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TAPE RECORDED INTERVIEW PROJECT

Interview of Howard McNeil

November 12, 2004

Interviewer: Robert Henson

McNeil: This is Howard McNeil, 4012 Harlanwood Drive, Fort Worth, Texas. I am just pleased to have a chance to have this interview.

Henson: Okay, this is November 12, 2004. This is Robert Henson from UCAR interviewing Howard McNeil in Ft. Worth, Texas. This is Side 1 of Tape 1.

McNeil: This is Howard McNeil. I am real pleased to have this interview and, of course, I consider that I have had a rather adventuresome life. When I was real young, that's what I was looking for more than anything else. I wanted to get out of Chicago and have a little high adventure; and, fortunately, the world has been good to me and I have had good times.

Henson: Let's start out by letting me asking you where you were born and what day you were born on and we'll go from there.

McNeil: I was born in Chicago, Illinois, on the 24th of October, *way* back in 1920. I lived in a section of Chicago called Beverly Hills, which is a nice section of town. I didn't live in the rich section; I lived at the bottom of the hill, really across from the railroad tracks, so we were of a modest family, but yet when I was real young, I had ambitions to have an adventuresome type of life.

Henson: So was there any—what was your earliest awareness of the weather at that—growing up in Chicago?

McNeil: When I was really young, we used to go out to the airport. My grandfather took me out to the airport and this was a big airport in Chicago. They had three flights a day coming in and I watched those airplanes and I thought, "Oh, my, would I love to be a pilot," because they could travel all around the world. Then, we lived in a section where the airplanes would come over to where they landed at Chicago, and I would watch them. They would come two or three

times a day; but, the biggest event that I remember as a child was the Graf Zeppelin. It came over our house at about 500 feet high and you could see the people in the Graf Zeppelin and I thought, "Oh, my gosh, wouldn't that be fantastic," and of course, that led you to think about weather, and as a real young boy, I was given a barometer by a great uncle of mine, and I would watch the barometer or the pressures rising and falling, so even as a young child, I became interested in the weather. And, of course, Chicago has all the weather in the world. You have the biggest storms, you have heat in the summer, there was no air-conditioning in those days; so, I thought, "Oh, this is a good field," although it was a type of field that nobody thought of entering. We would get a few weather reports on the radio. I built a crystal set so I could get my own personal reports from the Weather Bureau—and so it started way back then. But, my main interest, my main interest, was in aviation. My whole life, from those early days to recently when I retired, has involved aircraft and missions.

Henson: So, Howard, were there—you mentioned a great uncle that gave you the barometer. Was he a scientist, or were there other people in you family who had scientific interests that perhaps inspired you, or aviation interests?

McNeil: No, the man that gave me the instrument, where the instrument came from, he had a series of paddleboats on the Mississippi River. He would talk about weather at that particular time, but no, we don't have any scientists in the family at all. In fact, I am the first one in my immediate family that had a college degree.

Henson: Okay. Were your parents supportive of your interest in meteorology and aviation?

McNeil: In those days, these were the Depression days. In those days, the idea was to get through life. The idea, I had two sisters, twin sisters, and a brother, and the chance of sending us, from the modest home we came from, to college at that particular time, was negligible. So, all of the people were trying to do at that time was get some job that paid something, but no, no, I was not encouraged to go into a scientific field.

Henson: So, you mentioned seeing the Graf Zeppelin. That was at Midway Airport, right?

McNeil: Yes.

Henson: Okay. So then you went on to high school.

McNeil: Entered high school, a place called Morgan Park. I enjoyed high school very much. I was active in the swimming team and played the French horn and met my wife, who is sitting right over there now, Dorothy Klaas. I fell in love with her the first time I saw her. That's probably 65 years ago now.

Henson: Well! So, let's see, then after high school, you indicated that college wasn't considered a realistic ambition at that point, so what were your thoughts and at that point, what were your thoughts about meteorology and about aviation?

McNeil: Aviation primarily, then one of my best friends' father was vice-president in charge of United Airlines maintenance. And, at one time, this was back in 1938-39, he said, "Howard, what are you going to do when you grow up?" I said, "I haven't a ghost of an idea." He said, "If you can get to be an aircraft mechanic, what we call an 'A & E' [Aircraft & Engine] license," he says, "I'll hire you for United." He says, "We can start you at $225 a month." I said, "Oh, my gosh! Really?" And, he said, "Yes." He says, "You go to Chanute Field, Illinois, and get your license, an A & E license." And he said, "After you get that, you have to serve for six months, and we will buy you out of the service"—there was the Air Corps at that time—"we will buy you out of the service and you can come to work for us." Well, of course, that didn't work out. By the time I got through, they were going mad in Europe and the chance of getting out was nil. So, unfortunately, I never saw this man again. He died by the time I got out of the service.

Henson: Okay, so this was in 1940 when you enlisted in the Air Corps.

McNeil: Right, 1940, and of course, we were all aware of what was going on in Europe at that particular time, and so the thought was to get—I wanted adventure so I thought I don't especially want to be in the ground infantry. I want to get into the Air Corps. At that particular time you had to have two years college equivalent to be a pilot, or you had to pass a two-year college equivalent test. Well, I passed the test, went into the service, but at that time, there was a limitation on height. I was 6-foot-5 at that particular time, and the limit was 6-foot-2. Unbeknown to me, I didn't know that was one of the requirements, so instead of becoming a pilot, I became an aircraft engine mechanic.

Henson: Now, do you know why the height limit existed?

McNeil: In those days, a lot were open cockpits, so I would be sitting too high, and in those days, well, I can tell you when I went into the [Aviation] Cadets later, they talked to you through a hollow tube and my head was above the windshield and when the pilot was talking to me, all I could hear was the wind, so I am sure that was one of them. Then, of course, the fighter planes, they're short, just like right now. They want fighter pilots to be small. I said, "Okay, I'll be a bomber pilot." Well, in those days we had a B-10—old Boeing B-10 twin engine. They were painted, in those days, they were painted in blue and yellow, and one of my friends from Chicago was out of Chanute Field and he was a pilot so he says, "How would you like to take a ride in the front of this thing?" Well, there was a gunnery section in the front and so he took me up on probably a half-hour ride.

That was my first ride in a military aircraft and, of course, that was the first of many, many, many.

Henson: How did—did you immediately enjoy that and know that you wanted to do more of that or—

McNeil: There was a little turret ball in the front and there was no gun there. I was dressed up and it was in the winter and I almost froze to death, so that didn't motivate me too much.

Henson: Okay, so then, so at this point where, where are you located?

McNeil: I'm at Chanute Field. When the flight took place, I was at Chanute Field. I went through mechanics school there. They kept me for a little while after that as an instructor and teaching hydraulics. I've always been a fairly good student, so that's one of my problems. In fact, this is the single biggest problem; I never got out of the Training Command until right at the end of the war.

Henson: Now, you transferred from Chanute Field, Illinois, right?

McNeil: After Chanute Field, I went into the Cadets. They gave me a waiver so that I could get into the Flying Cadets, so I went out to Santa Ana to pre-flight school, which took about 2-3 months, I forget what, and I was definitely going to be a pilot, so I had made arrangements with my wife that when I graduated we would get married at Riverside out there and everything would be good. Well, all of a sudden, when the pilot was talking to me through these little hollow tubes that I was talking about, I had no idea what he was talking about. They said, "Well, Howard, we are going to have to get you in a Stearman—a bigger airplane. You wait awhile and we'll get you." Well, waiting never came, and the paperwork got all mixed up and pretty soon I find myself out of the Cadets and stationed down in Marfa, Texas, I mean, Marfa, Texas, in the Big Bend country. Some people say it is beautiful, but that was the end of the world for a guy from Chicago.

Henson: So then, you stayed in that general part of the country for a couple of years.

McNeil: Right. After they washed me out of the Cadets, I went back to Marfa Air Force Base, then from there to La Junta, Colorado where they had B-25's—that's a Mitchell bomber. I stayed there, as a crew member, I flew probably 500-600 hours. That was an interesting period because we were training Chinamen at that particular time, Chinese pilots, and they needed an English-speaking man on board. And so I would go with them and we would take long missions, sometimes low-level bombing missions over/around Pueblo where their mission was to learn how to bomb ships at 300-400 feet, so we would drop down to 300-400 feet and move in on these ships that were made of lathe and canvas. My

problem with the Chinamen was that they were always flying right through those ships and that would kind of goof up our propellers, but as time went on, I got a little more control. I would sit between then and if they were to get too low, I would just pull back on the wheel and we would miss the ships.

Henson: Now, as I understand it, this was practice bombing near Pueblo, Colorado…

McNeil: Right.

Henson: …right in that period. Were you familiar with that, or involved with that?

McNeil: Certainly, a lot of the bomb runs years later with the B-58 and the F-105 out of Carswell. I was aware of that, but no, I wasn't aware in the early part of World War II of that.

Henson: Okay. So then in 1944-45, you were in Roswell, New Mexico, and I understand you were involved in the Trinity test.

McNeil: Right. I was, at that particular time, I had progressed from B-25's to B-17's, to B-29's, a super-bomber, and was stationed at Roswell, the 506th Bomb Group, and I was flying missions as what they called a flight engineer. In other words, all you were doing is transferring fuel and handling some of the controls that the pilots weren't handling. You were facing backward in a little cockpit. Our group had gone over (this was toward the end of the war) to Tinian and they left one plane behind, so I was checking with the pilot and I said, "How come we're here?" He said, " I don't have any answer at all." But, pretty soon what it tied up to is that we were on a special mission, B-29 mission, and we were taking off one morning, very early, and heading west from Roswell to New Mexico, and nothing happened. We turned around and were going back to the base, and what had happened really is, we were supposed to be in contact with the ground out there at the Trinity Site where they were setting off the first atomic bomb and the Trinity Site was contacting us, but they were on the wrong frequency, so what they were doing, they were getting a freight yard in San Antonio, who they thought was the B-29, and of course that didn't work out at all. And finally, though, they did get us on frequency. We were heading back to Roswell and we turned around and as we turned around, heading west again, it was like the sun coming up over New Mexico in the wrong direction, and that was the first atomic bomb at the Trinity Site, and of course, all of the work was done at Los Alamos and there's many, many stories I could tell you about that first Trinity Site, what a rinky-dinky operation it was. They had one telephone line coming in there; that was all, period. They were so afraid of sabotage.

Henson: Now, how far away were you in the plane when—?

McNeil: When we saw the thing go off, we were still quite a ways away, I'd say we were probably at least 30-40 miles away, and we headed over toward where the detonation had taken place and by that time, this beautiful cloud had turned all different colors—azure and purples, and unbelievable, and of course, it went far higher than we were flying. We were only flying at about 20,000 feet, and so it was much higher than us, and then years later I became interested in just where the fallout occurred, and so, let's see, at this particular time I was a flight engineer, I was not a weatherman. Then, when I became a weatherman, I got the original map, oddly enough a surface map, analyzed by Dr. Irving P. Krick, and then I did a study, a fallout study to see where that went. Well, they knew in advance what type of day they wanted. They didn't want any of that fallout going up toward Amarillo, and so, I did a study on that, but it proved nothing. So, then I kept that for a long time, those maps and all the information about that. In fact, I had a lot of them in a drawer that I have. But I sent them not long ago to Los Alamos. I went by there years ago and that's what they wanted, the original map, and they said, no, they didn't have any place to display it, but about two or three years ago if I remember, I sent that map to them, so they have the actual map and the winds aloft that took place at the Trinity Site.

Henson: All right. One other question about that: did you know what that was when it was going off?

McNeil: Oh, no, no, none of our crew knew, had any idea what it was. We were told it was a large ammunition dump that blew up, but the odd part about it is, when we came back to the base, they told us, "You didn't see anything. **You didn't see anything.** " "So," we said, "okay," and they said, "We are real serious about this," and I said, "Yes." Well, within a couple of weeks, they dropped the two bombs in Japan and the war ended. And, when my friends came back, the other ships came back to Roswell, which was Walker AFB, our first base, they said, "Howard, while you were goofing off, we won the war." And, that's about what it added up to, so the war ended, I got out of the service, then went to Chicago, returned to Chicago. By this time I had my first son, Scott.

Henson: One final question about the Trinity experience. You said they were trying to contact you while you were flying.

McNeil: Right.

Henson: Why were they trying to contact you?

McNeil: Well, to tell us what time it was supposed to go off, and ask our position and altitude. That was the primary reason, and see, we actually, what it added up to, thinking back on that, we were a guinea pig to see what impact that would have on an aircraft at altitude. See, in those early days, they didn't know when they set off that first atomic bomb whether this would be a chain reaction in the hills around there and all the atomic particles in that particular area would also

cause a massive, massive bomb. And, so, as far as our plane was concerned, they wanted to know we weren't too close, I think that was basically it, although, see, I'm not, I wasn't on, I wasn't on the inter-phone at that particular time. All I was was a flight engineer. Then, when that all ended and the war ended, and I went to Chicago, I went to work for my father-in-law up there for a while.

Henson: Okay, well let's go from that to kind of the return of meteorology to your life.

McNeil: Right, now we get to what I am really doing. The part that I liked in the cadets, the Flying Cadets, best was weather. I really related to that and enjoyed it thoroughly. I had one of these minds that picked up things pretty fast. So I picked up on the weather and enjoyed that, and so when I got out of the service and went to work for my father-in-law on the Board of Trade in Chicago, there was no adventure there. So, I thought, "Howard, you're missing out on something." So, I thought, "I enjoyed the time in the service, so I decided to go back into the service, if I could become a weatherman." Well, the only weather school they had at that particular time for somebody who couldn't afford to go college was at Chanute Field. So I went down to Chanute Field and told them what I wanted. They had a special examination they gave you to see whether you were qualified to get in, how you were in math, and physics, and so forth. So I qualified and they had it broken down into two sections. There was an aircraft—I shouldn't say aircraft—they had Weather Observer course, which was one phase. I went through weather observer school, once again I enjoyed it so much that they kept me as an instructor for about a year. Then I went through the regular Forecasting School, and after that they kept me as an instructor. Then I went through the high-altitude forecasting class and the reason I got into the High-Altitude Forecasting Class was that when I was—it struck me, I was teaching tropical meteorology, which I enjoyed, and I was also taught winds aloft – there was drawing 850, 500, 200 millibar charts – I was teaching our students how to do that. So when we were up to the 200 millibar level, they picked three of us at that particular time, to do research. Our B-29's had made runs on Tokyo. Some days they were bucking headwinds of 200 knots, and the next day about the same altitude and the same position, they would hit very, very light winds. And so the Air Force was interested in, especially SAC, was primarily interested in why winds one day and no winds the next. We called those "rivers of air aloft" when we were first doing this research. The fast-moving "rivers of air aloft" when we were first doing this study.

Henson: So the term "jet stream" had not come into vogue yet…

McNeil: …and so much later we called it the "jetstream." But, that led—

Henson: Let's spend a little more time, though, on the period in which you were taking your training, and then you were instructing. Were there any instructors

who stood out for you, who made a really strong impression on you, or were very well-known?

McNeil: I don't remember names. One special friend, James E. McCready. Jim and I at this particular time were taking tests. We were both enlisted men, so we took a test to become a Warrant Officer. Now this is the time, you remember, when they were cutting back on the military, so, if you could be whatever rank you were, they would draw a number. If your serial number ended in that number, you were automatically out if you were a reserve officer. Well, a Warrant Officer was a regular, so Jim and I took the test for Warrant Officer in the field of meteorology and both passed it, and so that kept us on as instructors again. So, as I mentioned, Jim was my best friend. Oddly enough, years later, when the Air Weather Service was having contests, they wanted to pick out the best weather detachment in the country and, of course, I thought it was the B-58's and everything we had here at Carswell, and all of the work we were doing, we could win that, but Jim beat me out. He said, "Yes, you should have won it, but he says you guys didn't click on the blood drives. You weren't into the community business. Ha! Ha!" So, he got first place and I got second place.

Henson: So, at that point, Jim was still at Chanute?

McNeil: No, no, Jim at that time was up at McCord. (We are kind of jumping around here.)

Henson: Oh, that's fine, that's fine. So, he was a colleague of yours who then became an instructor.

McNeil: Yes, we both were instructors and we both went, actually, when we went overseas after we taught there, they were looking, well, we went overseas. We both shipped out together, out of San Francisco to Japan. He went to Yukoda, I went to a little place called Ashiya.

Henson: We'll get on to that. I just want to finish up with the school. If there is anything else we need to touch on. I should ask you about the methods of teaching and how those differ from later on. In other words, what was distinctive about the way meteorology was handled—

McNeil: Well, the big thing about this was, is that it was eight hours a day, it was the longest program that the Air Force had – far longer than pilot training. And, we would teach fairly large classes. Most of the classes for the meteorologists were ex-navigators. Navigators seemed to have a higher educational value. They were good at mathematics, so we would teach these classes and, but nothing else. It wasn't like going to a university and getting a degree in meteorology where you had to take everything else, this was straight "metero," all the way; in other words, everything from adiabatic charts, to you name it. Of course, we studied all of the ones that I see you have interviews with, like Horace Byers, all these

people, we read all those books, and especially if we liked it. We probably read every book that there was, and that gave us a lot of background information, and so Jim and I, as good friends, thoroughly enjoyed this. As far as the classes were concerned, the classes lasted about, oh an hour, an hour-and-one-half apiece each day. They covered everything from mathematics, like everybody used to joke: you drop your pencil and you've already missed out one of your mathematics. We didn't hit it too heavy, but a lot on the physics, but mainly, analysis. I would say 75% was analysis and learning the codes and learning the call signs of every weather station in the world and the call numbers of every station in the world. So, like when we went to Japan, we didn't have any trouble analyzing charts…

Henson: At the standard levels you mentioned – 850, 500?

McNeil: Right, right.

Henson: All right, well, thank you for filling us in on that.

So, let's move on. You said after your experience at Chanute in 1950 you got your orders to go to Japan.

McNeil: Right. We went to Japan and I went to a little place in Southern Japan called Ashiya. There is a book written about the "Ghost of Ashiya." A B-29 cruiser would get shot down. This one guy lived on Ashiya for about six months, hiding everywhere. They were trying to find him and they would find food missing, and so forth, anyway, this has nothing to do with weather, it was interesting. Anyway, this B-29 pilot lived there through the war, survived, and, they knew there was somebody there, but they didn't know who it was, so they called him the "Ghost of Ashiya." Now, the little base that I was stationed there, [was called] "Home of the Mustangs" (Mustang, of course, was a P-51, a beautiful little airplane.) The war was over, you see, and Korea, I mean, World War II was over, and nobody expected this thing in Korea, so all of a sudden, the P-51's that we got were from the National Guards across the country. They were put on an aircraft carrier and brought over to Ashiya, so most of the P-51's were from Texas, or Louisiana, or Oklahoma, or you name it. There were all different markings on them, and they were outfitted to carry napalm bombs, and so, the war had already started…

Henson: So, when you went over there it was earlier in 1950, before—

McNeil: I was arriving there just about the time the war started in Korea, and so the P-51's were loaded up. I had one interesting thing there. I was at the base at Ashiya and all of a sudden this man comes in in coveralls, and we had this typhoon south of Sassabo, and he says, "Where is the typhoon?" I was a weatherman, the only one on duty at the time. I said, "It's about 75 miles south of Sassabo." He said, "I didn't ask you where you thought it was; I asked you where it was." And, so, I said, "We don't have radar here." So, he says, "Get your butt

in that airplane out there with my pilot, and go find where this is, and who is the base commander." So, I told him the name of the base commander, who was a colonel, so he says, "Tell that guy to get his * down here right now!" So, I called up the Officers' Club—they were taking a break due to the weather, the 51's were all grounded—and so, the colonel says, "Who is it?" I says, "I don't know who he is, but he told me to get your * down here *now*," and he said, "I'll be right there." In the meantime I get in the airplane to go looking for the position of the typhoon. So, that was an interesting little event. He was flying an old BT-13 and the rain was coming in so fast that the controls on the floor were getting all messed up.

Henson: So, who was it that told you to…

McNeil: It was the head, it was the top general, Walker, in Korea. He had come back to find out why the P-51's weren't flying, and somebody flew him over there and, in that there, this was the only protection they had. We didn't have any planes in Korea at that time. So, that was, yes . . .

Henson: And, that was your first experience with a tropical cyclone.

McNeil: That was the first time I flew into one; I flew into many of them later.

Henson: So, what was that experience, the first one, like?

McNeil: It was very scary. My pilot was who? Doolittle, Jimmy Doolittle. Does that ring a bell with you? Well, Jimmy Doolittle was the pilot who took B-25's and raided Tokyo. Now he was a civilian, but he was also a reserve officer, so they brought him back in and he flew these little missions, like, I had to laugh. He said, Doolittle kept saying, "Is this it? Is this it? Have we found the eye?" I said, "No, this is not the eye." He says, "Do you realize how much water we are getting in this airplane? " and I said yes. He said, "Let me repeat, is this the eye?" So we never did find the eye. We just turned around and went back. That was an interesting thing, and I didn't know until after we got back—one of the highlights of my life is that I flew with Jimmy Doolittle—

END OF TAPE I, SIDE I

Interview of Howard McNeil

TAPE I, SIDE 2

Henson: The interview with Howard McNeil by Robert Henson on November 12, 2004: this is side two of tape one and we were discussing Jimmy Doolittle and Howard's flight with Jimmy to investigate a tropical cyclone in 1950.

McNeil: That was really a typhoon.

Henson: Typhoon, yes.

McNeil: Anyway, I think we went down there and we didn't find it. And there was water coming into the airplane, but it was bumpy. You can imagine. So, anyway, we came back from there and told them what we thought. We didn't tell them where we thought it was; we didn't tell them what we thought it was, we told them it was so and so and so and so. So each one of the base commanders said, "Let's get these airplanes in the air." So that, mind you, we had a crosswind there on the littlest runway at Ashiya and we started taking off these P-51's, loaded with napalm, and heading toward Korea, and a lot of them could never find a place to land again. So, we lost a number of them on takeoff because of strong crosswind; they didn't use the runway, they just put their brakes on and when the winds erupted about 90 –100 miles per hour they would just practically lift right off, so it was interesting to see. We lost a number of 'em right on the base; they burned up right on the base.

Henson: So you mentioned that you flew a number of weather recon flights.

McNeil: The next step, Bob, was they moved the P-51 outfit out of Ashiya to the only little landing strip in all of Korea that hadn't been taken, and so we landed there. It was a dirt runway, we landed there, they brought in all the napalm, stacked them up there. They gave me two tents: they gave me a weather tent and they gave me a tent to sleep in—12-man tents, good-sized tents, on the side of the runway and this was setting in a little field where the farmers kept running out and trying to straighten up the plants that we were trampling down because you see, the war wasn't going to last very long; they didn't want to lose their crop. Anyway, they had one P-51 that two people could be in—instructor and student. Well, I would ride as a student in the back and we would go up over North Korea and bring in the aircraft, the B-26's mainly, and drop napalm. And, we would take weather observations, and we had a special code. We didn't say where we were because we knew they were picking it up. We had a code number for each of the cities that we were passing over all the way up to the Yellow River, and that information was being sent by radio back to Japan so they could analyze the charts. See, the big thing, Bob, this was a very primitive operation. We had all of our information came in a few boxes—a portable weather station, if you can

imagine. We could send a balloon aloft and the message that we got, as far as the Chinese weather and the Russian weather, was supposedly secret, which wasn't true. We could break that code real easy. It was a code and we could break it real easy, so we analyzed the charts. Now, we analyzed everything,

Henson: Excuse me, so they were launching radiosondes in Russia and in China at that time?

McNeil: Yes.

Henson: So you were able to break those codes?

McNeil: Right. From the cities that they came from, and so we were able to plot the charts. We plotted all of the charts. All of our surface charts we'd plot ourselves, all of the upper-level charts we plotted, because we had no facsimile.

Henson: How many stations were you able to decode, roughly?

McNeil: Probably about 20-30 altogether. We were really only interested in the eastern part of Russia, Vladivostok area down through China. We were not interested too far west in Russia, although if we could have had it, we would have got the amplitude of the waves better and we could have forecasted the jet streams a little better, but this was very primitive. I had twelve men, and we were just plotting these things and analyzing them as fast as we can. We were the first ones to wear the blue hats for the United Nations' troops, and then we would have all of these different people coming in from the Netherlands and all over and they would want to take runs up to over the enemy lines. I don't know why they did this. I think a bunch of them just wanted to get a little combat experience in. Anyway, they would come in and I would give them the weather forecast, and they would fly off from there. But, it was very, very, very, very primitive and we were close enough to the front lines that our tents would take incoming shells at night—rifle. The North Koreans were using a black powder, so we could see where it was coming from in the hills, the rifle action was coming from, but we couldn't protect them. They had the 24th and 25th Division there and to protect the air base, they would have the 24th, then as daylight came— protect it at night because we had enough troops there that could probably help protect it in the daytime. They would send this other division over to the other part of the Pusan perimeter, and so it looked like we had twice as many people in Korea, as far as soldiers were concerned, but we didn't, we were real short, and as far as our group was concerned, it would get pretty dicey at times when they were shooting things. We were not sure at all that they were going to take this little airstrip; so, they had an LST, we were right on the shore, and we'd run out on the LST at night—

Henson: What is the LST?

McNeil: It's a landing ship that they had used on the Normandy Invasion type of thing where it would hold 50-60 people, so we would get in there and stretch out on the floor, because it was metal all the way around us, and that protected us for that night. And, sometimes, where I got banged up over there, sometimes we would make a run—I had a weapons carrier 50 caliber—and we would make a run for the LST at night, or the evening, and this gets a little dicey. One of our men ran the 50-caliber right behind me, and I would drive, and anybody out in front of me, we keep going. I didn't kill anybody, but my sergeants did. They just kept the machine gun going and, so anyway, I goofed up my back at that particular time running over bodies, and high-frequency ringing in the ears that I have till this day—that was over 50 years ago that the ringing started from the 50-caliber, which was right next to my head, so…

Henson: How, again, did your back get hurt?

McNeil: Simply from riding, a lot of times coming back on the landing field with the P-51's, having rough landings, and the rough ride in that weapons carrier. Unbeknownst to me before that, I had a fractured back, and a hairline crack that they didn't discover until years and years later. They said, in fact, I was back here at Carswell one time I was going in for flight physical and they said, "Did you know that you have a hairline crack in your sacroiliac?" I said, "No." They said, "Well, it's beginning to become apparent because it is sending out a lot of growth around there that will probably affect your nerves and your legs when you get older. So, anyway…

Henson: What did they know at the time?

McNeil: They knew at the time, when I was in Korea, that I was taking a lot of aspirin. I thought I could win the war myself, so I kept taking these aspirin. Finally I couldn't. My legs were completely asleep, I couldn't feel anything, and so they sent the medical officer over and he checked me and checked with needles and how [my] legs were and he said, "You gotta get outa here. You're getting paralyzed." And I said, "Yes, I know," because by that time I was pulling myself up on the post of the tent, but I was one of these dedicated nuts. Anyway, they put me in a stretcher and took me back to Japan, and then they, from there, they put me on shipboard and took me to Hot Springs General, and thank God, the paralysis got better after about two or three months in Hot Springs General. And, so, by that particular time, I was a regular. I was a regular Warrant Officer. They couldn't hardly get rid of me. They can get rid of reserve officers.

Henson: Let's take a break here, then we'll come back and talk more about your next assignment. [Short break]

Henson: Okay, so, Howard, you came back to the States, recuperated at Hot Springs, and then went on to Bermuda.

McNeil: That was interesting. When I was down at Hot Springs, they sent me some orders and said, "We are going to send you to Edwards Air Force Base due to the fact that you've got a lot of experience in jet streams, and we're trying to make some high-level flights out there." But then about two or three days later they called me up on the phone. They said, "Would you like to go to Edwards, or would you like to join the Hurricane Hunters in Bermuda?" They said, "You've got some experience, you taught meteorology and tropical meteorology, how would you like to go to Bermuda?" I said, "You don't have to ask." So, we went to Bermuda and we were there for 30 months with the Hurricane Hunters, which was—I had three children by that time, Brian and Bruce—and that was a fantastic tour.

Henson: Which tropical seasons, then, was it '51, '52, '53 . . . ?

McNeil: That was the summer of '51, '52, '53, and if we weren't flying a hurricane, they had what they called "sea gull" flights, where we would fly way out over the Atlantic and check on the winds at different levels and, then, at the basic weather station there, we took care of all the commercial flights. In other words, looking back on it, looking back on my career, I spent more time working for commercial organizations such as BOAC, Cubana, Avianca—there was probably four or five different airlines flying in there. They would come into the weather station to get their weather and, of course, my expertise was high altitude, so most of these planes were fairly high, they weren't jets, but they were pretty high. So, if they had flights to Europe and they could pick up strong tailwinds, even at the lower portion of the jet stream, then we could send them father north instead of heading straight to the Azores, then up to England, we'll say for example with BOAC. We would send them north, and then they could catch the winds and make time, even though they went 200 miles out of their way, they could make time getting into England, so that's what it added up to there.

And at that particular time, I had two years of college credits, right, so I also thought, "Well, you'd better," I was in and out of the hospital with my legs, so I was still very fearful that the legs would go out and I'd better have a degree. So I decided to make contact with a man that I had met at an American Meteorological Society meeting in New York. This guy's name was Irving P. Krick, and so I called Krick up from Bermuda and told him that we had met and I talked to him for a time. He was in New York. I said, "I'd like to go to work for you someday as a civilian." He said, "Well, contact me later." So, I said I was contacting him, I said Bermuda was under a real dry spell. I said, "I think maybe we can get a weather modification program going in Bermuda." So, we talked a little about it and he looked into it and found out it wouldn't pay, but he said, "If you want to follow up on your idea of going to work for me sometime, when you get out of the service, come to Denver."

Henson: How did you first hear about Dr. Krick?

McNeil: I heard about Krick—this is funny—when I was at Chanute Field teaching, there were very few private weather consultants in those days, in fact, 99% of the people were either in the National Weather Bureau—and of course, the Air Weather Service was much bigger than the National Weather Bureau. So they said, if you can ever get to work for Krick, he is a real interesting guy, and he has a lot of consulting operations around the world. You have "arrived" if you work for Irving P. Krick. And I said, "Well, someday." That's how I even heard of the name, because it meant nothing.

Henson: So, then, that was where it stood when you were in Bermuda.

McNeil: In Bermuda the legs were giving me a lot of problem. I wanted to finish school, and Krick said he would hire me. Krick was in Denver. So, I went to the University of Denver where I finished my degree a couple of years later.

Henson: Okay, so while you are in Bermuda, was there any particular hurricanes that . . .

McNeil: Oh, yes! Yes, we had two of them, rotating around each other that went right over the island of Bermuda, and not only that, but they were dropping tornadoes at that particular time, so wiped a lot of trees out.

Henson: Which ones? Were they named? Or, were they . . .

McNeil: That's a long time ago. Carla? No, I really can't say, but the two that were rotating around each other—they don't do that too often. In fact, it was kind of interesting. The Bermudians are real good about forecasting the movement of typhoons or hurricanes by the way the sea acts. We didn't live on the base. We lived in a place called Hungry Bay, and when all the fish and sharks would start coming into Hungry Bay and it was fairly shallow, you knew the hurricane was not too far away, so that was kind of interesting to watch that.

Henson: Now, were you with any of the original Hurricane Hunters from World War II?

McNeil: No, not in World War II. This was, like I say, '51, '52, '53. But that was an active group. I don't even recall, I don't think, Bob, that we even had a "Hurricane Hunters" in World War II.

Henson: I thought there were one or two in the Pacific . . .

McNeil: Well, you know, every time, we lost a couple of aircraft carriers in the Pacific from typhoons. They didn't know they were there. There were no satellites, there was no nothing! These storms would come out of nowhere, supposedly, and when you got out in the Pacific with those typhoons, well, a

typhoon could take down an aircraft carrier. I think, however, they were doing little flights around from the different bases, but, it was an unknown quantity.

Henson: So, you've been in Bermuda, in the early '50's, were there any other companies doing what you were?

McNeil: No, no, no, that was it. And later, they sent up some hunters—Weather Reconnaissance they called them—Weather Recon out of Guam—at the same time. They had the one in the Atlantic, and they had one in the Pacific. So, there were two organizations. I was never involved with the one out of Guam, just briefly for those few years up in Bermuda.

Henson: Now what was your protocol? In other words, did the U. S. Weather Bureau contact you from the States and say, "Okay, we want you to investigate this system," or how did . . . ?

McNeil: No, the Bureau never had anything to do with it. As far as I know. All we did was dropsonde. We would go up with the instruments that you drop out of the airplane, get into the eye, fly around in the eye. We'd come into the storm from the left rear quadrant and fly. If we could find an eye—sometimes you can't find it. I remember the first time I went in, they said, "We're going to go pretty soon, Howard." So I had a cup of coffee, and I was drinking the coffee and all of a sudden, we hit a downdraft and the coffee was near the ceiling, and I was there with my cup in my hand trying to catch it as it came down.

_____, but it was very primitive in those days.

Henson: Would your reports get fed into the Weather Bureau warning system?

McNeil: Oh, yes, they would all feed in. Of course, the Weather Bureau was the one everywhere was in charge of all warnings, you know. But, I don't know, Bob, I shouldn't say whether—unless I'm real sure about this—but the Air Weather Service was probably twice as big as the U.S. Weather Bureau. It's a huge, international organization that was all over, you know, and so the information would get in and would get tied into the Weather Bureau, etc. Now, another thing about Carswell—well, we can get into that later.

Henson: I just want to ask, the whole idea of going in and hunting hurricanes or going in and flying into hurricanes, when you joined the group in Bermuda in 1951, was that pretty well established, or was that still, did people think it was kind of a crazy thing to do, or what?

McNeil: Oh, yes. In other words, it was part of my enjoyment of adventure, I thought, you know, I was fairly young and I thought well this is really high adventure. And, of course, there were no satellites, so we only had a general idea where the storms were, especially after they moved out of Africa and the Azores,

and were moving over, we would be able to track them fairly early, because we had these regular flights, some we called "sea gull" flights, we would go out just looking for them. That's why they called them "Hurricane Hunters." We just looked for them. We might not ever find anything, or if we did, it was not tropical in nature, maybe an easterly wave and that was about it. But, then when we, as the storms moved farther west, and see in those days, too, a lot of people did not know that there was an easterly jet stream, did they. You know, things push from the east; so [with] my teaching tropical meteorology and upper level [experience], I found it was extremely interesting for me, and of course, the big thing was at that particular time was that there were so few people that did it.

I don't know if they sent you any letters that I would get from the top people in the Air Weather Service, but they said, "Howard, you got a commission way back when you got a direct appointment from Harry Truman, a long time ago. Why are you still a Warrant Officer?" And, I said, "I really haven't thought much about it." And they said, "Well, how would you like to get your commission, pick up your commission?" (that I had never picked up.) And, I said, by that time, I thought that the Warrant Officer thing had pretty well passed, and I thought, "Yes, if I'm going to stay in the service, I want a commission. I wasn't sure I was going to stay, because I wasn't sure the legs would last, but I was willing to take a gamble that if I picked up my reserve second lieutenant commission, that they could kick me out and I thought well, I don't care if they kick me out or not, but that is part of it. That's when I got my commission.

Henson: Okay, just to finish up a couple of things with the hurricane stuff. When you were on these flights, what did you particularly do? Were you piloting?

McNeil: No. I never piloted. I wasn't navigating. We had a navigator pilot, then we had three weather people who would handle the weather instruments, and one of us would, then, of course, I was real good at Morse [code] and the key. I could transmit and receive about—not fast—but ten words a minute we'll say, so we would send that message out. So, very often, what my job was more than the dropping of the equipment and the inside was transmitting back to the home base, where we were, what we were encountering, and so forth, and so forth.

Henson: Okay, and what was your maximum range, or did you sometimes stop at other fields. . . ?

McNeil: Sometimes we stopped in Savannah, and we would go out and pick up some fuel there and then go back. But we had B-50's-type aircraft. They would have a fairly heavy load, so I would say we could go 2000 miles.

Henson: So, you never really went to the Central and Eastern tropical . . .

McNeil: Oh, no, no. We never got over there. In fact, sometimes we were on these gull flights, which were earlier. We would head north and the navigator would

get his forecast for his winds and navigation, and if you were overcast, you see, we didn't have the instruments we have now that give you exact latitude/longitude. If it was overcast, you worked _____. I remember this one time we were on a gull flight and I kept telling the navigator, I said, "What did you figure the maximum wind shear at 25,000 was going to be up this far north?" He said, "Oh, you weathermen are always talking of these real strong winds." He says, "I cut them in half." So, we had gone north toward Nova Scotia, then we were heading southeast out in the Atlantic where we were making a turn and coming back to the south. Anyway, to make a long story short, he had goofed up and we hit *real* strong winds, even at 25,000, and by the time we got out of the cloud cover, we didn't know whether we had enough gas to get back to Bermuda, because he had us way out in the mid-Atlantic. So, when you asked, did mid-Atlantic? Yes, by mistake!

Henson: So, was that your closest call?

McNeil: Yes, that's the closest call.

Henson: Then, in 1953 you, you became a lieutenant.

McNeil: Actually, probably 1952, I became a lieutenant. I gave up my Warrant Officer position. You get a discharge and you pick up your commission and, so then after that, I wasn't quite sure. I knew I had to finish school. That was my main mission in those days was to finish school, and so that's when I contacted Krick and decided I'd go to work for him, because I had three kids, I had to work. So, I went to work, I got off, we went to Denver. By this time I'm out of the service, and signed up to school, and they said, "Howard, do you know the odds of you getting through school with three kids?" and I said, "No." They said, "You will be the first with three kids." They said, "You're so old [by that time I was 33 years old], we're going to stick you in the faculty dorm, the faculty apartment house" at the University of Denver. So they moved us into the faculty apartments, my wife and I, and brought up the three boys. I went to work for Krick and I'd go to school in the daytime. I was carrying 20 hours working for Krick an eight hour shift. Mainly my shift at that particular time was from midnight until eight in the morning. I was in charge of analyzing the surface charts, upper-air charts, turning the generators on and off for weather modification across the country. Then, when I would get up, I'd go to school and then I would try to get a little sleep in-between. I'm one of these people that was fortunately born with a lot of energy. I could get along on four hours, five hours sleep—even today. I was gifted with energy.

Henson: So what are your recollections of Krick?

McNeil: When I went to work for him, this answered [what] somebody said, "If you get to work for Krick, you have 'arrived.'" So, I was real pleased that I went to work for Krick. In fact, I was the first one he had hired in about two years.

He'd been laying off everybody else. So when I went to work for Krick, he knew I was specialized in high-altitude, and they had a contract with an aircraft company on the West Coast. [Now see, I'm beginning to forget stuff. The mind is going.] Anyway, they were trying to make some transcontinental runs, speed runs across the country, and—turn it [the tape] off for a minute . . .

Anyway, Krick had a contract with Lockheed on the West Coast, forecast the best time of year and the best altitude and the best route to make a transcontinental speed run. So Krick sent me out to Lockheed and I talked to the top-level people out there, which was another interesting thing, because I couldn't have even got into that office earlier. I talked to them and told them that we could handle it. So, we got the contract. They made a speed run, I forget now how fast it was, and even what type of aircraft it was, but that put me in good stead with Krick and within a week after I'd gone to work for him, I got him this contract for that, and so he hired me and when I was allowed to go to school, he went along pretty well if everything as far as my time is concerned. Then as time went on, turning the generators on and off, he would send me off on special missions, like he was a member of the Colorado Water Board that controlled water coming from the West Slope to the East Slope, and so on. So occasionally he'd say to me, "Howard, how would you like to go represent me at the Water Board meeting.?" Well, yes! I would like that, so I would go up and would talk to them about the fact that we could increase the snowpack over the Rockies, so he sent me there. Then, another time he . . .

Henson: How did the Water Board react to . . .

McNeil: They were interested, but they weren't endorsing it real well, but Krick was clever. He had these different generators in the different spots and after all the snow was pretty well gone in winter, they would take pictures from the air, because he had his own airplane there. They would find one of these generators and you could see a fan going out from the generator where there was still snow, and that impressed the Water Board real well, so, in those days, yes, you can increase it if everything is exactly right, but they would get a little more snow because the generator would put out enough to help the snowpack in that particular area. So, we did that, then he had under contract, he had, up in, I went to a meeting in Kansas or Nebraska, I forget where, maybe North Platte, Nebraska, where all of the irrigation corporations would gather and they were under contract for increasing the snowpack. I went to that meeting and they'd listen to me, what little I had to say. But Krick had the ability to sub-delegate a lot of work that he should have been doing himself.

Henson: So, that was a definite aspect of his management approach.

McNeil: Right, right.

Henson: What other recollections do you have of him as a manager, you know, working for him, and also just him as a scientist and, you know, his enterprise.

McNeil: Krick was a very charismatic individual. I liked him. Now, a lot of people maybe didn't like him, but I liked the guy from the first time I saw him. He would have parties for Christmas, which were a real delight, he had parties at his house. He knew I had a military [background]; he had a few military people coming through, like General Eisenhower, to the office.

Henson: Were you there for that?

McNeil: Yes.

Henson: Tell us about that.

McNeil: So he would have parties…

END OF TAPE 1, SIDE 2

Interview of Howard McNeil

TAPE 2, SIDE 1

Henson: This is an interview with Howard McNeil by Robert Henson on November 12, 2004. This is tape two side one, and we have been talking about Irving Krick.

McNeil: You mentioned Krick there, and so I'll tell you, the first time I actually met him in person was when I mentioned going to the AMS meeting up in New York City, long time ago. And Irv gave a talk on private weather service, not cloud seeding, but just private weather service and in those days, that was a pretty radical thought. In fact, Krick's basic, he told me privately one time, he said, "I'd like to close down the National Weather Service—that's what my goal is, to close them down, and have it all turned over to private enterprise." And, so, that, that, that was something. So when he made his talk at this AMS meeting, he was one of the guest speakers. He was there talking to them about how to set up a private weather consulting service, to do away with all the taxes that paid for the Weather Bureau. Well, that went over like a lead balloon, and so, halfway through his talk, people were jumping up and challenging him about this whole concept. They didn't want him to talk any more, so I had to laugh and Krick won a lot of points with me at that time. He said, "Okay, I'll stop talking if any one of you in this organization is not supported by the federal government. I'll talk to them. Raise your hand." There wasn't a soul at that meeting from a private weather consulting organization. I was representing the Air Weather Service and everybody else was from the Weather Bureau and wherever they were from, and, that really sent [Krick's] stock up as far as I was concerned, as far as an individual. So, you ask what he was like, yes, he was his own man.

Henson: So you worked for him, doing graveyard shift part time and completed, and then you went ahead and actually completed your studies.

McNeil: I completed studies, and in-between, even when the study, I'd take it with me. We went down to Florida, for example, and we had a cloud seeding program down in Florida. We met at Tallahassee, and the forests down there, a lot of people were setting fire to the forests. They sold their land real cheap to these forest industries like Weyerhaeuser, and all that type, and then they were setting fire to them because the figured they had sold them too cheap. Well, Krick went down there under contract to bring rain to these forest people. I was Krick's representative down there. This is an interesting little side story. They were meeting at the Tallahassee Courthouse, not the state, but the Tallahassee Courthouse, and I was supposed to talk all these farmers from all over into signing up a weather modification program—actually cloud seeding. And, I was in there, got the thing started, then I left and they said we're going to have another meeting tonight with more people, so come back tonight, Howard. So I came back that night. In the meantime we had already set up the generators, of course. I came back that night and as I got out of the taxi, the rain stopped. It had been

raining all day. I went in the courthouse, the rain stopped. Everybody said, "How did you do that?" And I said, "No way, no way did I do that. That was a pure accident." Well, they really didn't believe me, so I got up and was talking to this particular group and while I'm talking to this group, this man comes running up the aisle and drops to his knees and starts praying. I asked the fellow next to me, "Who is *this*?" and he was praying because I was fooling with God, you see. Those clouds up there belonged to God. And, so I asked this guy, "What does he do?" He said, "He's a shade tobacco farmer." And, so I said, "Oh?" So, after he got up he asked me if I was an anti-Christ. I said, "No, I'm not an anti-Christ." We won't get into religion too much, but I says, "You don't want us to bring any rain to these people of the forest industry." I said, "Have you thought about the fact that maybe God brought all this drought here so that the tobacco farmers wouldn't be killing everybody?" Dead silence, dead silence! He goes out. I continue my talk about getting the people selling Mrs. Fleischmann's yeast. Somebody ran into her to give her a message and she says, "I have to leave here. My lake is filling up. My ponds are filling up. This is the first time they have filled up in three years." She said, "I'll donate my portion; you people do what you want." Well, she was the matriarch of the whole area, so then the people all wanted to do it. In the meantime, the tobacco farmer comes back and he says, "I talked to God, and he says, 'Go ahead.'" You have these incidents in your lifetime that are memorable, and how silly they were.

But, the funniest part about the whole thing was while this was all going on and I'm down there, the National Weather Bureau man, an old fellow, well past retirement but beloved, is writing, is publishing in the paper that the charlatan has come in to try to take their money away and no way will weather modification work. Well, within a day, the rains came real heavy, not that had anything to do with the generators, I'm not saying that, but real heavy rains came, probably due to a little tropical depression or storm, and they have a viaduct there where the road drops down and goes under a railroad track—

Henson: Where exactly was this?

McNeil: In Tallahassee, so a man was selling watermelons on the side of the road and all of his watermelons went down underneath the viaduct, through this flood, and so the newspaper ran a story about the watermelons and the tremendous water. And then they asked the old guy from the National Weather Service, "How do you explain this?" Well, of course, he wouldn't talk to them. I didn't talk to them, but it was kind of a laugh, how different people look at weather modification entirely different, see.

Henson: So, even at that point, there was still quite a huge disparity . . .

McNeil: Oh, yes, in other words, this was the early days of weather modification…

Henson: By the way, the Tallahassee event, do you remember when that was?

McNeil: I would say, it probably is still in the newspapers over there, probably about 1954, or early '55, I forget, somewhere in there.

Henson: Interesting. So you also came to Dallas-Ft. Worth, right, on behalf of Krick?

McNeil: When I was working for Krick on the sideline after really after I finished school, he wanted to develop a weather consulting service for all of the television stations across the country. So I went up to New England, other different places, then came to Ft. Worth.

Henson: You went around meeting with TV stations.

McNeil: Yes, as a salesman. And, ah, so I came to Ft. Worth and Channel 11 was just going on the air…

Henson: Howard, let me just clarify. When you went to these TV stations, you were trying to sell the stations the system, or . . .

McNeil: I was trying to sell them a one-week forecast—two-day forecast and a five-day outlook, weather outlook, that they could use on television, and then we had a system where we could transmit on a teletype-type of thing, a map of where the fronts were if they didn't have one. See, a lot of stations in those days, they really were into this weather television thing. You know, wrestling was a big thing.

Henson: One other question, would those services from Krick be branded as specific _____?

McNeil: Yes, they were supposed to be better than anything in the world, you know, and so forth.

Henson: Would the stations then be asked to say that this was from Krick or just give the forecast?

McNeil: Yes, they would mention it was an Irving P. Krick weather consulting service out of Denver. That upgraded that particular station because everybody else was using the National Weather Service. There was no competition at all. Anyway, I came down to Ft. Worth to sell the cloud seeding program—see I'm getting goofed up—to sell the TV program. They bought it, and then they said, "Howard, we don't have a meteorologist." See, the Bureau people couldn't do this. They said, "We'd like to hire you." I said, "I'm already working for Dr. Krick." They said, "We pirate." I said, "I never heard that term; what is 'pirate'?" They said, "We make you an offer, either you take it or leave it?" I said, "What's the offer?" They said, "We'll pay you twice what you're making

now." I said, "Oh, boy!" So, I called up Dorothy and says, "We're moving to Ft. Worth." She says, "Where's Ft. Worth?" And, that's how we ended up here.

Henson: Wow. So then the station you came to work for was KFJZ?

McNeil: KFJZ.

Henson: And that was in Ft. Worth?

McNeil: In Ft. Worth. It was a radio station and they had just built a TV station, so they were looking for a weatherman, and they didn't have a weatherman. You couldn't find weathermen in those days. See, there was no private weather. You weren't allowed to do this sort of thing, and even on TV, you used all the weather warnings, used all their information, etc., etc., etc. So after I had been here for a while doing the TV thing, Dallas was running short on water. They were buying water in milk containers.

Henson: This was 1955.

McNeil: 1955, yes, '56, I'm not sure, probably '56. Anyway, there was a real shortage of water, and so I contacted Krick, and I said, "These people don't have any water down here." He says, "Howard, we have already got a contract with Dallas on weather modification." I didn't know this, see. He said, "See if you can sell Ft. Worth on it. And, then, we'll include Ft. Worth in on that too." Well, it had been a drought for a long time, I mean, there wasn't a cloud in the sky. You couldn't turn on a generator because there weren't any clouds. Anyway,, I contacted the city, the head of the water service here, and we sold a weather contract to them. About this same time, I'm getting a little tired of no high adventure, so I think I'd like to get back to the Air Weather Service. I had put in for the job after I got through Krick, working at Cheyenne Mountain. And, they said to come down, yes, come down.

Henson: Near Colorado Springs.

McNeil: Yes. So, we went, Dorothy and I went down there and looked at the houses and so forth. We couldn't afford it, and so I just said, "No thanks," and I just kind of disappeared. Then, unbeknown to me, see a lot of these people that knew me were now head of the Air Weather Service. A lot of the guys that used to run the school, way up there, they were in charge of the Air Weather Service. So, they had been looking for me after I turned down the job at Cheyenne Mountain, and they found me, somebody saw me and they said, "He's in Ft. Worth." So this was interesting. So all of a sudden I get a notice from the Air Weather Service. And they said, "Howard, we need a forecaster, civilian forecaster, to forecast for all of the aircraft factories in this area—Convair, Bell Helicopter, Ling Tempo, all of them. Well, see, that would be a competition with private weather consulting. Why didn't the private weather consulting do that?

But, what they were looking for, what Convair was looking for was somebody that could help them with the jet stream. They had the B-58. And, they were having trouble with the 58. They weren't sure the little black box that would tell them what was going on aloft – they weren't sure whether a magnetic field was building up around the thermal variation or the wind variation across these high-level winds that they were becoming aware of. So, they said, "Yes." And I said, "Yes, I'd like to do that." So, they said okay, come to work for the Air Weather Service. So I went back to work doing that.

Henson: Now I'd be interested in how this unfolded, because I understand that you couldn't, as you pointed out, you couldn't work for the Weather Bureau and do television, but there was no such constraint . . .

McNeil: No, there was, but unknown to me. I got the job. And, then after I had the job working for . . .

Henson: Excuse me, so they could have, in principle, they could have said, "No, you can't do both."

McNeil: Yes, right.

Henson: Then, no one ever complained.

McNeil: But, see, there was a fellow. Colonel O.K. Jones who was a friend. Ah, I knew him in Korea, etc., etc. O.K. Jones was in charge of personnel for the Air Weather Service. So he said, "We have looked this all over. Howard is a specialist in high-altitude forecasting for these aircraft factories. They need him. B-58's were dropping out of the sky in Salt Lake City, up in Oklahoma, head first into Louisiana. We're talking B-58's, which were having trouble, high-altitude trouble. Here's a picture of the B-58 if you are not aware of it.

Anyway, ah, so they wanted me to brief all of the aircraft that would get up into the jet stream. Well, the B-58, they were selling, if I recall, I don't remember, we'll say $33-million apiece. They lost, before I went to work for them—talking of the jet stream and so forth, I didn't work for them, but I was over General Dynamics or Convair about everyday talking to their test crews. See, every B-58 that came off the line, had to be tested and had to fly and had to be accepted by the 43rd Bomb Wing, which was at Carswell, so I was involved every day with test flights, of the B-58, before they were put into the inventory of SAC. So anyway, that job was approved by Col. O. K. Jones that Howard can do this. As far as I know, I'm the only one that ever did work for the federal government and had a TV job. Have you known anybody else?

Henson: No, except for very short intervals.

McNeil: Yes.

Henson: Jim Fidler was, of course, on the "Today" Show while he was [with the Weather Bureau].

McNeil: Well, they might have been Reserve. Anyway, that's interesting, then, as I got into this more and more, probably unbeknown to you, or anybody else, all of the weather information for the entire world—China, submarines, everywhere—came into Carswell. Are you aware of that? We had a unit here with huge computers, and every bit of weather information in the entire world came into Carswell as this little Detachment 3, Sixth Weather Wing, and I didn't work there, but I knew them and what we had to do for them is they had these huge computers so that if they took an electrical strike, the _____ dumped, so anytime there was a ghost of a chance of a lightning strike in the area of Carswell, I would call. I shouldn't say "I," I don't mean "I." I mean the Detachment—I was the Chief Weather Forecaster, but it was the Detachment people, 24-hours a day, that would contact this office and say, "Turn your generators on," so they wouldn't lose, wouldn't dump all this information. Finally, all of this closed down and they moved, I think they moved most of the outfit, I'm not positive where it is now. But, at that particular time, I was doing forecasting for everybody. Look at that picture: B-70, B-1's, and this is Joe Cotton. They had built three of these special high-altitude planes. He had also been a general, a B-58 pilot. So we became real good friends. I was forecasting for these supersonic big bombers. This is a huge thing, see. Anyway, so that job out there in Carswell was interesting because I worked there in the daytime. I would occasionally fly with them. We would fly to the North Pole when we were, for DEFCON – does DEFCON mean anything to you? That is "Defense Condition—1-2-3" and whether the Russians had already started the missiles coming, or whether we were just thinking they were coming, like down in Cuba, so I would fly, I loved to fly. If they'd let me in the airplane, I was off to the North Pole, or wherever we were. I never flew a B-58, I flew in a KC-135, but I did thoroughly enjoy it and, it was a time, it was a time where I would work all day, and sometimes overtime with the Air Weather Service, and then I'd go do a radio show, then I would do a TV show, then I would do a late TV show. In those years I did over 15,000 in-front-of-camera presentations. Of course, the big thing there was everybody who was out at the base and General Dynamics, Ling Tempo and Bell, they knew me, because I would see them, but then they would see me at night, and if I would change the forecast, they would say, "Howard, that's not what you told us last night." After we got them up late night there.

Henson: Now, this station you were on, again…

McNeil: KFJZ-TV.

Henson: KFJZ-TV.

McNeil: And then I stayed with them, we'll say, for about twenty years.

Henson: Let me just ask – were they a network affiliate?

McNeil: No, they were independent, so we didn't really have much of an audience at that time. So, yes, I would talk, but I didn't have the coverage BAP had. Well, WBAP was network and a friend of mine by the name of Harold Taft, who worked with me out of Carswell, he was a reserve officer. Harold said to me one time, "Howard, are you getting tired of this?" I said, "Yes." He said, "I am too." He said, "Why don't you go over to BAP; you take one week; I'll take the next week." So we did that for a few years, and then…

Henson: So in other words, you would alternate weeks.

McNeil: Yes, we would alternate weeks. We would only do two shows. Now, the funny thing, there would be one person on at a time; now there's four people, replacing each one of us, and of course, they are paying far, far more than they did. In those days we were just one step above wrestlers, you know. We had chalkboards for weather.

Henson: Harold Taft was one of the pioneers of the . . .

McNeil: Harold was the one who piloted, he came on WBAP probably five years before I was here. He was well known, and I liked Harold. Harold was about 5-foot 5; I was about 6-foot 5; when they took a picture of us when we went in, they made a big deal out of that. Anyway…

Henson: Did they adjust the cameras for your—?

McNeil: When they first introduced us, that was funny, the camera was way down to the floor, then as they panned up, they showed Harold, as they panned up they kept pointing up at me and I had my head practically in the ceiling, you know, which was a good promo that I had joined WBAP instead of the second-rate.

Henson: So, you were at WBAP starting in what year?

McNeil: I would say, let's see, I had been with KFJZ from 1955-65, maybe to 1970, and then I went over to WBAP for five years, and I moved back to Channel 11. I put in 26 years in television.

Henson: WBAP was channel number . . . ?

McNeil: Five.

Henson: And they were based in Ft. Worth, also?.

McNeil: Yes.

Henson: They served the whole metro area.

McNeil: Yes.

Henson: So, you went back to Channel 11 from 1975 till about 1977?

McNeil: Yes.

Henson: Okay. And during all that period, you were working at Carswell by day.

McNeil: All that period I was a workaholic.

Henson: That's a long time to be working.

McNeil: That's a long time. Like I said, I was gifted with energy. See, not only did I do that, but when my boys were growing up I was Scoutmaster. So, you know, it was busy, busy. I look back at it now and think, "Hey, old man, you wore yourself out a long time ago. [laughter]

Henson: During the 1970-75 period, did you alternate weeks that whole time?

[Brief break.]

McNeil: Harold worked for me out at Carswell. I was the one that got him promoted. See I had the status, my GS rating, of a Light Colonel, so Harold at that time was Captain, so it was easy to get him to be a Major. Then, Harold went to work over in a Guard station in Arlington, then, of course, Harold is a gifted man as far as public relations, so he took over and got himself promoted to Colonel by taking over the Guard unit weather-wise in all of Texas.

Henson: So, he was also moonlighting then? All that was going on while . . .

McNeil: Let me think. That's right. He was with the Guard. Maybe the Guard is not the National Weather Service, [but] anyway, he did that and he was good and as time went on, Harold would develop new systems out there. He got away from the chalkboards we started with and so forth, and, and, started to develop what we see now on television. What we see now on television is far more fantastic than anything anybody ever dreamed of, where you can show the jet stream and the movement of the jet, and can show clouds moving in—I mean, this is, what the people have done on television – they have brought people forward as far as weather knowledge a hundredfold.

Henson: Oh, I think someone who's 20 years old now would never dream of such things.

McNeil: That's fantastic. So, where are we?

Henson: Well, we're up to the mid-1970's, and so in 1977 you retired . . .

McNeil: So, anyway, about this same time we were talking about Harold; Harold and I were interested in getting better radar. The little station I had, we had no radar. Out at Carswell, we had a CPS-9, and APQ-13, but no radar. But, Harold talked them into getting a radar for WBAP and now BAP, long after Harold is gone, they have got one of the best radars in all of Texas. I don't even watch it, but they can lead, but they reach out with that thing...But Harold and I at that particular time were supposed to talk; the National Weather Service wanted to hold a hearing about how private TV and private weather people were getting information across to the National Weather Service. So this was a Congressional investigation and there's my statement on what I thought about it. I thoroughly endorsed private weather consulting, and so forth. You can have that.

Henson: Thank you.

McNeil: That's part of the record. Here's another part of that record that I was talking about a long time. You can turn this off

[Brief break.]

Henson: Okay, since we've hit Howard's retirement point in mid-1977, we are going to go back to some other areas of interest.

McNeil: After I retired, I started compiling some of this information for my kids, and so let's look back at the time where they set off the first atomic bomb out there in the Trinity Site. And I see I've got a lot of information on how this went. The funny part about that was, it was such a small operation that there was one line running into the Trinity Site, and what happened— Harry Truman at that particular time was in Russia, and he had to give the final nod to set off the atomic bomb. When it was time to set off the atomic bomb, there was no telephone on that line. Everybody thought sabotage. So one of the men that was stationed there with that group, got his flashlight, they got into their car, and the followed that line back to this little town that had a switchboard that went out to the Trinity Site. And, so they followed it along, the line, until they got to this little town, which was a small town, I forget the name of it right now, (as you get to 84 you forget these things). They go up to the house and there, in the house, is the switchboard operator, with the switchboard all lit up and she is fast asleep on the couch. So they knock on the door and they tell her that Harry Truman is on the line. She laughs, and plugs him in, and sure enough it is Harry Truman. She says, "Is this Harry Truman?" He says, "Yes, put me through to—"

But, can you imagine, a woman asleep at a switchboard, waiting for a message from Harry Truman from Russia to set off that. So the bomb did not go off at the

time it was supposed to go off. It was supposed to go off at about four o'clock in the morning. It didn't go off. There were some electrical storms around that area at the time and everybody was very concerned about the electrical storms. Here are these guys up on the top of the tower, etc., etc., and an electrical storm was moving around, so they delayed setting off the bomb until these isolated thunderstorms moved away. By this time, of course, they had got through to Harry Truman and he said, "Yes, let it go," so that's when we were looking to the west and we saw the sun coming up, because it was still dark, and the sun came up in the west, brighter than the sun in the east, so that's when it went off, but it would have gone off much earlier; that's why we didn't know anything, the B-29 didn't know anything, because everything was being held up.

Henson: Where were you that morning?

McNeil: That morning I was in the B-29 as a flight engineer.

Henson: And you were stationed . . .

McNeil: . . .not a weatherman at Roswell. Yes, yes. I was not a weatherman at that time. That's what interested me in doing those fallout plots that I talked about earlier.

Henson: Now, you mentioned in one of your interviews that when you did the flight, when you were flying during the Trinity Test you were wearing oxygen and then you noticed a little bit of skin effects.

McNeil: Yes. I've got even now, I go, you can't see it, but my hair went back and I lost from here up. I go see the dermatologist; they burn off the cancer about every year that helps some. So I was completely covered except this little right here. But that heals. That's a small. . .

Henson: And, you had your oxygen mask on, so presumably . . .

McNeil: Yes, yes, yes.

And, the big thing is, we didn't know it, even the pilot didn't know it, and so later on when I started getting this problem with the cancer, I was aware that this was probably due to radiation, but there was nothing I could do. This whole flight was so Top Secret, that I could say I was there and somebody would say, "Oh?" Because, it was Top Secret, see. It sneaks out....

Henson: There weren't any other flights in the area.

McNeil: I'm not certain.

Henson: I mean, you were the only people who saw this from the air.

McNeil: Anyway, that was an incident at that particular time of how rinky-dink things were. Now, when we do anything, my God, you know, you'd have radio backup, you'd have probably how many lines coming in.

Henson: Well, what stands out of your life, looking at the changes in weather observing technology and techniques, since the days you first took your training?

McNeil: Oh, I tell you, the biggest thing is, of course, is how fast FAX is, and the quality of facsimile and the quality of reproducing flight folders. We used to use a jelly, put the things on this jelly and transfer them over. We didn't have facsimile in those days and, of course, nowadays, as far as satellites are concerned, it's an entirely different world. In fact, even, even, when you talk of El Niño, who, what, in those days, what is El Niño? We had tied up nothing, Bob. We hadn't tied up even the jet stream with the movement of the surfaces. In those days, everybody said, "Howard, you're at 30,000 feet—how can this affect the movement of a surface system?" Well, now we know it does, but see in those days, it was strictly winds aloft. It didn't tie in with the general movement, maybe, of the atmosphere the way they would figure out at the bottom of this wave there should be a low pressure system, yes.

Henson: Did you refer to the jet stream in your early weathercasts at all, or to upper-level winds much?

McNeil: Oh, yes.

Henson: Was that unusual for forecasters to do so?

McNeil: Yes, it was, and I would plot it on the map and, hardly anybody used it. Then, as time went on, I went off to Chanute Field again to learn the satellite program. This was when I was working for them, for the Air Weather Service, they sent me to school. And we got into that and it was primitive in those days, as far as how it worked, in other words, we didn't, you'd see these things moving, but now they move them on television, they re-run them, you can see them moving and they can put up what they had yesterday or the day before. In our day, it was a very primitive idea of how to use them for surface analysis, one day out probably.

Henson: Did you ever use satellites on your weather broadcasts?

McNeil: No, I never did.

Henson: Yes, it seems like it was in the 1970's somewhere . . .

McNeil: It was a little bit later, and I didn't. In fact, I had trouble with this little KFJZ of getting them to buy radar, APQ-13-A, you know. They weren't very good.

Henson: Well, Howard, is there anything else that you would like to tell us?

McNeil: Well, here is something, Bob, about Krick. Getting back to that particular time. Here is a generator-operating manual. I don't know if you have ever seen this.

Henson: No?!

McNeil: This is probably a collector's item. Showing the target area, the whole story, I'll give this to you, to this organization. That's the operator's manual. You probably have the only one left in the world.

Henson: This is going to be really a treat for the Archives.

McNeil: Yes, this should be good.

McNeil: When I came to Ft. Worth originally we were forecasting for General Dynamics. They were losing so many aircraft that, Carswell at that particular time had one of the most beautiful airplanes in the whole world—that's the B-36. It was a huge, huge airplane. I rode in it once. This one shows they have little aircrafts tied to the bottom of them and the airplanes could head over toward Russia, drop this one off. It was a flying missile in on the targets in Russia. At this particular time, one of my sidelines was forecasting for all the targets in Russia for the B-36's. Then I started forecasting for the targets for the B-38's, and anyway, that was a time period, so my main life was tied up, Bob, with airplanes—all types. I'll show you a couple of other ones here. When I was at La Junta, I was, that's a B-25, that's when we were flying the Chinamen around and showing them how to do low-level bombing. That's at La Junta Colorado. That's a Mitchell bomber, you know what that is—that's the B-17, that was my next flight, I was flight engineer in that. Here's a picture of a B-29 when I was a flight engineer.

Mrs. McNeil: Were those Chinamen that used to do the scissors and whatnot?

McNeil: No, no, no. That was us. This is a B-36. Isn't that a beautiful airplane?

Henson: Yes.

McNeil: But you asked me, you know, when I washed out of the cadets, that's the type of airplane. My head would be above the windshield.

Henson: [laughter]

McNeil: So, anyway, that's kind of my own record for my kids. But, you know, as you look back on a lifetime, ah, there are so many things, so many things that you had an opportunity of doing and being involved with, the fact that I'm involved with you right now is one of the high points of my life!

Henson: I just want to thank you so much, I mean, it's a wonderful pleasure for me and for us to be able to get this on the record and have your recollections and your experiences for future generations to benefit from .

McNeil: You know, like they say, my generation, the World War II generation, is dying out so fast that my age people are going to the funerals all the time of their buddies. I belong to an organization here in town that is mainly made up of retired military people. I'm in contact with people now who are friends that I wouldn't have been able to get near them. Generals. Two and three-star generals in charge of SAC are sitting next to me at Golden K Kiwanis, which really pleases me.

Henson: Well, then, I guess we'll just wrap up the formal part of this interview, and again, Howard, thank you very much, and that will complete the interview.

END OF INTERVIEW