

ORAL HISTORY MEMOIR
AMERICAN AIRPOWER HERITAGE FOUNDATION
of the
Confederate Airpower Flying Heritage Museum

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It had always been my ambition to fly. I had a grandfather who thought that Lindberg was the greatest thing since sliced bread. When I was about eight or nine years old, he would pick me up in his Model-T and we would go out to the Salt Lake Airport to look at the aircraft. After that, we would go someplace and he would let me fire his pistol a couple of times. He promised to let me drive his Model-T around when I reached the age of 12; but he died before I realized that opportunity.

I was in the ROTC at West High School. In fact, at Bryant Junior High School, Jack Douglas (of Douglas Models on 33rd South in Salt Lake City--he was then located downtown on Second 2nd South), who had tried to get into the Army Air Corps in the 1930s, would come to the school and teach an after-school class in aviation. He was color blind, and that prevented him from being accepted into the army. I attended that class on the fundamentals of aviation. Then at West High, there was a gentleman who came and talked aviation to the ROTC cadets. Both men were interesting and inspiring to me.

I had a bicycle, which I rode out to the Salt Lake Airport, just to stand and watch the airplanes. Both United and Western were flying out of Salt Lake City. Western Airlines was called at that time--the mid-thirties--Western Air Express.

After I graduated from high school in 1937, I had a job such as you have when you're 17 or 18 years old--as a delivery boy. Frustrated, I decided I would try to get into the Army Air Corps. In August of 1939, when I was 18, I enlisted. The recruiting office was on Secondouth where the Capital Theater is now. I think the recruiters were a lieutenant colonel and a tech sergeant. I reported to Ft. Douglas. My first meal there was cornbread, pork and beans, and wienies--a typical army meal. I was there for about five days, then put on a train for San Francisco.

I had a week at Ft. McDowell, out in the bay by Alcatraz. We shipped out to Panama on a troop transport called the Hunter Ligget, on 1 September 1939.

The war broke out in Europe while we were on the water out of San Francisco. Our ship put in to San Diego, 3 September 1939, where we took on an anti-aircraft outfit. That was the

first we knew that the war had started in Europe. It was about an eight-day trip to Panama City from San Diego.

I knew at the time that if you had two years of college, you could be appointed to become an aviation cadet. Without two years of college, one had to take a written examination, which included trigonometry, geometry (plain and solid)--those subjects a person would normally take in college. I had played football in high school, so my plan was that if I could go into the service, knowing that athletics was something that might help in promotions and more money, maybe after two years in the army--the term of an overseas enlistment (normally it was three years, unless you went to Panama, Hawaii, or the Philippines)--I would be 20 and could come back to the university for two years, then go back in to the air corps and make it a career. Of course at that time, I wasn't paying much attention to what was going on in Europe.

Again, luck was on my side. I knew that football was not played in the Philippines or Hawaii, because of the hot, humid weather, so I chose Panama as my assignment. Unfortunately, there was no football played there either. That's where I was when Pearl Harbor occurred. In a sense I feel very fortunate that I was not in Hawaii or the Philippines.

At that time, as I remember, the Army Air Corps was about 25,000 strong--officers and enlisted men. It was a very small branch of the army, because of the economic situation in the U.S. The government was beginning to realize what was shaping up in Europe, so the air corps and the other services were starting to expand. My basic training was ROTC at West High, so when I got to Panama, I was assigned to the 74th Attack Squadron at Albrook Field, on the Pacific side of the Canal. In those days the nomenclature was "pursuit, attack, bombardment, and reconnaissance." This squadron had aircraft similar to the Navy SBD, except that it had a fixed landing gear. I had some training in auto mechanics, and this qualified me to start training as an aircraft mechanic.

Up near the Costa Rican border, there was an auxiliary field named Rio Hato, used for air-to-ground gunnery, and for aircraft that were bombing targets out at sea. Pyramid-shaped targets were made of wood and canvas, which the old B-18s bombed. The B-18 looked like a C-47. We also had A-17s.

I spent some time there doing engine maintenance, then went back to Albrook Field, my permanent base. My training was on the job. We had a master sergeant, a WWI type, who was the line chief. He was a real hard-nosed, crusty sonovgun--swagger stick and all. It was decided that some formal mechanical classes would be held in the hanger. I was the recruit in the outfit--"the kid." All the other troops were previous servicemen.

They'd had one or two enlistments behind them. Pete held up a sparkplug and asked, "What's the purpose of this plug?" He pointed at me.

"Well, it fills up that hole in the top of the cylinder," I replied. He threw it at me. I ducked, but I found out you don't smart off that way to the N.C.O.s.

We were up at Rio Hato on maneuvers when Pearl Harbor was bombed. We were pretty much isolated, because we were in the jungle, near Costa Rica. That night, the squadron commander called everybody together and said that war had been declared, and there was great concern about the Canal being attacked. The fleet in the Pacific had been badly damaged; and the Atlantic fleet was doing escort duty. With the Canal knocked out, you can imagine the time it would take the Atlantic Fleet to go down around the tip of South America. There was great worry that the Canal would be attacked, because the Japanese attack had seemed to be so well coordinated--Pearl Harbor and the Philippines.

Our commander told us we would be going on 24-hour alert. Of course we had B-18s and WWI bombs, which were very unreliable. The airplane had 30 caliber machine guns. Turrets were manually operated. Our commander put us to work cutting foliage so we could pull the aircraft back into the jungle and cover the wings. The aircraft were still aluminum in color. We strung rope around each airplan area, then hung tomato soup cans full of rocks, so that anyone trying to come through the shrubbery would jiggle the cans, and we would be alerted. The enlisted men slept on cots under the airplanes. In the event there was an alert, the bombardier could go get the Norden bombsight as the pilots were being briefed. In the meantime, we'd warm up the aircraft and theoretically have them ready for a quick takeoff. We had the first enlisted bombardiers. However, the army was beginning to turn out bombardiers as flight officers and second lieutenants when they washed out of pilot school.

The bombardier had to wear a sidearm at all times the bombsight was in his possession. He was always armed when he brought the bombsight to the airplane, and it was kept out of view in a canvas bag. It was all very top secret. The Norden bombsight must have been developed about 1938 or 1939.

The bombardiers would practice with the bombsight on a platform in the hanger, with the hanger doors closed. Only authorized personnel could be inside, because the bombsight was exposed on the platform. The bombardier would sit on the platform 10 or 12 feet in the air, at a "set" altitude represented by the height of the bombsight on the training platform. Below, there was a bug with a target on it. The winddrift was put into the bug--tailwind, headwind, or crosswind. The trainee was trying to bomb on the target he could see on top

of the bug. When the "bomb" was released, a little plumb bob would drop and mark the point of impact.

The master sergeant I mentioned earlier bragged about how good he was with the bombsight. In those days, five bucks was a lot of money; a private made only \$21.00 a month. So we bet him \$5.00 that he wasn't as hot as he thought he was. In the meantime, we arranged for somebody to unplug the bug from its electrical outlet momentarily just as the sergeant looked up from having made his final adjustment in zeroing on the crosshairs on the target. Pete could never figure out why he was missing the target, until somebody tipped him off. He was one mad G.I., and he took our money.

It was very effective training, and economical too, because the army didn't have the money for the fuel to fly the aircraft. By that time, the old Army Air Corps was beginning to expand. There was great anticipation of what was going to happen in Europe.

December 7, 1941 - Pearl Harbor. I was as ignorant about the Japanese as anyone else. It was being said that the Japanese couldn't see too well, and the war would last a month, because they were inferior in all ways--equipment, etc. Many thought that the Japanese, with slant eyes and poor night vision, and poor equipment, would be no challenge. There was a great lack of knowledge that came down to the troop level as to what the Japanese were like and what they could do. It was simple ignorance. In the Canal Zone after the Pearl Harbor attack, there was pandemonium; I heard of men executed who went to sleep on guard duty. There were courts martial and executions. A lot of the dependents were still living on the bases in Panama, so slit trenches were dug; and if a siren went off, even pregnant wives and children were required to jump into these slit trenches and stay there until the "all clear" sounded.

The first month of the war, we flew anti-submarine patrol; I think I had about 150 hours in the air. Whenever there was an alert, away we would go out to sea; it was totally uncoordinated.

Then we began to get organized. An airline called Panagra (Panamerican-Grace) used to fly from Texas across the area of the Gulf into the Canal Zone or Costa Rica, then into South America. The airline pilots would radio seeing U-boats on the surface. The clearance for us to fly would have to go down through the navy in the Canal Zone, then come back up to us by radio; then we could take off and try to find the coordinates that Panagra had reported as target location. It might be four or five hours later; consequently we didn't find many U-boats. Deterrence of U-boat activity in the Gulf and on the Atlantic was practically nil at this time. And there were numerous U-boats out there.

After Pearl Harbor, the ships of different nationalities that were going to transit the Canal were timed carefully. A friendly ship could go through the Canal, and then the authorities would make a German or Italian vessel wait 24 hours, to keep them separated. We heard stories that the U-boats would be just outside the Canal and torpedo some of the freighters coming through.

About March of 1942, we moved up to Guatamala City, to fly anti-submarine patrol out of Guatamala. Most of the South and Central American countries stayed neutral until they could see which way to commit. But the dictator of Guatamala did come in on the side of the allies, and made the airbase at Guatamala City available to the U.S. We went up initially with B-18s, then later on we had B-17s and LB-30s, with which to fly anti-submarine patrol. Again, we worked with the Office of Naval Intelligence, which would determine the territory and pattern we would fly. Vessels in those areas had daily recognition signals. We would start a bomb run on anything we saw in the area, not knowing whether it was enemy or friendly, and the vessel was to fire the recognition signal of that day. There was quite a bit of action in the Gulf, but not much on the Pacific side.

We had pictures of a German submarine taken by a B-18 that was equipped with the WW-I bombs that were used during the attack. One bomb hit on one side of the sub, one hit on the deck, and one on the other side. Every bomb was a dud. The camera was of course running while the bomb run was being made. You can imagine how useless 30 caliber guns were against the armor plate on a modern war vessel. Later the LB-30 and the B-17 had 50 caliber guns, and we finally got armor-piercing ammunition.

I heard there were German subs destroyed, but I was personally aware of none. It seems they had just about free run of the Gulf and the Atlantic at that time, in 1942. We were told that the allies were doing a lot of shipping by sailboat, because the draft of such a vessel was so shallow that a torpedo might porpoise and miss. It would have to be set to run so shallow that it would be inaccurate. A torpedo can be set lower on a steel-hull vessel with deeper draft. We lost thousands and thousands of tons of shipping in the Gulf and in the Atlantic. In fact, when we moved from the Canal Zone to Guatamala City, we loaded all our bombs, ammunition and troops on a troop transport and put in at a Costa Rican port on the Gulf side. A Russian freighter had been torpedoes against the wharf. This port was a bay, with a narrow inlet; the German sub had come into the entrance of the bay and torpedoed the frieghter while it was tied up at the dock.

Most of the crew on this Russian ship were women--even the stokers, who shoveled coal into the boilers. Their hands looked

like catchers' mitts--huge, muscular women, ugly, not feminine at all.

I think all the reconnaissance flying was just to do something. I don't know whether it had any rhyme or reason. We flew a protective arc from Guatamala down to the Galapagos Islands. We would fly down, stay over night, and come back the next day. We had the very early radar, which looked like a Christmas tree--something like a television antenna was hung under the wing of the Liberator. We'd sit at the scope and sweep 90 degrees to the flight path for fifteen minutes, then go on search, which was dead ahead, for five minutes. This was to see if we could pick up anything running on the surface that we could attack. I was an engineer, a photographer, a parachute packer, and a gunner. My training as a gunner was with a water-cooled 30 caliber ground machine gun. We would put up a washtub about 100 yards out, set the sight, and fire away. That qualified me to be an aerial gunner! I was just assigned these jobs. It was really a make-do operation.

There were two ratings: a private, at \$21.00 a month; or what they called 1st AM or 2nd AM (air mechanic ratings). If you were First AM, you earned \$84 a month, equivalent to a staff sergeant's income. So I took the examination to become a 1st AM because of the money. As the army air corps began to expand, I went from corporal to staff sergeant. I had the stripes and a little more prestige.

The rear gun turret on a B-18 was a cylinder that normally was retracted into the fuselage. You got into it, sat on a bicycle seat, then cranked the turret up so that it would come up out of the fuselage of the airplane. Your 30 caliber machine gun was in a slot; you were to use your feet to make the turret traverse on the horizontal plane. It had a fire interrupter, so that should you be firing when you swept by the vertical stabilizer, the gun barrel would hit a guard fence. You'd have to raise the barrel and come around on the other side and fire into your aircraft's tail area.

Not too many years ago, a B-18 was being used as a grasshopper sprayer up in Wyoming. The landing gear and props were quite similar to those of the DC-3 or C-47, though the engine was smaller. The LB-30s we received had been on their way as lend lease to Great Britain, but were diverted to us in Guatamala for anti-submarine patrol work.

Morale was good. The work was exciting. I don't know about the officers, but the enlisted men were career men. It was excitement and adventure for the younger men coming in. The idea was that the war wouldn't last very long; you were dealing with an inferior enemy in the Japanese. There didn't seem to be much

thought about the European theater. Everything seemed to be focused toward Japan.

In the meantime, I had taken the examination for the aviation cadet program. I had passed the written part, but our squadron was at peacetime strength, and was being expanded. So because it was being expanded to wartime strength, I was not allowed to come back to the States and get into the cadet program. By this time I had become well acquainted with the squadron commander. He was one who said that if you were going to make the military a career, you should try for West Point. "Those are the people who go to the top."

"No," I told him. "I'm just interested in flying airplanes." That's what I wanted to do.

Our outfit was brought back to the states as a cadre. Previous service people were being used as a nucleus for expansion. So many would be taken out of the squadron, from which would be created four more squadrons, using those people as a nucleus. I was at Gowan Field, just outside of Boise, Idaho, for a short time at the end of 1942, about the time that Jimmy Stewart was there instructing.

Finally I got into the cadet program. If you passed the test, as I had in Panama, but were not activated, you had to start over. So at Gowan, I made application again. Of course all my previous efforts were on my service record.

As an aviation student, I was sent down to Kearns, Utah, for a short time. I think it was something of a recruit depot. There were two classifications: aviation cadet, and aviation student. The cadet was a civilian coming in--a college man, or someone like that. I think his pay was \$75 a month. Those of us like me, a staff sergeant, were aviation students; we were kept together as sergeants. We had some privileges the cadets didn't have. We could go to the NCO club, and we didn't get the hard PT (physical training). They recognized that we'd been down the road before. And our pay was a little bit better.

We had some PT, and some training on the rifle range. But mostly we fooled around. I could get into town and see my family. My wife and I had go ten acquainted in high school, so we were dating again at this time. I had my brother's car and an A ration card for gas, life was pretty good.

From Kearns, Utah, I was assigned to Santa Ana, the big cadet depot. There we studied meteorology, Morse Code, more PT, some engine mechanics--at least some exposure to those subjects. I think that's where we took a Stanine Test, which determined

Picked up
our dating
time

NOT MARRIED
THEN !!

whether you went to pilot training, navigator training, or bombardier training.

I was assigned to the municipal field at Visalia, California for primary flight training. The field next to us was Tex Rankin's School of Aeronautics. Rankin was quite a famous aerobatic pilot. Cadets at Rankin flew Stearmans, and we flew Ryans.

I took flight training there and soloed in the Ryan. We got to basic flying, and a little exposure to aerobatics. I think you got about 60 hours in primary; our instructors were civilian pilots; then each 20 hour period, you'd be checked by an army air corps pilot. After the 60 hours, you were signed off and assigned to basic flight training.

We lived in barracks. Food was excellent, I guess to keep up morale. Interestingly, a lot of the townspeople would invite us in on weekends for Sunday dinner. There was a real concern for our being lonesome. At Chico, California, where I took basic in the BT-13, the families at Thanksgiving sent out notices that each could accommodate two cadets, or four cadets, for turkey dinner and to stay overnight if they wished. It was the same for Christmas. They realized that we were a long way from home, and this hospitality was a most welcome change for us.

The BT-13 was an airplane with a little more sophistication. It had flaps, a controllable prop, and a little bigger engine. You went through almost the same routine--stalls, a little aerobatics, and some night flying. You were graded again the same way--after 20, 40, 60 hours, you had acceptance rides by army pilots. Usually by this time, the air corps actually offered a questionnaire that asked you what you would like to fly after you graduated. Of course everyone wanted to fly fighters. A lot of men who had had combat experience by this time in the European theater were coming back, so they were getting the first opportunity to be checked out in fighters. They had probably put in their 25 bombing missions; their tour of combat duty was over.

I had had a little mechanical experience with the B-17, and I loved that airplane. My thinking was why not go for the biggest and heaviest, so I put in for four-engine equipment. I guess at that time, the U.S. was mounting more of bombardment type air war, so there was a need for bombardment type pilots. At least it was easier to be assigned as a bombardment pilot than a fighter pilot.

After I graduated, went down to Pecos, Texas and Hobbs, New Mexico, and checked out on B-17s. I thought I was going to go to the European theater, but when the list came out, my name was on it for B-29 training. This would have been 1944.

The cadet program would take you a little over a year to complete: a couple of months at Santa Ana, three months in primary, three in basic, three in advanced, and three months for transition to B-17s. I think too, the army was beginning to realize that the RAF and the U.S. Air Force were really beating the devil out of the European targets. Attention was swinging to the B-29 and long-range bombardment of the Japanese Empire. It was assumed that the U.S. would have to invade Japan. Plans had been drawn up and very high casualties were estimated.

I was unhappy with the new assignment. I liked the 17; I knew the airplane. It was like an old buddy. The B-29 was known as a fire hazard, for one thing. The engine was so tightly baffled, and it was such a big engine, that it was difficult to keep the temperatures down. It was also a different airplane to fly; someone said it was like sitting on your front porch and flying your house. It seemed like one of the dividers on the windshield was right dead between your eyes. In the B-17 cockpit, you are in the left seat, and the throttles are at your right hand; in the B-29, if you're in the left seat, the throttles are on the left side. The control situation was different.

We actually had a couple of engine fires. Usually by the time you knew you had a fire, it was time to bail out. It would have been burning for some time, particularly in the engine. The airplane was so streamlined, and the engines cowled so tightly, half the time on heavy takeoffs, you'd tell the engineer not to tell you how hot the cylinders were. You didn't want to know. "We'll get airborne, then work on trying to bring the cylinder head temperatures down."

We found later that in instrument flying, if you wanted to make a needle-width timed turn, if you cracked the outboard cowl flaps, the airplane would make a nice turn. After we got onto it, as a Boeing product, it was fantastic--the amount of damage a B-29 could sustain and still fly was awesome.

I trained at Walker Field, in Kansas. There were B-29 outfits at Salina, Smokey Hill, and Great Bend, Kansas. This was for advanced training. We would have with us instructors at each crew position until they felt we were safe to be signed off. We had sophisticated equipment, for example, remote control gun turrets. The upper-aft turret was called central fire control. He would have primary control over his turret and the forward turret. The bombardier could have secondary control. The bombardier might have target he's firing at, and the CFC gunner might figure he needs both turrets, so he could take the turret away from the bombardier. Once you got the crew coordinated, and information coming in on the interphone, particularly when you were under attack, you could work things out pretty well.

As isolated as we were, doing as much training as we were doing, we were pointing toward combat. We hoped we wouldn't have to go, but when you got the true story from combat veterans coming back, particularly some of the men who came back through the underground in Europe, you began to realize that this wasn't going to be all fun and games.

We shipped out from Mather Field in California into Honolulu, where we overnighted. Then we went to Kwajalein, and when we went into the mess hall, wounded GIs were being brought back, and some were in the mess hall. That's when I began to realize that you could get hurt. We arrived in Kwajalein the first part of April 1945.

From Kwajalein we flew our airplane to Saipan, where the 21st Bomber Command was headquartered. From there we reported to Guam, where I was based for the remainder of the war.

In March, the Japanese had flown some bombing raids against Tinian and Saipan and destroyed some B-29s. Guam was further south. It was a court martial offense to go into the jungle of any of those islands, because there were still Japanese holdouts. If you had reason to go into the jungle, you either wore leggings, or you didn't go. If the marines were on patrol, that's how they identified you as friend or foe. If you were not dressed properly, you were fair game to be shot.

When we were on Saipan, a G.I. was brought in who had gone down into the caves, looking for souvenirs. The Japanese had caught him and gutted him out like a deer. A marine patrol had found his body and brought him back on stretcher. Quite a sight.

As I've said, more and more you got the idea that this was pretty serious business that you were involved with.

At a recent reunion, a fellow who had kept a history of the outfit gave me a picture of us after we'd come back from a mission, a daylight raid. We'd been under fighter attack, so the intelligence officer was querying the gunner about tactics and aircraft. I'd kept a little diary of my raids [attached]; my first raid was Nagoya, on May 14, 1945, 16 hours and 25 minutes long. Guam was a 3,000 mile round trip, Iwo Jima about 1,500 miles; so Iwo Jima, which was being taken about this time, was a midpoint.

We bombed from odd altitudes, because sometimes the Japanese might put someone in the air that could speak English very well. He might ask, "Say, what's our bombing altitude?" So we'd say, maybe, "Angels, plus six." If the Japanese didn't know what "angels" was, he wouldn't know the altitude. Otherwise he'd be radioing altitudes to anti-aircraft batteries on the ground,

which could set their fire accordingly. [Reviews other missions from his diary.]

There's a B-29 in a museum in the Pima Museum, in Tucson, Arizona. It's an airplane from my outfit--the Block K-36. I had flown that to Kobe, on June 5. [Reviews that mission.] It's interesting that I scratched some of these things in my book.

Normally, we had an airplane assigned to us. But if it had to go down for maintenance, or you went into Iwo Jima with damage (which we did two times, because of an engine shutdown or you didn't have enough fuel to get back to the Marianas), you would land, and the quartermaster (the engineering officer) would parallel you with a jeep. When you finished your landing rollout, if he gave you thumbs up, then the follow-me truck took you into a maintenance pad. If he gave you the thumbs down, you got off the airplane with all your stuff, and he put a tractor on it and towed the plane over on to the beach. Then the maintenance men would cannibalize it for parts for other aircraft.

As you flew down from Japan, you would call in at Iwo, on an intersection called "whiskey." If you had wounded on board, of course you had priority to land. So when you crossed this intersection, identified yourself, stated your problem. The tower would say, "We'll call you. Just orbit." So you'd sit out there and circle until you got a call. Then you'd come in--those with wounded on board first, and then the airplanes with serious mechanical damage next. Aircraft short on fuel to reach the Marianas (Guam, Tinian, Saipan) were last. We'd stay overnight at Iwo Jima, then fly somebody else's airplane back to Tinian or Saipan. Maintenance would do just enough to get the plane off the island, because the island was so crowded. I think I read somewhere that more than 2,000 B-29s landed on Iwo Jima, so the 20th Air Force had a pretty good feeling toward the marines that took Iwo Jima. Otherwise, we'd have been in the ocean. A lot of lives were saved. But the marines suffered terrible losses taking Iwo Jima.

At that time, the quota to finish a tour of combat was 25 missions. Our first mission was kind of exciting, then the missions after that began to make us more tense and apprehensive. We shared Quonsets with another crew, and there were times when you came back and that crew was missing. You'd see someone had rolled up their belongings, cleaned up their stuff, and sent it home. You never knew whether the crew were prisoners, or down at sea. We lost two sets of crews in our Quonset. That's rather depressing--you live with these five officers, get to know of their families and what they are doing; then one time you come back and see their belongings being packed up to be sent home to next of kin. My crew decided we would fly as often as we could, to get our missions in as quickly as possible.

If a mission was on, the crews who were going to fly were posted, along with the target. Then there'd be a crew briefing time, usually about three or four o'clock in the afternoon. You'd be told the bomb load, the target, duration of the mission, what you could anticipate in flak or aircraft--everything the mission would encompass. Then you'd have dinner, and following that, specialized briefing. The pilots would be briefed on the weather; the navigator and bombardier would pick up target folder; we also had on board a radar man who was rated as a bombardier. He could bomb by radar. In a sense, we had two bombardiers. So we would have a primary visual target, a secondary visual target; a primary radar target, and a secondary radar target--if the weather went bad over the visual targets. Usually the radar targets were where there was a body of water, so that you could identify the shore line or lakes on the scope--something like that.

We didn't have too many specific targets, like the Uata Steel Works, or a refinery, or the Mitsubishi aircraft factory. I think I only flew about six daylight raids. The rest were night fire raids. General LeMay had decided there was so much cottage industry that the only way to get to it was to burn everything. After LeMay took over command of the 20th Air Force, he avoided the high altitude bombing, because we were carrying too much fuel to get to altitude, and the long climb was devastating to the engines.

That's when we ran into the jet stream. No one, including meteorologists, had any idea that there was a jet stream at high altitude, until the B-29s started flying over Japan at high altitude--20,000 to 25,000 feet. The bombsight couldn't compensate if you were going downwind with a 100 to 120 knot tailwind. The sight couldn't track. If you were going upwind, you could track pretty well, but then you were subject to anti-aircraft fire that could be pretty accurate, because of your slow speed. And if you were bombing crosswind, the bombsight couldn't take out the drift. That was when someone decided that something strange was going on up there at high altitude. The meteorologists decided there was a core of high-velocity wind, which was the jet stream, sometimes as high as 150 or 180 knots. Now, commercial pilots if they can pick up a nice tailwind jet stream and ride it, can really cross the country in a hurry.)

For one daylight target, we carried two 4,000 pound bombs. We cheated a bit on fuel load. We had a center tank, so we would carry illegally an extra 200 to 250 gallons of fuel in it, as insurance. Many times, everybody would be getting back to Guam at the same time, and so sometimes you'd get cut out of the landing pattern. More than once, a 29 circled and ditched, because he ran out of fuel. So we just packed a little extra fuel, to prevent getting dunked in the ocean.

Primarily on night raids, we carried incendiary bombs, like napalm. The bombs were packed in clusters. They contained anti-personnel bombs in them, so people who were trying to fight the fires on the ground never knew when a grenade might go off. Maybe it would be 24 hours later. On the fire raids, we just bombed on the edge of the fire, building bigger and bigger fires. When you crossed those fires, the turbulence would bounce you around. You could smell wood burning and other odors.

A pathfinder B-29 would be sent ahead, to establish the target and drop a load of incendiaries. Then the bomber stream would start to enlarge the fire. After two or three raids on Tokyo, we had destroyed some 26 or 27 square miles of the city--just burned out. Later on, LeMay had us go in at low altitude, maybe 6,000 or 7,000 feet; because when we took off from Guam, for example, we'd be in climb to get to 18,000 feet almost all the way to the target. As you decreased weight, you could get higher; and everybody was under the impression that the B-29 was to be used as a high-altitude bomber. When LeMay came along, he said we'd go in lower. "Then you don't carry as much fuel. You don't climb. It's easier on the aircraft. You're just above the range of the low caliber stuff, so you don't have to worry about that." It was a wise decision, but he nearly had a mutiny on hands. We'd all be indoctrinated--high altitude.

On the daylight raids, Japanese anti-aircraft fire was very accurate. The Japanese knew you had a six or eight minute bomb run, on heading and on speed. You were locked in and couldn't take evasive action. So they put up a box barrage--a huge cube of flak. The plan was that you had to fly into it. But on the night raids, we found out initially that some of the Japanese listening devices that ran their search lights were the old type. They looked like the the speaker on a Victrola gramophone. We found that if we ran the engines out of sync, we would louse up their sound, so they couldn't pick us up so easily.

The first night raid we were on, we came in on briefed air speed and altitude; and the next thing we knew we were bracketed with searchlights. Those lights walked us all the way across the target. I think that at one time, one of the crew counted seventeen searchlights that had us coned in. Flak sounds like gravel on a tin roof--you can hear it rattling on the airplane, and see the bursts. We were running maybe 180 knots indicated, something like that.

When we got back from that raid and were talking to some of the other crews, they said, "Fine. What we do is circle until somebody, like you, is picked up, then we go across the target flat-out parallel to the side of the guy that is catching all the flak." So from then on, that's what we decided to do, because we weren't bombing for accuracy, just starting another fire. That was the procedure everybody used.

Up until the 17th mission, we were flying about every four or five days. On the night raids, we take off from Guam about 7:30. We were in revetments, and each airplane was set up with a start-engine time and a taxi time. You check out the crew, to make sure everybody is at his station. The ground crew has told you that everything is ready to go. So, for example, you may get a start-engine time at 7:32 and a taxi time of 7:40. You crank everything up and taxi out of your revetment. You enter a long bomber stream that's taxiing out. On some raids, by the time you put together the groups on Tinian and Saipan, you might have 400 or 450 aircraft headed for Japan.

On the daylight raids, the airplanes might be going after different targets. On a daylight raid, we would rendezvous at an outcropping rock in the ocean. Each group would be assigned a quadrant and an altitude. The lead aircraft in each quadrant would drop his nosegear and circle until the set departure time from the assembly point. He would periodically fire a colored flare, so you knew what group that was, then join up with it. Then you would depart at a predetermined time and head up to Japan in very loose formation, till you got to landfall, where you would tighten up the formation for fire power and mutual protection.

After you went across the target and were departing Japan, you would buddy up, two airplanes, so if one got into trouble, the other could at least give a position report in the event of a ditching. The navy had ships on station for air-sea rescue. If your buddy couldn't contact by radio, you could; or you could circle and fix his position, if he had to ditch, then relay that information to the navy.

When we flew at high altitude and pressurized the airplane, we would sometimes use our "water buffalo meat" sandwiches to plug the leaks in the airplane, wherever you could feel a draft. The sandwiches were pretty bulky and tasteless.

The airplane was heated, and actually it was pretty comfortable at those altitudes. When you got up to Japan, you could get very warm. When you stop to think, you were wearing a flight suit, and a survival vest (with a mirror, fish hooks, shark repellent, and other items in case you went down at sea). On top of that you had your Mae West. When you went over the target, you also had a flak jacket on. There was a flak pad that went into the seat--little pieces of metal in pockets, like shingles, to protect your back and your buttocks. Some of the pad dropped down, to protect your legs somewhat. We wore a helmet like that of an infantryman, but it had flexible earpieces, so you could wear your earphones underneath it. We had also wore over the target what they called "flak goggles," to protect your eyes from flashes. You were pretty well clothed.

The B-29 ditched well, but didn't float well. Sometimes the bomb bay doors would cave in, and the water would flood the aircraft. There was a bulkhead door to the forward bomb bay, and one to the aft bomb bay, because the bays were not pressurized. The forward section was pressurized, the tunnel over the bomb bays was pressurized, the center section where the gunners were was pressurized, and the passage back to the tail gun position was pressurized. There were bomb bay portals, so the crew could check the bays visually after the bombs had been dropped, to see if all the bombs cleared the bays.

After a couple of 29s ditched and sank immediately, because of the failure of the bulkhead doors, we carried an 8 by 8 block that could be anchored to the floor and the door, to keep the water from forcing the doors and flooding the airplane.

I never had to ditch, but I've seen pictures of a crew who ditched off Iwo Jima, when the island fogged in. He did a beautiful job of ditching, 50 yards off shore. There's quite a technique to ditching, particularly in heavy wave action. You have to catch it just right. I have a friend whose plane was pretty well shot up on Christmas Day. The crew was picked up by a sub after they ditched and spent 30 days on a submarine patrol that was just starting a war-patrol.

Our first mission is memorable because we realized that we were the recruits; all the other crews had had maybe one, two, three or four missions under their belts. We were late getting out to Guam, because of problems with a landing gear strut. We couldn't get it fixed, so finally we had a tech rep from Boeing come down to Sacramento, California, and solve the problem. By the time we got over to Guam, the other 14 crews in the squadron had at least a couple of missions to their credit. Now they were the veterans, and they were going to scare the bejesus out of you with the tales they would tell.

For one thing, when we were briefed, we were told that if we had to bail out over Japan, we should turn ourselves in to a military officer-type person. Otherwise, the civilians would probably beat us to death. The ordinary Japanese GI was not well educated. Their attitude was that if you became a prisoner, you were not much better than a dog. You are no longer a warrior.

That was revealed to me during the typhoon at Okinawa, about August, 1945, when we flew supplies there for the troops. We saw the tremendous damage done to the navy and to the island. Flagpoles were bent 90 degrees from the vertical, by the horrendous winds. A cruiser or destroyer of the 3rd Fleet lost its entire bow. We parked the airplane, and two marines marched 50 or 60 Japanese prisoners down in front of the airplane to unload it. From the ferocity of the fighting on Iwo Jima, I thought, "Holy Toledo, two marines, armed with 45s and with 60

Japanese prisoners! Marching in a column to unload supplies!" I asked one of the marines about it. "Once they surrender, that's it," he told me. "You draw a line, and they become obey. They become nothing, no good, no longer the warrior"--if they surrender.

Initially, I didn't want them around the airplane. One of them was built like a gorilla; his arms hung down below his knees. He kept looking at the airplane. We had shot down a fighter, so we had a rising sun painted on our fuselage, plus bombs denoting each mission. I thought he was pointing at the rising sun, but he kept looking at the airplane. He came over and stood by the wheel. He couldn't get over how tall the wheel was. He would measure himself against it and was dumbfounded by its size.

The first thing we did when we arrived on Guam was run a practice mission down to Truk, which was to the Japanese what Pearl Harbor was to the U.S. fleet. So, to get experience, we would be sent down to bomb Truk. The Japanese had taken a tremendous beating from the navy. The first mission was like the first time you do anything. You can practice basketball on your court, but the first time you get into the game, you want to do everything right.

[Reads the details of the first mission from his diary.]
The U.S. must have named Smith Island, our assembly point.

I remember that I sweat a little more than you normally would. The adrenalin is flowing, because you can see the fighters and the flak. The lead ship opens his doors maybe five minutes earlier than the other aircraft, because you drop bombs when he does. We flew a diamond formation: lead; number 2, left wing; number 3, right wing; and number 4 in the trail. Number 2 would be aiming on the target with number 1. If anything happened to number 1, you bombed off number 2, sort of a backup "bomb aimer"--for want of a better word. You wonder when the bomb bay doors are going to open, because know you're going to get rid of your load.

When the bombs drop, the airplane really jumps. There are two bomb bays, and the CG (center of gravity) is established by load. All airplanes have a forward and aft limit, so in the B-29, there was an intervalometer, so the bombs were released in a sequence--one from the forward bomb bay, one from the aft, etc. This is to keep the airplane in balance. We've all seen pictures where the bombs are streaming out. The airplane will jump about 200 feet when it gets rid of that weight so quickly.

When you have but two big bombs, they both go at the same time. That's a change of weight of 8,000 pounds very quickly.

The B-29 had an 11-man crew. Our crew stayed together from initial assignment till war's end. On one of our raids, we had about seven feet of our horizontal stabilizer shot off--the tail, where the elevators are. We were on the bomb run, a daylight raid, and I think I'd been trying to fly tight formation. You're working and sweating. It's hard work. If there's a little turbulence, and you're moving in and out from prop wash, you can really work your fanny off. You're on the power levers, and sometimes you're cross-controlling, using rudder, sometimes not making coordinated movements. We would be just outside the propwash of the outboard engine of the lead airplane, because that propwash can really start rolling you around.

I think I had just said to the other pilot, "Will you take it for a minute?" I was just releasing control, looking over to make sure he had it, and suddenly the yoke jerked violently, and we heard a loud noise. Your heart jumps into your mouth then, because you don't know how badly you've been hit. [See the June 26 notation.]

We hollered, "Crew check in!" Each position checked in: "Engineer okay. . . . Navigator okay. . . ." We couldn't get a call from the tail gun. "What's going on?"

Finally, after we got squared away, one of the waist gunners crawled back to the tail position. The tail gunner was okay, but the pins that held his seat up (which was like a bicycle seat, and he could raise or lower in order to see out the window and man his guns) had pulled out, and dropped him. When it dropped, it disconnected his earphones. He had a flak hole just above his head that was about the size of a softball, where a piece of flak went through the aircraft.

Somebody in the formation called immediately and asked if we were okay. "We'll find out," was our response.

We didn't want to take the airplane into Iwo Jima, because we figured we'd lose it if it were given a "thumbs down," and we liked the airplane. It was the one that had been assigned to us back in the States.

We trimmed the airplane up and clutched in the autopilot. The bombsight could fly the airplane through the autopilot. It was what was called a PDI--pilot directional indicator, an instrument in front of you; and you flew whatever it told you, it being fed from the bomb sight as corrections were being made.) We were relieved from trying to fly the airplane manually. We slowed down also, because we didn't want to put any additional stress on what we could see of our tail damage.

Once everything settled down, and everything seemed to be operating okay--and we had a buddy airplane with us--we figured

we'd just ride it out. It looked like everything was going to work out--which it did. We didn't quite know what we were going to experience on the landing, with that amount of damage. As I remember, there was no great problem. We probably didn't use full flaps; we might have used a lesser degree of flap, and a little more air speed, to compensate for something that might occur unexpectedly. I remember feeling great when we got on the ground. The chaplain, seated in his Jeep, just off the end of the runway, would usually give you the cross or wave to you as you taxied by. As we turned and he could see the damage, he froze momentarily in giving his benediction. One could see the spar swinging in the breeze, and the ragged aluminum surrounding it.

When we taxied in at Guam, of course the maintenance officer and the engineering officer were parked at the end of the runway. When you drive in with your airplane all shot up like that, everybody congregates at the revetment when you park. The civilian tech rep from Sperry was looking at the damage, talking with us about what had happened. He said, "Geez, that must have been tiresome, flying that thing for seven hours manually."

"We didn't fly it manually," we told him.

"What do you mean, you didn't fly it manually?"

"We set it up on autopilot."

"You can't do that," he said.

"Why not?"

He gave us a big technical explanation about dashpots, etc. (part of the mechanism in the autopilot). He maintained that it was out of the parameters of control for the autopilot, with that amount of control gone from one side of the tail.

"Well, we did fly it on autopilot."

"No, you're lying to me."

"No, we're not. We put it on autopilot and flew it that way."

"Well, why are you telling me this?"

"Because it's the truth."

Then every time he'd see us, he would say, "Why are still lying to me? The autopilot can't do that."

"Well, it did it!"

In a bomber crew--at least in my crew--rank disappears. You might be a major, and me a private, but you're Don and I'm Jack, because we depend so much on each other. You develop a closeknit feeling. In fact, one of the ground-pounder officers was upset because the crews weren't showing enough military courtesy--saluting, and so on. He climbed all over me about that. "Apparently it's something you don't understand," I told him. "We're not rank-conscious. When we're on a mission, I don't expect the tail gunner to say, 'May I speak to the commanding officer?' That's out the window. That might be the guy that pulls me out of the airplane and saves my life. I can realize that in a different environment, you might have to recognize rank and courtesy, and all that crap, but here it doesn't apply." The pilot is simply "the old man."

We lost some crews through pilot error--stupid mistakes. When we flew the airplane, sometimes we were up around 136,000 pounds gross weight. That's another reason why we flew at night, to get the performance out of the airplane. When we took off from Guam, maybe 250 or 300 feet above sea level, we would drop back8Hdownon top of the water, to be sure that we had flying speed. Half the time, you were right on the margin. If you lost an engine, you really had your hands full at that critical point, just as you rotated. You were near the end of the runway anyway, so you would just pull the gear and drop down over the cliff, right onto the water, where you could pick up speed. By this time, the cylinder head temperatures might be in the red, and everybody would be moaning and groaning. However, the navy kept boats out there patrolling, in case you went into the water.

We were on a raid one night, and on our return after the mission found out what a pilot had done. He had lost an engine on takeoff and made it out to the water, salvoed his bomb load to lighten his airplane, then come back around and tried to execute a landing. All he had to do was stay out there, fly and burn off fuel to reduce the ~~air~~ weight. He hit, bounced into the air, tried to go around (of course he had two good engines on one side, and one operating on the other), and flew into the trees. Everyone on board was killed. He should have circled, lightened his load, settled himself down, and waited for daylight. There were some stupid things done like that.

Japanese fighters would stay off the to the side of the B-29 formations. When we were under flak fire, we had situations where the fighters dropped cable, or chain from above, to try to entangle the props. Some of the formations were bombed by fighters, which used phosphorus bombs. A phosphorus hit on an airplane will just keep burning. I saw one airplane that had been rammed by three different fighters. I don't know whether it was inexperienced fighter pilots, or whether they were trying to take the airplane out; but this happened on a daylight raid. One of the later Japanese fighters, which was called a "Jack" (I

don't know why), came down vertically and hit the 29 and took off an inboard engine--just cleaned it off. That knocked the airplane down out of the formation.

The second fighter came in on a 45 degree angle from head on. He went right across the 29, opened it up, above the wing, like a can opener. Of course the fighter went tumbling and exploded some distance away from the 29. But the 29 was doomed. The third fighter came down vertically and plowed into the 29, and both airplanes folded up and were engulfed in flames, exploding. I have to think the last fighter was a suicide attempt. I'm wondering if the other two were just inexperienced pilots. By this time in the war, the Japanese air force was pretty well beat up and had suffered the loss of many experienced pilots.

The greatest loss we ever sustained--I don't know if it was from fighters, flak, or mechanical problems--was 26 aircraft on one raid. We had a close call during one night raid. The engine superchargers were shrouded so that night fighters couldn't see them. Normally a supercharger glows, cherry-red. It was a cloudless night, but there was no moon. We were approaching the target, and all of a sudden something slid over the top of us. It was so close, we could see through the louvers of the supercharger shrouds the glowing turbos. So he must have gone across the top of us by six or eight feet, and after that we hit his turbulence. It happened very fast.

A crew has an advantage in a close call. They let off steam to each other a little bit. A fighter pilot is alone to think about it.

As to my crew, the other pilot, navigator, engineer, the central fire control gunner, and one waist gunner are still alive. At the group reunion before our last one, when we were sitting in the hotel room with our wives, reminiscing, the one gunner said, "I've got something on my mind. It's been on my mind for forty years, and I've got to get it off my conscience."

"What's that, Hawk?"

"Do you remember the time we went into Iwo Jima with an engine shot out?"

"Yeah."

"I shot it out."

"You shot it out?!"

"Yeah. If you remember, we were under fighter attack. You guys were so busy, and I was really hammering at one fighter. He

was coming up from beneath us. I had the lower turret, and instead of giving him quick bursts, I was really pouring shot at him. Then he went up out of my gun range. I had called him to the top gunner. My guns were pointing forward, and I was bringing them around to the aft position, and I had a cook-off. I saw it go right into number three engine, right through the cowling. In about 30 seconds, the engineer called and said, 'We got a problem with number three engine. We're losing oil pressure and the oil temperature is going up.'

"So the prop was feathered. We called the engineer and asked, 'How does our fuel load look for three-engine operation back to Guam?'

"I'll figure it out,' the engineer replied. Then we said to the navigator, 'Give me a heading for Iwo, just in case.'"

Iwo was a little bit off course, on the way to Guam.

"The engineer came back and said, 'We can't make it. Not enough fuel.'"

"So let's plan on Iwo."

"When we got on the ground at Iwo and walked out, you guys were standing there looking at the engines: 'Boy, that was close.' I said to myself, 'Hawk, keep your mouth shut.'

"I've carried that with me for 40 years."

He did laugh about it and told Hawk he was forgiven.

On one of our first night raids, bombing from 16-17,000 feet, when we checked to see if the bomb bays were clear, we found we had a hangup in the forward bomb bay. The bomb racks held each bombs by two toggles. When it was electrically triggered, the two mechanisms came together, and that pulled the toggles out and dropped the bombs. One had malfunctioned and was still holding. There was also a wire that went to the fuses as a safety measure. The fuses also had a cotterpin installed for safety reasons. So the bombardier, at some point on the way to the target, would pull the cotterpins; theoretically, he had to have those still in his possession when he returned to Guam, as evidence that he had armed the bombs for the drop.

The wire had pulled out of the nose fuse, so the propeller could spin out and arm the bomb, so that when it hits, it is like a firing pin. When I saw that, I said to myself that I'd better go back, put it back on the rack, and attempt to drop it manually.

I got back on the catwalk and got to thinking about the fact that the bomb bay doors were still open. I was hanging on to a support with one hand, trying not to look at the ground. I finally got one lever back into position. The other was still in its pre-drop position. I got ahold of the bomb's tailend and was trying to hoist it back up and relatch the pin onto the rack, when the bomb came loose and dropped out of the bay. It tore the skin off my hand and scared the devil out of me.

But just prior to that, I had shouted, "Close the bomb bay doors!"--in case I slipped. I didn't have a chute on. The bombardier closed the doors, and when the bomb went, it just took part of the door off with it. "Holy Toledo! When it fell, my mind flashed, 'Is that fuse working?' Because if the bomb had been armed, we'd have all been goners at that moment.

Initially, the B-29 had electric bomb bay doors, which were very slow to operate. Then someone came up with a compressed air-operated door, which would snap shut within just a fraction of a second.

When you landed and were taxiing, you opened the bomb bay doors to vent the airplane. Again, when we went by the chaplain, and he saw half of one of the doors gone, he must have thought we had taken a hit in the bomb bay. He didn't realize that it had been the other way around.

The B-24 was notorious for fuel leaks, and it had a lot of electric motors. So if you were actuating something electrically, and you had a concentration of gas fumes, you might lose the airplane. I think quite a few B-24s were lost that way.

The times we went into Iwo were from mechanical shutdowns, just as you might do if you were flying commercially, and someone says, "We've got to shut down an engine and divert to an alternate airport that's close at hand."

We always heard all kinds of rumors. On our last mission, we were told to stand by on the radio, and if you hear the word "Utah," turn around and come back, because the war is over. "Utah" was the code word.

We were up by Iwo. Here we decided to turn the radio off. As long as we had gone that far, we thought we might as well go all the way. So we shut the radio down--there never was a recall anyhow. We finished the mission. This was before the atomic bombs were dropped, during the time Japan was being encouraged to surrender.

I was on Guam when the first bomb was dropped on Hiroshima. You really aren't privy to what's being planned at headquarters--only mission targets. It's rumor--no big announcement. Someone

says, "Hey, did you hear. . . ?" They're trying to describe one airplane, with one bomb, and the Japanese are going to surrender, and all such jazz. Then the next day, there's nothing. So you think that somebody must have started a latrine rumor. After the second bomb, there began to be some official word from headquarters as to what was going on. In order to keep everybody informed, there was what was called a "commander's call." We'd meet at the theater, or some other outdoor place, and somebody with some rank--so you could accept what he was saying--would brief you on what was going on.

I remember that when we were aware that it was over, Guam went wild. Men were firing anti-aircraft batteries in the air, flak was raining back down on everybody. Anybody who had a weapon of any kind was firing it. Guys found booze. In fact, after the first bomb was dropped, and the 19th Bomb Group thought the war was over, they had a big party and set their officers club on fire and burned it down. They were somehow getting booze from the navy. Then the war wasn't over, and they didn't have a club. It was a funny sadsack bunch of guys.

When the war was over, you began to think about how fast you were going to get home. A point system was used to establish priority. In my outfit, I was one of the high-point men, because I had had previous service, and overseas service. That all counted. Then your decorations counted, as did your missions. I had 126 points. Everything was back to normal, and we were just counting time as to when we were going to get out. In fact, I got a call one night at the base theater to come and clear the base. I went down to headquarters to clear the base; I thought the whole crew was going down together. Then I found out, "No, you'll ride home with somebody else."

"Well," I said, "we came over together, and I'd prefer that we all go back together." You know, we'd been together for over a year and were really close. My wife and I had married in Kansas in 1944, and the crew were all there at the ceremony. A crew is family!

Getting married was a big decision, too. My wife and I talked about it. You might come back beat up, or not come back. But we said, "Why not?" We've enjoyed 47 years since then.

We flew our airplane back to the States. Meanwhile, a tremendous navy fleet put in at Saipan, to bring back the troops by water. I remember we carried two or three extra guys, who hitchhiked with us. In the bomb bay, we had platforms for individual baggage that everybody was bringing back. Most of our stuff we turned in when we landed in Honolulu. A quartermaster there took it. I kept the B-29 emblem from my airplane. I was going to get the big binoculars, there were two pair on board. Somebody must have realized that those were a h t item, because

those got off the airplane before I did. I did get the Boeing emblem and still have it. They took our GI Hamilton watches and just threw them in a barrel. You were allowed to keep your flying gear--the leather flying jacket.

We landed at Mather Field, near Sacramento. That was another interesting thing. We got to where we could fly our airplane at a little higher speed than a lot of people realized. So we hit the West Coast before the sun came up, but we weren't allowed to land before daylight. We had to cruise up and down the coast, but you were really anxious to get back to land in the States and get home to family.

The movies have played up the emotions one feels when flying back over the Golden Gate Bridge. We had left the U.S. at night, so we could not see the bridge, and wondered if we would see it again. It certainly looked good to us on our return--all safe and sound.

I processed out of the air force at Mather. I had had my wife get the employment address for United Airlines, so when I was overseas, I wrote to them, thinking maybe the airlines would be expanding. I was torn between a military or civilian life. I guess what happened, I was called into the squadron commander's office on Guam. There was a questionnaire, and I had thought about a military career, because by that time I had six or seven years in. Maybe I would like the military. So I had put a question mark by one of the questions on whether you wanted to say in.

The commander asked, "What's the problem here?"

"Well, I've got six years in the service. When I graduated from cadets, I had a ten-day leave. I've never had any more time." Normally, you're supposed to have 30 days or so after enlistment.

He said, "Lieutenant, the army doesn't owe you a damn thing!"

"Would you put a big 'no' next to the question 'Do you want to stay in?'" I requested.

Then I began to think about civilian aviation. When I got back to the States, I found that everybody had made application with the airlines. They were swamped.

The more I thought about United, the more I thought that I'd like to stay in Salt Lake City. I started to think about Western Airlines, because it had a domicile there. I went out and talked to the chief pilot. The requirements, in order to keep pilot applications down, were at least two years of college, over 2,500

hours of flight time (I had about 1,800 at that time), and under 25 years of age (I was 24 and had no college).

Prior to enlisting in the army, I had worked for Western Dental Supply in Salt Lake City. The wife of the owner was a real "honcho." She could make things happen. So I went out and talked to her. "I'll tell you what," she said to me. "I'll get you a job at Western Airlines on the ticket counter. You drive that chief pilot nuts, everytime you see him, requesting a job."

So I went out. She had made arrangements, and I was hired to work on the ticket counter, and everytime I'd see Bert Mooney, chief pilot, I'd say, "I want to fly for this airline. How about a job?"

"You don't have the qualifications," he would reply.

"Yeah, but I'm a good pilot. College doesn't mean anything when you're flying an airplane."

I kept bantering back and forth, and I'll bet I worked on him for about six weeks. Then one day, one of the four original pilots for Western, Fred Kelly, was in town. Bert sent down a message: "Come on up to the office." And he introduced me to Fred Kelly.

Kelly said to me, "I understand you've been driving Bert nuts. You want to fly?"

"Yeah."

"Why do you want to fly with Western?"

I gave him some answer, I guess.

"I'll tell you what. Get on an airplane next Monday, come on down to Burbank, and we'll see what you can do. In the meantime, Bert, see if he can take the DC-3 around the pattern."

I'd never been in a DC-3 in my life. It was a tail-wheel airplane, like the B-17; but the B-29 was a nose-wheel airplane.

I went out, we went around, and I shot a couple of landings. Bert said, "I'll send you down to Burbank."

I went down and went through their school, came back to Salt Lake, and was in hog heaven flying a big DC-3 airline as a co-pilot. About that time, Western nearly went bankrupt, so I was furloughed, because I was among the most junior pilots.

I then went to work for Standard Optical Co. I was very unhappy. Then I heard about Challenger, a feeder airline that

was shaping up in Salt Lake. I talked to the chief pilot, who said, "Come on out again, on Saturday, and we'll see what you can do."

By this time, I had about five or six months flying a DC-3 with Western. He hired me, and that was the beginning of my airline career. I flew the DC-3, the Convair 340 and 580; I checked out on the Boeing 737 and flew that the remainder of my career. I spent 34 years with Frontier Airline.

There was Challenger in Salt Lake, Monarch out of Denver, and Arizona Airways out of Phoenix. The three merged and called themselves Frontier Airline.

I did commute to Denver for ten years when I flew the 737.

I have two children. I think life has been great for me. There were times, flying out of Salt Lake at 6:30 or 7:00 o'clock in the morning and I could see people driving to work on the freeway. I'd think, "Geez, isn't this neat! A lot of those people feel they're going to the 'salt mine,' and here 'I'm getting paid to do the greatest job there is."

I retired in 1981. I still fly our CAF Wing's Stearman. Occasionally I fly a DC-3 for Majestic Airline on a part-time basis. If I have nothing to do, I give them a call and fly a trip to Billings, Montana, overnight, and come back the next day.

Age 60 is mandatory retirement as a commercial airline type. I'm 69 [1990], and there's no restriction with Majestic, because I'm just flying freight and mail. I have about 30,000 total flying hours and feel life will hear no complaints from me--ever!

*This was an interview by a Professor
from BYU who, also belonged to the Utah
Wing CAF.*

*Re-reading made me realize I did
benefit from WWII*

It put me into aviation.

Jack

CREW # 815

UP FRONT

Dolan; Knipp; Schade; Rodin;
Leslie; Rogocki.

REAR

Sams; Hawkins; Baskins;
Blocker; Cihocki.

- 1 14 May 1945 Nagoya K-34
12,000# [500# Incendiary]
18,600 feet bomb alt.
Assembly Smith Island
I.P. Biwa-Ko
Bombs Away 1015K
Flight Time 16:25
Position #3 Light Flak, some fighters
Weather good, bombed visually.
- 2 17 May Nagoya; Mitsubishi A/C factory K-34
12,000# [500# Incend]
12,300 ft. Bomb Alt.
Assembly: Individual bomb runs.
I.P. Biwa- Ko.
Bombs Away 0428K
Flight time: 14:55
Night Raid. Light Flak;
no fighters. Bombed by
radar.
- 3 19 May Hammamatsu K-31
23,000ft
11,000# [500# G.P.]
Assembly Tori-Shima
I.P. direct radar run
Bombs away: 1244K
Flight time 15:00
Tachikawa weathered in.
Hammamatsu was radar target.
No flak-no fighters. Weather
bad. Position #3.
- 4 24 May Tokyo K-32
18,500# [500# Incend]
12,100 ft Bomb Alt.
I.P. Mt Fujiyama
Bombs Away 0317K
Flight Time 15:25
Night fire raid. Bombed by
radar. No fighters, Moderate
flak, lots of searchlights.
One flak hole on tail.
Weather fair.
- 5 26 May Tokyo K-32
11,000ft Bomb Alt.
9,500 # [500# Incend]
Assembly: individual Attacks
I.P. Mt. Fujiyama
Bombs Away 0042K
Flight Time 14:25
Night fire raid. Bombed by
radar. No fighters. Heavy flak,
many searchlights. Fair weather.
- 6 29 May Yokohama K-32
18,500ft
13,500# [500# Incend]
Assembly Tori Shima
I.P. Mt. Fujiyama
Bombs away 1115K
Flight time 15:00
Position #3. Visually bombed dock
area. Light flak, no fighters. Day
raid. Target smoke up to 19,000ft.

- 7 5 June 1945
Kobe K-36
11,400# Bomb Load
15,600 ft Bomb Alt.
Assembly 33 10 N by 134 00 E
I. P. Awaji Shima
Bombs Away 0928 K
Flight time 15:55
- 8 7 June
Osaka K-40
13,800# Bombload
21,200 ft Bomb alt.
I.P. Awaji Shima
Assembly Minami Iwo Jima
Bombs Away 12:47K
Flight time 14:45
- 9 18 June
Kagoshima K-29
15,750# [450# Incend]
8,000 ft bomb alt.
Assembly: Individual Attacks
I.P. Tanega Shima
Bombs Away 0109K
Flight time 14:45
- 10 22 June
Tamashima K-29
12,000# [500# G.P.]
Bomb Alt 17,300ft.
Assembly Tanabe
I.P. Shodo Shima
Bombs away 1028K
Flight time 15:40
- 11 26 June
Nagoya K-30
11,000# [500# G.P.]
18,400ft Bomb alt.
Assembly Shimono Masaki
I.P. Biwa Ko
Bombs away 1044K
Flight time 15:15
- 12 29 June
Nobeoka K-29
20,000# [500# Incend]
11,000ft Bomb alt.
Assembly: Night, individual
I.P. Okino Shima
Bombs away 0312K
Flight time 14:30
- 13 2 July
Shimo no seki K-30
12,000# Incend.
14,600ft Bomb alt.
Assembly Night raid. Individual
Bombs away 0347K
Flight time 15:30
- Position #6 in formation. Visually bombed target. Light flak, few fighters. A/C #57 shot down near Tanabe. Saw 8 parachutes. Our bomb-bay malfunctioned, salvoed bombs after lands-end. Flak hit on #4 engine, No other damage.
- Position #5. Bombed by radar. P-51 escort. No flak or fighters.
- First raid to Kyushu. Weather from Iwo Jima to landfall. Last over target. City well burnt-out and still burning. Bombed visually. Auto/weapons fire, but ineffectual. Fire-balls in area.
- Assembled off S.E. Shikoku. Flak and fighters at assembly point. Light flak through to the I.P. Flak accurate over target. One hit on the A/C.
- Position #3. Few fighters. Flak intense and accurate from the I.P. to the target. About 7ft of right horizontal stabilizer shot away. TOO DAMN CLOSE!!
- Milk run! Turbo trouble #4 Eng.
- Briefed as a rough raid. Was an easy one.

- 14 4 July
Takushima K-41
20,000# Bomb load
10,200ft Bomb alt.
Assembly Night raid
I.P. Aeoga shima
Bombs away 0317K
Flight time 14:45
Another milk run
- 15 7 July
Kofu K-29
20,000# Bomb Load
13,100 ft Bomb alt.
Assembly: Individual
I.P. Omai Saki
Bombs away 0137K
Flight time 14:10
Easy raid. Saw one night
fighter-no attack. Mt. Fuji
could be seen very nicely.
- 16 10 July
Gifu K-14
20,000# Bomb load
16,000ft Bomb alt.
Assembly: Individual
Bombs away 0137K
Flight time 15:00
Easy raid. Caught in 6 search-
lights at the target. Night
fighter climbed one towards us,
but did not fire. Bomb from
A/C over us narrowly missed
our left wing.
- 17 13 July
Uwajima K-29
20,000# Bomb Load
14,200ft Bomb alt.
Assembly: Individ.
I.P. Coordinates Soda Misaki
Bombs away 0047K
Flight time 14:50
Rotten weather. St Elmos
fire seen on windows and
prop tips. A/C made a bomb
run right over us. Kept
Nav. lights on continuously.
- 18 20 July
Akazaki K-32
18,400# Bomb load
14,600 ft bomb alt.
Assembly: night, ind.
I.P. Muao Siki Point
Bombs away 0222K
Flight time 14:00
Easy raid.
- 19 24 July
Tsu K-32
Two 4,000# G.P.
18,900ft Bomb alt.
Assembly Minami Iwo
I.P. Biwa Ko Lake
Bombs away 1140K
Flight time 15:25
Led 'C' Flight. Carried
two 4000# bombs. 10/10's
overcast. Sporadic flak, had
burn marks on bomb bay doors.
- 20 29 July
Ogaki K-32
19,200#[20 500#s, 92 100#s]
14,000ft Bomb alt
Assembly: Individ.
I.P. Biwa Ko Lake
Bombs away 0252K
Flight time 14:50
Easy raid. Weather bad near the
Empire. Cleared over the target
area. Haze on the ground,
thin overcast. Moon very high.
No turbulence.

- 21 2 Aug.
Mito K-32
19,200# Bomb load
13,000ft Bomb alt.
Assembly: Individ. attack
I.P. Lake Kashima
Bombs away 0241K
Flight time 15:10
- 22 6 Aug
Nishi no Miya K-32
20,000# Bomb load
13,000ft Bomb alt
Assembly: Individ. Attack
I.P. Awaji Island
Bombs away 0158K
Flight time 15:40
- 23 8 Aug.
Tokyo Mitsubishi A/C plant K-14
8,000# [4 2000# G.P.]
21,000ft Bomb alt
Assembly: Tori Shima
I.P. Motosu Ko Lake
Bombs away 1728K
Flight time 14:25
- 24 15 Aug
Kumagaya K-32
19,200# Bomb load
14,000ft Bomb alt.
Assembly: Individ. attack
I.P. kumagaya
Bombs away 0138K
Flight time 14:00
- 25 2 Sept
"SHOW OF FORCE" Flew over the
Battleship Missouri as the
surrender terms were being
signed. Alt 2,000ft to 3,000ft
Entire 20th Air Force on display.
- Milk run except for a
near collision on the
bomb-run.
- Easy mission. Shut down
#2 Eng. at land-fall.
Over the target on 3 Eng.
Landed at Iwo Jima and
left K-32 for repairs.
Flew "Eagle" back to
Guam.
- Flew #3 position. Flak heavy,
but off to right. One A/C
down by Mt Fuji- on fire.
Near collision while on the
bomb-run.
- Easy raid. Last Mission!!!
"Utah" was call sign for recall
of the mission. We never heard
the "recall". Ten minutes
after landing we heard that
the war was over.