minute or two would tell.

The end of the runway came, and we were airborne. We were able to climb slowly. We made it. Ray Elliott had been sitting beside me during takeoff. He knew exactly what had happened. Once we were safely on our way, he explained the situation to Goodwin, for which I was grateful.

A couple of hours into the flight, Goodwin turned the pilot's seat over to Ray and came back to sit beside me. I apologized to him for what had happened. I had almost ruined his takeoff. His reply was something like, "Don't worry, about it now. We made it." Apparently he wasn't worrying about it. He stretched out on the exit hatch beside me and was soon asleep.

The flight over Japanese-held eastern China was in darkness. At dawn, all we could see were a few clouds and the blue Pacific beneath us. About 12 1/2 hours after the takeoff from Luliang, there was Tinian dead ahead of us. Navigator Ed Adamson had done his usual excellent job.

CHAPTER VIII

TINIAN

Life on Tinian was quite a contrast to that in India. The weather was pleasant, though it did rain frequently. Most food had Stateside origins and did not need to be boiled. Fresh water was in good supply. Mail arrived in a week, not two weeks or more. Housing was in four-man tents. My tent-mates were Ray Elliott, Ned Baugh, and Charlie Allison. Ray, Ned and I became close friends and spent much time together. Allison was OK but something of a misfit. I doubted he would ever amount to much. Instead, he became an architect and designed and supervised construction of luxury, hotels all over the world.

We had no houseboys and had to do our own laundry. At least we knew we had used hot water and soap. The island had no beaches. Soon, a zig-zag stairway was built down the coral cliff to the water's edge, near our tent area. We could enjoy swimming there frequently. In June enough Quonset huts had been built that we could abandon our tent and move into one.

Tinian Island was 9 miles by 5 miles at its longest and widest points. Living areas and runways were works in progress. When completed, West Field had four parallel runways stretching almost completely across the island. Before construction started, the island was covered with cane field and brush growing from a thin layer of soil over solid coral rock. The coral made an ideal base for the asphalt runways. The world's largest asphalt plant had been built there. Ground coral mixed with heavy oil made excellent asphalt. The runways and parking areas were no doubt the best we had ever used. The island was fairly level and about 75 feet altitude. Takeoff from and landing approach to the runways were over water, which provided highly satisfactory takeoff and landing conditions. Because of these better conditions, our maximum takeoff weight was raised to 137,000 pounds.

We didn't have long to get acquainted with our new surroundings. We were briefed for a mission to the aircraft factory at Kure, Japan, on May 5. Takeoff in early morning was uneventful. Transfer of gasoline from the center wing and bomb bay tanks was always done as soon as possible after takeoff. Our plane was equipped with carbon vane transfer pumps, which were prone to failure. Soon after switching on the pumps, I knew we had a serious problem. We were transferring fuel at only a fraction of the normal rate. I discussed the situation with Ray, telling him if the present rate of transfer continued, we could have it completed before we got to the target. His decision was to continue. The problem didn't appear to be serious enough to abort the mission.

About that time, I began to get the jitters, something that had not happened on any mission before. Perhaps the two-month lapse between the last Singapore mission and this one worsened the situation. Somehow I was sure we would be hit over the target area. I knew I could not do my job unless I could get over the shakes and be calm enough to think clearly. Ten other men in that plane were depending on me to do my job. Their lives depended on me, just as mine depended on them. I prayed as fervently as I had ever prayed in my life - not that we would avoid the danger, but that I would have strength and calmness to do my job properly. Almost immediately it was as though the burden was lifted. I was calm again. Somehow I still felt we were going to be hit, but I was sure we would come through it because God wanted it that way.

I was relieved when gasoline transfer was completed about the time the Japanese coast came into view. As our formation went over the target, we were bounced around considerably by anti-aircraft fire. Before we could take stock of the damage, we were fired on by a fighter. Our No. 2 engine was out. The gunners could see gasoline streaming from the trailing edge of the wing behind that engine. Thankfully no one was hurt. If we were to make the return trip on three engines, we needed the gasoline remaining in the No. 2 tanks transferred to the other three sets of tanks. Now the transfer pumps totally failed, and I soon had to give up the effort. Watching that precious gasoline flow off the wing and being helpless to stop it was almost enough to make a man cry.

All fuel tanks were supposedly self-sealing. A hole made by a .50-caliber slug would seal almost immediately, but a large hole was beyond the self-sealing ability of the tank materials. Inspection on the ground showed one hole big enough that I could put my hand through it and numerous smaller ones.

Ned Baugh and his crew were in our formation and aware of our problems. As we dropped from the formation, they flew with us to offer whatever assistance they could. Because we had lost so much gasoline, it was obvious we could not fly all the way to Tinian. We would need to land at Iwo Jima for refueling and repairs. Ned and his crew would stay with us. As we neared Iwo Jima, we could see nothing but clouds ahead. When the navigators in both planes agreed the island should be below us, we couldn't see it and couldn't pick up any radio signals to guide us. To fly on toward Tinian was pointless. We would probably have to land in the ocean far from any emergency help. Baugh's crew might have made it, but they chose to stay with us. We flew in a search pattern, occasionally out of the clouds but mostly in clouds or rain. I marveled that the other plane could keep us in sight. After an hour, we saw an opening in the clouds and there was Mount Suribachi and the volcanic rock runway. What a relief!

We were fed and put up in tents overnight. Next morning, word came from Tinian that we should leave the plane there and return to Tinian. We all crowded in with Baugh and his crew for the flight. After several days our plane was repaired sufficiently to return it to Tinian. There the decision was made that it should no longer carry bombs. It was fitted with additional radar equipment and would fly radar counter measures (RCM) missions. We flew one such mission on June 7. The target was Osaka, Japan. Our job was not to go over the target but to circle near it. The radar operators on board (I cannot recall how many) constantly searched their screens for signs of Japanese radar. When they located a signal, they tried to jam it. Several times the crew could see searchlights lock onto a plane, then our people could almost immediately locate the signal and jam it. The searchlight would go out. The effort appeared to be fairly successful. Also we had on board several boxes of "window." Window in this case consisted of rolls of aluminum foil designed to unroll when tossed from the plane. The foil was supposed to reflect the Jap radar signals and confuse them to the extent that they were ineffective. I thought it was a novel idea that didn't cost much. Whether or not it worked, I don't know.

Iwo Jima was an 8-square-mile volcanic island halfway between Japan and the Marianas Islands. When the 73rd Wing began operating from Saipan, they soon found planes were being lost because there was no emergency field between there and their targets. On February 19, 1945, Marines began an invasion of Iwo Jima. After some of the bloodiest fighting of the Pacific, the island was secured in late March. The news photo of the Marines raising the flag on Mount Suribachi became one of the best-known photos of the war. It is the basis for the Marine Memorial Statue in Washington, DC

Suribachi was the one prominent feature of the island, rising sharply at one end. On some missions, as many as 10 percent of the planes involved had to land at Iwo Jima for repairs or refueling. It would be impossible to estimate how many planes and crews were saved because the runway there was available. I shall be eternally grateful to those who were a part of the battle for the island and to the families of those who were lost there. Were it not for their efforts, I probably would not be here writing of these events today.

May 8, 1945 brought the end of the war in Europe. We were relieved, of course, but wondered what changes it would bring to us. Would Air Corps units that had performed so well in Europe now be retrained to join us in the Pacific? We hoped our part of this World War would be over before that could happen.

May also brought word that the British had retaken the area around Rangoon and that allied prisoners of war there had been released. We didn't know then how many of our men missing since December were there or what they had suffered, but it was great to know it was behind them.

Our third mission from Tinian was our first of many nighttime fire bombing raids. After more than a year overseas, we were at last to bomb Tokyo. It was the greatest bombing effort of the war up to that time. The four wings then operating put 525 planes over the target. Nineteen square miles of Tokyo were destroyed. On these missions, we took off in late afternoon, bombed in darkness at 10,000 to 13,000 feet altitude, and landed back at Tinian in daylight. If we were among the early planes over the target, the air would be smooth except for anti-aircraft fire. Later planes had to contend with turbulence caused by the burning city below them. Sometimes it was so bad we wondered if it would rock us out of the sky.

We still flew some daylight missions, taking off in very early morning, bombing in formations of either four or 11 ships and landing back at Tinian before dark. On any of these flights when it was clear enough to see the coast of Japan, I looked down at the rugged coastline and shook my head over the poor GIs who would have to

make the landings there, where landings appeared to be nearly impossible. We all assumed an invasion would be required in spite of the pounding we were giving them.

We flew four missions in May and five in June. Twice more we landed at Iwo Jima. Once our fuel shortage was caused by accompanying a crippled plane that far. The other time, we saw off the coast of Japan what appeared to be a life raft and dye from a sea marker below us. We went down to confirm our sighting and called for help from the air-sea rescue people. A reply came back that a rescue submarine was in the area, had been notified, and was proceeding to the location we had given them. We circled the area, chasing one fighter plane that showed up. We stayed until we could see the sub approaching the life raft full of men, then flew on to Iwo Jima.

On one of the overnight stays in Iwo Jima, a typhoon moved over the island. We had water gushing through our tent. We had to give up the struggle to keep the tent upright. Soaking wet, we finally got to the mess hall to spend the rest of the night there. We had no dry clothes. We had to wear the same ones until we got to Tinian the next day.

Soon after our move to Tinian, Chaplain Father Adler (we usually called him "Padre") felt a pressing need for a chapel. Volunteer help might build one, but where would the materials come from? Some lumber used to load cargo usually was piled near the docks, and it was available if you had a friend there. Much more was needed. Padre was resourceful, and came up with a plan. Seabees and Army engineers were doing a lot of construction on the island. They seemed to have lots of equipment and unlimited supplies of materials of all kinds. We were getting a monthly liquor allowance, something we did not have in India. Non-drinkers donated their liquor to the cause, and a few drinkers sacrificed some of theirs. The Padre pooled it together and traded it to the Seabees and engineers for building materials. His chapel was completed in June. All transactions were off the record, of course.

Soon the inspector general from Island Command, a colonel, called on the Padre, accusing him of misusing government materials to build an unauthorized structure and threatened to file charges. Padre stood his ground, telling him he had no intention of staying in service, had no family, and was sure he had a job when he got back to the States. The colonel left in a huff, saying Padre and other chaplains were too damned independent. A few days later, the commanding general of Island Command called on the Padre, inspected the chapel, and issued an order authorizing other groups to build chapels as the 40th had done.

Unfortunately, about the time the group returned to the States, in October, a typhoon moved over the island and destroyed the chapel.

I surely admired the Padre. Many mornings on Tinian, he would walk past his Catholic friends and come over and eat his breakfast with Ray, Ned and me. Then we would visit as we all lingered over coffee and cigarettes.

I seldom attended church while overseas. I didn't feel I wanted to go to Mass. The Protestant chaplain, who came just long enough to conduct services on Sundays, impressed me as being a boring fuddy-duddy. I always had a Bible, which I read occasionally, and my prayer life was irregular. At a time in my life when I most needed Him, God was always there in spite of my neglect.

In June 1945, Bomber Command announced a rotation policy for flight crews, requiring 35 missions before we could go home. We in the 58th Wing were given some credit for our time flying The Hump. I believe it was about two hours of Hump time to equal one hour of combat time. A few of our most experienced crews had already been sent home for one reason or another. None of us had yet flown 35 missions. A point system had been established for rotation of ground personnel, but it had exemptions for people in "essential" classifications. We had numerous people eligible, but all were essential. Not until mid-summer did any of them get to leave.

By July 1, I knew I needed five more missions to reach the magic number 35. We flew to Kure on July 1, Chiba for photo recon on July 7, Sendai on July 10 and Utsonomiya on July 12. That was Ray Elliott's last mission. I wondered when I could fly my No. 35. I didn't wonder long. July 16, I was listed to fly the next mission with pilot Leland Jones. Jones had grown up wrestling alligators in the Okefenokee Swamp in Georgia. He had been ill and had flown fewer missions than most of his crew, so for this mission they assigned him a crew of men who were without a crew assignment. I was glad to see Ken Dothage, Ed Adamson and Del Glover from

Elliott's crew were listed. Also on the crew were Fritz Kulicka, bombardier, and gunners Bob Rawson and Samuel Farrat. These three plus Glover and I were all flying mission No. 35.

The target was Numazu. It was on the coast of Japan. We didn't expect it to be as heavily defended as many recent targets, so we thought we should be able to get over the target, make a quick turn back over the bay and come on back to base. Takeoff was in late afternoon, the flight uneventful. Bombs were dropped, and we turned back over open water. We all heaved sighs of relief and began removing flak vests and making ourselves more comfortable. Several unhooked their seat belts, but I did not. A hundred miles or so away from the coast, we were passing through clouds, which were quite common in that location. Suddenly out of my window appeared what looked to be another B-29, landing lights on, coming directly at us. Just then one of the gunners yelled, "Dive," into the intercom, and I yelled the same thing. Jones didn't hesitate even though he didn't know what the problem was. He pushed his control column forward, overpowering the autopilot, and we dived. Everything loose - flak vests, water cans, men who had unbuckled their seat belts - all hit the top of the airplane. Jones pulled back on the control column to pull us out of the dive. Nothing happened. Thinking we had collided with another plane and the control cables had been cut, Jones ordered, "Bail out!" I thought that was a stupid order. No one could even push himself off the top of the crew compartments, much less open an escape hatch and get out. Jones and Dothage kept working their control columns. Finally it happened. The elevator controls were effective again, and we headed up just as steeply as we had come down. Men, flak vests and water cans hit the deck just as hard as they had so recently hit the top. As he was getting the plane leveled off again, Jones said into the intercom, "Don't bail out, don't anybody bail out. I think we'll be all right now. Don't anybody bail out." We didn't need his urging. No one wanted to bail out over the ocean.

Under some rather unpredictable combinations of altitude, air speed, etc., control surfaces such as elevators had been known to stall. Apparently that had happened to us. As our dive continued and air speed increased, the combination of factors changed, and we came out of the elevator stall and started climbing again.

As things got settled down again, all the crew checked in and reported no injuries. As far as could be quickly determined, the only damage inside the plane was in the tailgunner's tiny compartment. Del Glover, tail gunner, was 6 feet 2 and probably weighed 180 pounds. The rules were that no one over 6 feet could fly tail gunner, but Del had gotten a special waiver to allow him to fly that position. When we pulled out of the dive, he had slammed so hard against the seat that it broke loose from its supports.

During the dive, my engineer's panel had been vibrating so severely that I could not read any of the gauges. I inquired of the navigator if he had been able to read his altimeter or an air speed indicator. He had not. Both pilots had been so occupied with getting the plane under control that they hadn't looked at their gauges. So we never knew how far down the dive took us or at what speed.

As we flew on, members of the crew who had seen what I saw agreed it appeared to be another plane, probably a B-29, landing lights on, headed right at us. Inquiries after landing found no report of any of our planes lost in that area that night. In issue No. 41 of the 40th Bomb Group "Memories," pilot Otto Kerstner tells of a similar incident while leaving the Tokyo area. He said atmospheric conditions were such that they created a layer of air that acted like a huge lens and magnified light from the planet Venus. That is what he and his crew had seen, and mistook for a Japanese fighter heading for them with a spotlight on them. Correspondence with Kerstner led both of us to believe our crew had seen much the same thing.

As we continued toward Tinian, the pilots and I agreed we had probably stressed the plane about to its limit. It might have caused some structural damage. We thought a rough landing at Tinian could cause problems. Jones did his job well, bringing us in for a very smooth landing. We described the incident to the ground crew. I wrote in my log, "Airplane in dive at unknown but excessive air speed. Violent pullout. Request complete structural check of plane." These checks were done. There were no wrinkles in the plane's skin to indicate any twisting of the fuselage, and all the bolts fastening wing sections together were checked and found OK. We concluded it was a pretty rugged airplane.

It was over. In spite of our problems, we were on the ground, and five of us would not have to fly combat again. I believe all of us knew our maker's hand had much to do with our return from this last mission, and we thanked Him for it.

We had done our job. We had tested a new airplane, the B-29, under enemy fire and in the world's worst flying conditions and had proved its worthiness. Our recommendations for improving the engine had been accurate. The first ever airplane radar system had been of great value in many situations. The gun control system, known as the CFC (Central Fire Control) system, also the first of its kind, was so successful that for several months we had the greatest number of enemy planes shot down per sortie of any combat units in the Air Corps, including the fighter groups. But best of all, we had survived.

At squadron headquarters, I was told I would have my orders to return home within one to two weeks. In the meantime, I had nothing to do but laundry and discarding clothing not worth carrying home. I had not informed Betty or my parents of the rotation system, not wanting to build up their hopes for something that might not happen. Now I wrote them that my combat duties were over, and I would be home, probably in a month or so. I believe they were almost in shock when they got the news.

Hank Lanzoni, a pilot who had some experience as a carpenter, was leading an effort to build an officers' club. It was being done much as Father Adler's chapel had been built. Materials were either scrounged or received in trade for liquor. All labor was volunteer. I spent some time helping with it but hoped it would not be finished in time for me to enjoy it. It was built in the shape of the Air Corps insignia, which was painted on the sides of each plane. It had two large rooms extending in opposite directions from a large circular room.

July 26, 1945, I had my orders. That afternoon, I said my goodbyes to quite a number of people, including squadron CO, Marvin Goodwin, now a lieutenant colonel. He wished me well and said he was sorry to see me go, as the squadron was running short of older, experienced flying personnel. I said, "Colonel, after our takeoff from Luliang, I never thought I'd hear you say something like that." A grin spread over his face, and we both were able to laugh about it.

CHAPTER IX

THE WAR ENDS

The next day, I caught a shuttle flight to Guam, where we were told we would wait for the next available transportation. The following day, I was one of a plane-load of B-29 personnel on board an ATC plane. I carried all my worldly goods in one duffel bag and one B-4 bag. The B-4 was a canvas fold-over garment bag. The two bags packed weighed about 75 pounds.

Refueling and crew change stops were at Wake Island and Johnston Atoll. Wake was hardly large enough for a runway. On Johnston, with an area of 1 square mile, it had been necessary to push many tons of coral into the ocean to lengthen the atoll enough for a usable runway. July 28, we landed at Honolulu.

Our first meal was a real feast. For the first time in over 17 months, I could enjoy fresh vegetables and fresh milk. My tray was full of delicious food. I had a full quart of milk. Then I found I could drink less than half of my milk and could eat far less food than I had taken. For the first time in many months, I felt really stuffed with food. I was down to 145 pounds. My stomach had shrunk so much that I could not eat a big meal.

We were assigned to a hotel near the beach and told again we would wait there for the next available transportation. It was a relaxing time. I did little sightseeing, but enjoyed going to the beach several times. For a long time, I had heard of Waikiki Beach. Now as I strolled along the beach or swam in the waters, my thoughts were, "Sure, it is a nice beach. But what makes it so much better than other nice beaches?" I still don't know, unless it was the songs written about it.

All of us hoped that when our turn came we would leave the island on a fast plane headed for a California air base. Many did, but that was not my lot. On August 6, 1945, we boarded the Cushman K. Davis, a liberty ship nearly identical to the Newton D. Baker I had ridden to Casablanca more than 17 months before. There were important differences. The quarters were clean, and we were not nearly so crowded. The Pacific lived up to its tranquil name. We hardly saw a wave over 3 feet high the entire voyage. I knew none of the other passengers. Many of us had shared similar experiences, so there was no problem getting acquainted. Very few of them had been overseas as long as I had. One co-pilot complained that he had flown his 35 missions in less than six months, so he wouldn't get to wear an overseas stripe on his uniform. What a contrast between those of us who first entered the B-29 program and the latecomers!

One afternoon about halfway through our voyage, we had suddenly turned about 90 degrees to the left. We weren't told why. About 2 the next morning, I woke up to realize we were not moving. Daylight found the ship sitting dead still in the ocean, and there we remained for several more hours. Then a large troop transport ship came toward us, stopping a couple of hundred yards from us. Then we learned one of our passengers was carrying some shrapnel in his gut and had developed peritonitis. Since we had no medical personnel on board who could do more than offer first aid, the troop ship had come to his rescue. They had operating rooms and surgeons available. Our ship let down a life boat carrying the man strapped to a gurney, and he was sped over alongside the troop ship. Lines were lowered, and the man was hoisted up and taken aboard. The troop ship was soon speeding away. As soon as the life boat crew was back on board, we again headed for Seattle. We never knew whether the man survived.

Sometime while at sea, word came of the bombing of Hiroshima. The news brought many questions. What was an atomic bomb? What made it more effective than the bombs we had been dropping? Would it bring us closer to the end of the war? Was it possible the war could end without an invasion of Japan by land troops? A few answers came on my 24th birthday, August 14, 1945. Japan had surrendered unconditionally. Our efforts for the past several years had brought the desired end. There was no big celebration on board ship. At last the war was over, but our attitude seemed to lean toward quiet reflection and thankfulness rather than toward riotous celebration.

Late on August 15, we could see the shoreline as we neared Seattle. I stayed on deck all evening as we passed through the strait between Vancouver Island and Washington State. Around midnight, we stopped a few miles

from the docks at Seattle, so I went to bed. I was back on deck soon after daylight. It looked to be a quiet morning until a "Welcome Home" launch pulled up alongside. The band was playing and the ladies were throwing kisses as the launch stayed beside us as our ship steamed toward the docks.

As a boy I had read many adventure stories, and was intrigued by those describing foreign lands. I daydreamed of traveling around the world someday, somehow. Today I was two days past my 24th birthday, and there in Seattle harbor I completed my trip around the world. Traveling was done at Uncle Sam's expense while I was drawing a monthly paycheck from him. My cost had been three years of my life. Had I planned a sightseeing and pleasure trip, it might have borne little resemblance to our route, but I did get a degree of satisfaction from it.

We were soon on Army trucks headed for Fort Lewis. Seattle was quiet. The previous day had been declared a national holiday to celebrate the end of the war. No doubt many were still trying to sleep off hangovers. We had missed it .all by one day!

At Fort Lewis, we were given a quick physical and told we would soon receive orders sending us to a processing center nearer our homes. There we would either be processed for discharge or be given 30 days of leave, then be returned for discharge, if eligible. I sent telegrams to Betty and my parents telling them I would be home in a week or so. Somehow an evening of bar hopping with my acquaintances from the ship did not appeal to me, so I called my landladies from two years before. They insisted I come for dinner. I spent a very pleasant evening with them. I exchanged Christmas greetings with them as long as they lived.

Next day I was on a troop train traveling the same route I had gone almost two years before when I moved from Seattle to Salina. The troop car to which I was assigned had no doubt been built for use in World War I. It had few comforts. A few of the cars were standard Pullmans, but I wasn't lucky enough to be assigned to one. Each car had its own black porter. Ours did a good job, considering the poor equipment he had to work with. Our route through Colorado took us through several tunnels, including the Moffett Tunnel, almost 7 miles long. It was a hot day. Many of the men had opened windows to escape some of the heat. We were pulled by a coal-burning steam engine. When we entered the tunnel, smoke, soot and cinders immediately came through the windows and the ventilators in the top of the car. Our porter had been asleep, but quickly woke up and started closing the ventilators. Everyone beside a window closed it, but the car was already full of smoke, and everything was gritty with soot and cinders. When we began to see light at the end of the tunnel, we knew the engine would be out of the tunnel, so windows went up again. When we were back in sunshine, the train passed by washers - pressure sprayers - put there to wash the soot from the windows and sides of the cars. No one knew about them in time to close the windows again. Now we had wet soot and cinders and many wet uniforms. Our porter did all he could, mopping, sweeping and dusting, but we and the car needed a thorough cleaning when we got off in Denver. Army trucks soon took us to Fort Logan. There we were advised to take the 30 days of leave offered us. They were not yet ready to start processing large numbers of men for discharge. Our alternative was to simply wait there until they could get to us for processing. Leave orders were ready rather quickly, however. Late afternoon on August 21, I had mine in my hand. I knew a train to Kansas City left in late afternoon. I called the station to see if I could still catch it. They said probably not, but that the train stopped in Littleton. Since I was closer to Littleton than to the Denver station, I probably could catch it there. Art Heise, a shipmate whose wife lived near Hoisington, Kansas, was with me. We soon found a cab, told him to hurry, and we caught the train.

At Kansas City, I took the Santa Fe to Garnett and spent an afternoon and evening with Betty. She was wearing the ring I had sent her. Whether or not she had worn it all the time since receiving it, I didn't inquire. We had a wonderful visit, but when I brought up the subject of marriage, she put me off. She planned to teach another year of school, then go to Kansas State to complete her degree. The next weekend, she came down and met my family and many of the neighbors while attending church and a picnic with me.

From Garnett, I rode the Santa Fe on down to Cherryvale, where Mother, Dad, brother Hadan, sister Mildred and niece Phyllis met me. It was wonderful to get home again, to walk over the farm where I had grown up, the land that I loved. Friends I had grown up and gone to school with were getting home, too, and we had happy reunions. Others, we knew, would never come home. I sympathized with their families but somehow had guilt feelings, too. Why was I spared but they were not? Would the world be a better place if they, not I, were here to

help build its future? My only answer was that my return was God's will. Surely He expected me to make the best of it.

Shortly before leaving Tinian, I had received a letter from Helen Thomas of Altamont, Kansas. I didn't know Helen, the woman who would become my wife, but I knew she was a sister of Marcell, who had been behind me in high school. Helen told me her cousin, Clark Halbert, had been missing in action since May. Clark had followed me through high school, and I had chanced to see him in Calcutta sometime in the fall of 1944. He was a bombardier in one of the other Groups in the 58th Wing. He had written his family of our meeting. They asked Helen to write me to see if I might have any information about him. I had little opportunity to inquire before leaving Tinian, but on the way home, I talked to a couple of men who knew him and had served with him. They said Clark's crew was lost in one of the fire raids over Tokyo, and they considered the crew's chances of survival slim. Shortly after arriving home, I stopped by the Thomases to give them the discouraging news. Helen had just moved to Chicago to take a job with the government. Her parents told me they had received word that, while not definite, at least led them to believe Clark would soon be released from a Prisoner of War camp in Japan. Later it proved to be true. I was grateful to be spared having to bring them bad news.

In the previous December, Dad had bought the "Hugo farm," which lay alongside the "Molesworth farm," which he had owned since about 1936. We made a trade. He took the land I had bought, and I got the quarter section that became Laneview Farm. Of course, it took a bigger loan on my part, but I felt I was putting down roots. Besides owning land, I now had a house, hardly livable, two barns and a couple of smaller buildings. I had doubts that any of the outbuildings were worth tearing down.

I was able to help Dad on the farm, and I visited Betty several more times. I could not help feeling our relationship was going nowhere. An order had come granting a 15-day extension to my 30-day leave, but that soon passed. Early on October 9, 1945, Mother and Dad's anniversary, I was on a Katy train headed back to Kansas City. Two days later, I arrived at the air base near Santa Ana, California.

There I was told that there was a big backlog of men to be processed and that my turn was probably at least a week off. Meanwhile I could do pretty much as I pleased, but should at least check the bulletin board often enough to be there when my turn came. I went down to the operations office and chanced to meet a pilot, who, like me, wanted to fly for a few hours in order to draw flying pay for October. His problem was convincing someone they should let him fly one of their planes. He was persuasive and good enough to take me with him when they relented. Two days we flew a C-47, a twin engine cargo plane, the workhorse of the Air Transport Command for much of the war. The next day we were in a BT-13B, a single-engine basic trainer used to train fighter pilots. I expected this would be my last flight in the Air Corps and would have preferred a straight, level, safe flight, but my pilot friend had to thrill me with a few maneuvers. I felt I must pretend I was enjoying it all or he would have tried some more daring ones.

Finally my turn came for processing. Officers were not discharged, but separated, from the service. My papers would read that way. I could have joined the Air Corps reserves, but turned it down. I planned to return to the farm and couldn't see how farming and serving in the reserves would fit together. I had back pay coming. It was paid all in cash. My unused leave time was calculated and became terminal leave time. Then leave time (2 1/2 days a month) on the terminal leave time was added to it. My separation-from-the-service papers were made out to be effective January 4, 1946.

I had received several awards during my months overseas. I was now entitled to wear the Asiatic-Pacific Campaign Ribbon with five battle stars, the Distinguished Unit Citation, the Air Medal with three oak leaf clusters, and the Distinguished Flying Cross. All these were noted in my separation papers. Now the "ruptured duck," the "honorably discharged or separated" button was added. Common sense told us we should hang on to that button. It and a dime should get us a cup of coffee almost anywhere. After processing, I stopped by the officers' club and ran into Jim Cowden, a pilot from the 45th squadron. His wife was in one of the Los Angeles suburbs. He gave me a ride to the home of Aunt Floy (my mother's sister) in Pasadena.

Aunt Floy's twin sons were then 18 or 19 and had been in service a few months. David was home on leave. I enjoyed spending some time with him in spite of the age difference. We spent some time at the Homings' cabin at Lake Arrowhead. We were able to repair the engine on the boat they kept at the lake. Uncle Sam Homing, in

addition to teaching at Pasadena Junior College, had taken a part-time defense job. He showed me one of their projects. Their assignment had been to devise a way to more effectively use the firepower of B-29s while flying in formation. They used B-29 models with movable gun turrets in their research. Their conclusion was to go to an 11-ship formation rather than 12 and to change the way the planes were positioned in the formation. I knew we had changed from 12- to 11-plane formations, but I had no idea Sam was involved in devising the system. I told him they had done a good job. It had proven effective.

On Saturday, an engineer friend of Sam's invited Sam, David, and me to be his guests at his engineering club meeting. His son, about my age and just out of service, was with us. The chief attraction was a visit to the "Spruce Goose," an eight-engine seaplane built by Howard Hughes. It got its name from being built almost entirely of wood. Hughes had hoped to sell it and more like it to the Air Corps or Navy, but they didn't buy. He had never received FAA permission to fly it, but once during taxi tests had pulled it off the water and up to 70 feet altitude. In some ways the plane was a contradiction to what I had been taught about aircraft construction, but I was glad to have seen it. The plane never flew again. Many years later, it sat there, a multi-million-dollar tourist curiosity.

Sometime later, I received a message saying I had been promoted to captain, effective December 22, 1945. I didn't bother to try to collect the difference in pay between a 1st lieutenant's and captain's pay for the 13 days I had been a captain.

Oct. 30 I got back to the farm. Fall weather had delayed farm work. I got to help Dad finish sowing wheat. Next harvest, some of it would be mine! I saw Betty a few more times, including a small New Year's Eve party at her home. A few days later, a package came containing the ring I had given her and a note ending our relationship.

January 4 arrived. My separation from the service was official. I was now a civilian again. The past three years and five months had been the experience of a lifetime. The memories would be both haunting and gratifying. I was more than grateful there was no prospect I would have to do any of it again.