BS:  This is an oral interview with Mr. Elgen Long, taken as part of the Polar Oral History Project, conducted by the American Polar Society and the Byrd Archival Program of The Ohio State University on a grant provided by the National Science Foundation. The interview was conducted by Brian Shoemaker in Mr. Shoemaker's home on the 8th of May, 2001.

      Mr. Long . . . Elgen.

EL:  Brian.

BS:  You have a very distinguished flying career with the Flying Tiger Airlines and privately as well. We're interested in your polar flying in the Arctic and the Antarctic, but you just didn't materialize in the polar regions. You were an experienced pilot before you went. And backing up further, something prompted you to fly and before that someone or some event inspired you to get going and you wound up with a whole repertoire of things that you were capable of and made you successful as a polar flyer. So, take it back as far
as you like and feel free to fill in between your polar flying experiences and your experiences, certainly, on studying Amelia Earhart.

EL: Well, thank you, Brian, for inferring that I had a brilliant career with the Flying Tiger Line. It was no more brilliant than your flying career with the United States Navy. But, I started with the Navy, too, actually, and as you suggested, life is a number of choices along the way and opportunities that present themselves that you either take advantage of or don't. There's no one single thing that got me talking into this microphone with you here today. It was a series of events over a lifetime almost of flying. But, to try to put it in somewhat chronological order of the way things happened, World War II probably blasted me loose from this area here. I lived right here in Coos Bay, over in Marshfield, right next door here. I went to Marshfield High School and the war came along. And even though I was only 15 years old, it was a very patriotic thing to do to go into the service. My older brother was going in. It was obvious that I was going to eventually get in the war one way or another and my parents believed it would be best if I followed my brother, Robert Earl Long and go into the Navy at the same time that he did and he could take care of me.

BS: How old were you when you went in?

EL: 15. Otherwise, we're going to get into all sorts of trouble with ages after a while. I went into the Navy with my brother and went through boot camp and never saw him again until after the war. The thought that he would be there to take care of me escaped the Navy's consciousness about three weeks after I was out of quarantine in boot camp.

BS: Which year was that that you went in?
EL: 1942. I went in on my 15th birthday. I actually took the oath in Portland, Oregon, into the Navy as an Apprentice Seaman on August 12th, 1942. I was born on August 12th, 1927 in McMinville, Oregon. And the Navy went in with 150 men into a company at the boot camp and of the 150 men, the Company Commander said, "All those that could typewrite, step forward." And I stepped forward and I was the only one that knew how to use a typewriter, so I was made the Company Yeoman. It was one of those little things in life that has a great impact on the future. As Company Yeoman, when the time came for shipping orders for where you were going to go afterwards, the Company Commander said, "Well, you're typing out the orders. You'll probably cheat and send yourself wherever you want to go, so let's work on it together." And I decided I wanted to be a radioman, an aviation radioman. So, the Company Commander saw that I typed myself up for Aviation Radio School, North Island, San Diego. And I was trained to be an Aviation Radioman at that time. And since I was going to be flying, I had to go to Aerial Gunnery School and some radar was starting to come in just then. I had to go to Radar School. And if I joined the Navy to get out of school, you can forget about it. The next 9 months, I spent 5 or 6 days a week, 10 or 12 hours a day in school.

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And so, I wasn't escaping an education. I was trained minimally, to be an Aviation Radioman, a gunner and probably was supposed to be sent to carrier duty on Douglas Dauntless dive-bombers or torpedo bombers, or something like that as a gunner radioman. I was sent to Hawaii Fleet Air Wing 2, Headquarters Squadron, and they needed some better-trained radiomen. And they had an advanced aviation radio school there where they sent you to school for another 4 months, and I went to advanced aviation radio school and at the completion of the first school, I made 3rd class aviation radioman, and at the graduation of the second school, I made 2nd class aviation radioman.
radioman. I was still only 15 years old, and already a Second Class Petty Officer. However, I joined the PBY Squadron VP-34, which was a straight seaplane squadron and went down to the South Pacific with them. And I actually saw combat before I was 16 years old.

When I came back from that tour, I was sent back to another squadron at the Headquarters Squadron in Hawaii. I joined VP-102, which was a Coronado four-engine seaplane. And I was a second radioman on one of those big boats. And we went on another tour, this time to the Marshall’s and Mariana’s. And we spent every other day on patrol and every night we spent on the airplane. We played a lot of pinochle and this is where something else happened. We devised a game that we played while we were sitting at anchor out in the lagoons of Eniwetok or Saipan. It wouldn't be a lagoon in Saipan, but wherever we happened to be. Got tired of playing pinochle, so what we'd do is we'd take celestial observations and have a game to see who could come closest to our actual position. Practiced taking shots and what not. And I learned the basics of celestial navigation from our navigator that was on the crew at the time. Being a junior officer, he had to stand watches out there too. And he became interested, became my mentor and I actually learned quite a bit about navigation and got a lot of actual practice.

BS: *Do you remember his name?*

EL: Evans. Ensign Evans. I can come up with his full name. I have the crew list at home. Anyway, the fun part of it was we went back to the outfit again, after Saipan. We went back to Eniwetok, and this time, they decided that Ventura’s had too many people on the airplanes. And they wanted to take some of the jobs and combine them. So, they thought they would take some radiomen and train them as navigators and they could get rid of the navigator, because the navigator wasn't a gunner and they just didn't need him on the airplane. So, I went through aviation navigation school at Headquarters Squadron Fleet
Air Wing 2 and this was only a 3-month course. And I did real well because I'd had all that training ahead of time. Of course, a radioman had learned about headings and compasses and radio direction finding and what not earlier, so it was kind of a natural thing. Well, it was a good idea, but it didn't work. People were just too busy without the other people, so they gave up on that. They assigned me back to another Coronado Squadron. This time it was VP-B4, and I went on another tour and this time I was first radio operator and I made First Class and I believe I was 17 when I made First Class. I'm not certain. I might have been 16. I'd have to look that up.

But, be that as it may, now I was not only a radio operator, but also I was a navigator. And my second tour was to Okinawa and later, to Japan and to China at the end of the War.

(BS)

BS: *This was after the war that you were in China?*

EL: Just after the war. In fact, the day of the cease-fire was Sept. 2, 1945.

BS: *Just turned 21?*

EL: No, I just turned 18.

BS: *Eighteen, OK. Turned 18.*

EL: And we spent the whole day buzzing every Japanese facility we could find on Formosa or Taiwan now, and it was a great day. It was more fun that we'd ever had and the Japanese held the cease-fire. Nobody fired at us. Though I must say, we buzzed a few
airports where they had some of their fighters out there with their engines running. The pilots were sitting in their cockpits shaking their fists at us. But, nobody fired at us or took out after us, so the cease-fire held. After that, we went up into Japan. As a matter of fact, I was on the Kenneth Whiting and that was the first capital ship that went into Sasebo on Kyushu at the end of the war. It was the first capital ship. We had three minesweepers in front of us. But, we were the first ship into the harbor there at the end of the war. Then we went to Hong Kong, and I spent several months in Hong Kong. We were flying security patrols and picking up coast watchers and Admiral Buckmaster, the Captain of the Battle of Midway ship, the carrier that was sunk, Yorktown, Admiral Buckmaster came into Hong Kong and we flew him up to, I believe it was Swato, China. Anyway, we picked up a coast watcher that had been living on the local economy there, supplying intelligence information for a couple of years, and we brought him and unbeknownst to the officers on the crew, we also brought back his common-law wife to Hong Kong and he picked her up a couple of days later from the San Pan.

BS: This was in addition to his regular wife?

EL: I don't know about the regular wife. I don't think he had a regular wife. But, he had a lot of paperwork to fill out before he was going to get that one settled. But, he asked us to see if we could get her there somehow and we managed. And being that we considered him a real war hero, why, we thought we owed it to him. The war was over.

Anyway, I went back to the States. I went to UCLA, and thank goodness for the GI Bill. I decided I was going to be an electrical engineer and I got into a pre-engineering course at UCLA and I went there for 3 semesters and that was just after the war. By the way, I was discharged in January of 1946 - January 6th, as a matter of fact. And one time in the fall of '47, we were playing street football out in front of the house, when a friend of mine who was a Marine fighter pilot came driving by in his new convertible and he
said, "I'm going to go over to the Flying Tiger Lines. They're hiring pilots and I'm going to go about seeing if I can get a job as a pilot. Want to come on over? Go for a ride with me?" "Oh, yeah," so I jumped in his new convertible and off we drove to Burbank, California, where it was the headquarters of the Tigers.

**BS:** *Who was the head of the Tigers then?*

**EL:** Bob Prescott started it . . . the airline. Just started it in the fall if 1945 in Long Beach, California. And they just got a big military contract flying the Pacific via Honolulu and Wake Island to Haneda, in Japan, to support the US forces in Japan. And the military was supplying the airplanes. They were all DC-4s, and they needed pilots that had experience in the Pacific. So, I waited and waited and waited for my friend to come out and I went inside to get a drink of water. It was kind of hot sitting out there with the top down in that convertible, and I heard some radio codes. And I walked down the hall a few steps where the door was open, the code was coming out of, and I was just listening to the code and copied it in my head and the fellow that was up in the front of the room motioned to me to sit down.

(150)

I stepped in and sat down and there was a pencil and paper and I just started copying the code. Well, to make a long story short, my friend - by the way, his name was Armand - didn't get hired. I left the following night for Honolulu on the first trip with the Flying Tiger Line as a radio operator. I was the number one radio operator with the Flying Tigers for a year or so and then I switched over to being a navigator with them. And then I became the senior navigator with the Flying Tiger Line and the contract came to an end. And I had been transferred back to New York and was flying out of New York to Europe
when I was furloughed, laid off from the Flying Tiger Line. But, I immediately got a job with Alaska Airlines. A fellow by the name of James Wooten had come from American Airlines and was now President of Alaska Airlines, and he was trying to get Alaska Airlines into the international business. And they needed a navigator and a radio operator, and so I got hired in New York and went to work for Alaska Airlines. I flew some of the early Berlin Airlift support missions out of Westover.

BS: *Were you a pilot then?*

EL: No. Still a navigator and radio operator.

BS: *So, basically, you were there for the genesis of both Flying Tigers and Alaska Airlines.*

EL: Well, Alaska Airlines had been in business quite a while in Alaska. But, James Wooten, Jimmy Wooten, was taking them into the international field. They didn't have any DC-4s. They were flying C-46s and DC-3s in Alaska. And he was getting them into the international business. That was his idea at the time. And as things changed, this, that and the other thing - trips changed, and what not, I was transferred to the West Coast and I started flying out of the West Coast and their headquarters was at Payne Field at that time, in Everett, Washington. I started flying international flights over the Pacific and over the north Pacific and the only other person flying over the north Pacific at the time was Northwest Airlines. And it was rugged flying in the DC-4 days. We had a government mail contract. We had charter flights for various people, and I started flying into Anchorage a lot. And some of the flights would go to Tokyo, usually via Shemya, and back to Anchorage. And I'd stay there a few days and being that I had nothing to do
and I got to know more of the Alaska people all of the time, I found out they were flying DC-3s and C-46s up into the, I called it the Naval Petroleum Reserve area above the . . .

BS: North Slope?

EL: North Slope, above the Brooks Range. And they were flying dynamite and stuff up there, not on skis or anything. They were just flying wheeled airplanes and landing on the rivers and lakes up there and delivering the explosives that I understood was for the purpose of oil exploration. They were using them for seismic . . .

BS: This was Alaska Airlines or . . .?

EL: Yeah, Alaska Airlines.

BS: Which year was this?

EL: That would be early 1949, I believe. Possibly late '48. And that's where we found out that we could land wheeled airplanes on ice if it was smooth enough. And they were doing it quite regularly.

(200)

BS: On ice-covered lakes?

EL: On lakes and rivers there. If the river was wide enough and the ice was strong enough.
BS: *Did you do it on sea ice, off shore?*

EL: Not that I know of. I don't . . . I wasn't flying those. Those were just things that were going on. But, we had an interesting time flying in the Aleutians. I remember flying one flight. I took off from Anchorage and we went to Shemya, loaded up more fuel and took off from Shemya for Tokyo. Got about 4 hours out of Shemya and we weren't going to make it to Tokyo. The winds were howling and we could only do about 180, 170 knots was about as fast as we could go and the winds were blowing about 120. We were never going to get there. So, we turned around and tried to land at Shemya. Shemya had gone down. We couldn't get in there, so we went over to Adak. Tried to get in there and couldn't get in there, and so we ended up at a place - it's called Cold Bay now. Before that, it was called Fort something-or-other. I can't remember what . . .

BS: *I know where Cold Bay is.*

EL: Well, anyway it used to have a different name before they made it . . . it had a separate airport that was built during World War II. Finally, we got in there. Filled up full of gas and headed for Shemya again. Didn't make it. This time we couldn't get into Adak, couldn't get into Cold Bay and we ended up right back in Anchorage two days later right where we started from. So, it was a man and a plane type operation. It was not the type of flying that we do today at all. The Captain was the Captain and his decisions were whatever they were and you would make it or break it depending on what you could and couldn't do and if you tried to do too much, you'd end up killing yourself.

BS: *Nobody following or anything like that?*
EL: No, we had no dispatching, no anything. Alaska Airlines had dispatchers, company radio, and flight following for their scheduled domestic flights, but the international charter flights operated independently under different rules and were on their own.

BS: *They didn't know that you're going to be there until you got there?*

EL: That's about the size of it.

BS: *What year was that?*

EL: That would have been '48-'49. Then, the Flying Tiger Line called me back again.

BS: *In '49?*

EL: And I went back to work for them and the Korean War was going pretty good then and I worked for them pretty much for the rest of my career. When I was working for the Flying Tiger Line, the Chief Pilot's name at that time was Johnny Long. His name was Long like mine, but he was really no relative. But, everybody thought he was my father. We used to kid each other. I'd call him Dad and he'd call me son. But, I finally convinced John that I'd taken flight training, got my commercial and instrument rating, multi-engine rating and . . .

BS: *Where'd you do that?*

EL: I did that at Clover Field in Santa Monica.

BS: *And when was that?*
That would have been about '50 and '51. So, he finally agreed that I had all the licenses. He'd hire me when he was hiring pilots. So, he hired me as a pilot in March of 1952. And actually, I told him I had 240 hours. I lied. I only had 210. Anyway, be that as it may, everybody there sort of took me under their wing and I was very appreciative of it. And the pilots really put me into intensive training for the next 5 years. It was almost unbelievable. They really did everything they could to help me.

BS: *Make your life miserable.*

EL: They really did everything they could.

BS: *Make you miserable so you'll become a good pilot.*

(250)

Something like that. Anyway, to advance the story a little faster because we're going along pretty slow here, I flew mostly C-46s for the next 5 years and became... it was a good teacher. That was a good airplane to learn to fly. You fly that airplane; you're in pretty good shape from then on. You could handle a C-46; you could handle just about anything. Of course, it made it's name over the Hump. Be that as it may, along came something called the DEW line - the Distant Early Warning System and Western Electric, if I remember correctly, got the contract to start the bases for the DEW Line. Now, this was before there were any sites at all. And they divided Alaska, Aleutians; I don't know all the sectors. We called ourselves the Central Sector and we ran from Parry Point, if I remember correctly, which was Site 10, if I remember correctly, to Shepherd's Bay, which was Site 24 on the Boothia Peninsula.
BS: *This was the sector in Canada, right?*

EL: Yes. This was all in Canada. From Perry Point to Shepherd's Bay.

BS: *Parry Point is where?*

EL: Not too far from Alaska.

BS: *Near Alaska.*

EL: Yeah, near Alaska. I don't know exactly. That's as far west as we went, and I believe they called that Site 10 and Shepherd's Bay was Site 24.

BS: *Is that by Boothia?*

EL: Yes, it's on the Boothia Peninsula, which tells you another problem we had because that's where the Magnetic Pole was in those days and we had no compasses once we got up in those areas and that can make navigating difficult.

BS: *So, you were actually right on top of the North Magnetic Pole.*

EL: At Shepherd's Bay, yes. We based ourselves, where I was, in that sector. They had an eastern sector that flew out of Churchill, but we flew out of Slave Lake - Great Slave Lake. Out of Hay River and Yellow Knife. And that's where we had mechanics and parts and what not and we flew mostly C-46s and we had one DC-4. And we were the Flying Tiger Line. All Tiger personnel, Tiger airplanes, Tiger mechanics and everything, but we
were known as Queen Charlotte Airlines and when we went up there, they told us that we had to go to Vancouver and take our Canadian examinations and laws and what not, and we had to get Canadian pilots licenses. So, we went up and got our Canadian licenses and from then on, we weren't to mention the Flying Tiger Line from then on. We were to be working for Queen Charlotte Airlines.

BS: *Did you have Canadian pilots, too?*

EL: No. They were all American Flying Tiger personnel. We started the DEW line sites up there and I'm sure you've had other people that have told you how it was done. But, it was really quite interesting and I'll repeat it and maybe I'll add something that wasn't in some of the other interviews you did. The way they started most of the sites . . . they didn't even really know where they were. By the way, just for orientation, Cambridge Bay, if I remember correctly, was Site 18.

(300)

So, that kind of tells you where we are east and west along the district of Franklin up in the Arctic. They would send a CAT out with two big sleds behind it. One sled would have a cook house tent on it and the other would be fuel drums and they'd send an Eskimo along as a guide. And they'd picked where they thought they wanted the sites to be, and the Eskimo was supposed to take them to that spot. Well, they ended up in some places they hadn't intended to end up. And whether they changed them or not later, I don't know. But, what would happen is when he got to where the site was and one of the things was, it had to be accessible by water. And some of them were on lakes, but most of them were on the . . . Arctic Sea, is it? Oh, no, no, no. Up there between Cambridge Bay and . . . . I've forgotten the name.
BS: *I can't think of it either. I know what you're talking about.*

EL: Anyway, I'll think of it. The Eskimo would say, "This is the place." And the CAT driver would park the sleds and then he'd start scraping the sastrugi off the ice and what not and make a runway.

The DEW line sites we were opening were located in the District of Franklin in northern Canada. They stretched from site 8 (?) at Parry Point, Parry Peninsula (70N - 125W) eastward along the Amundsen Gulf, Coronation Gulf, Queen Maud Gulf, and the Gulf of Boothia to site 24 Shepherd's Bay, on the Boothia Peninsula (68N - 93W).

The original plan was to establish main sites for Early Warning Detection about 100 miles apart. Then auxiliary sites would be established in between, if necessary, to detect any low flying intruders. All of the main sites at that time were even numbered; 8, 10, 12, etc.

At random here are some of the names of mechanics and pilots I can remember that were working with us in the Central Sector. Ed Abraham, Mechanic; John R. "Dick" Rossi, Captain and former Chennault AVG China pilot; William F. "Bill" Patterson, Capt. And Navy Reserve Officer WWII & Korea; Bill Hoey, Capt. and Chief Pilot of Central Sector; Robert S. "Bob" Hamby Sr., Capt. and former USA Col. in Aleutians WWII; Bob V. Tharp, Capt. and former Alaska Airlines pilot; Paul Perry, Capt; Gerald J. Vasey, Co-pilot and former radioman; Elgen M. Long, co-pilot and former radioman - navigator. You can see there was a lot of talent represented.

BS: *What year was this?*
EL: '54, I believe. It was the winter. We were flying up there in the winter time. It had to be in the winter because . . .

BS: *It was frozen.*

EL: Yeah. And then he would take the fuel drums and once he got about 3500, 4000 feet scraped off about 50 feet wide, then he'd take fuel drums and put one about every 100 yards along the sides of the runway so we could spot it because everything was just pure white up there and the fuel drums . . . They had no radio, no nothing.

BS: *You mean the CAT drivers?*

EL: Yeah, they had no radio or anything. And we'd go out and . . . well, first, I remember I was with Bob Tharp, Robert Tharp, he was the Captain. And we were going to Shepherd's Bay in a C-46 and we were the first airplane ever to ever go in there. And we couldn't find it, but you had to know how difficult . . . in the first place, the visibility might have been a mile or less. Complete white-out. Everything's all snow and ice. Of course, we always timed it so there'd be *some* light. And you were looking for these fuel drums to say, "Here's the runway." And we'd literally just wander around and we finally found it, lined up and managed to land. And it was Shepherd's Bay. We landed at the right place. It wasn't everybody'd land at the right place. We had one land a DC-4 out in the middle of nowhere and he had to dump his load and then he went back and forth and packed it up enough so he could finally take off empty. Some lucky Eskimos found a whole bunch of stuff out there that he just dumped. That was Bill Patterson. He just landed out in the middle of nowhere. And he got away with it. He got off out of there.
Then, after we got in there, the first thing we'd bring in was some more fuel for them and some radio equipment and a couple of people. And I guess one was the worker to set the radio up and what not. And then from then, there was a British airplane and it was a nose-loader, twin-engine.

BS: *Bristol Bay?*

EL: Bristol. Bristol's brought in some more - I think they brought in a CAT. I'm not certain of that. Another one. Anyway, they ended up with two or three CATs there. And 10 or 15 people there, trying to put together enough of a base so that when the summer time came, the people could come in and sort of have the infrastructure put together. Being that we were just flying in there and only stay an hour or two, offload and take off again, it was not . . . I'm not the right one to know what the whole picture was. But, our problems in the earliest part of it, was finding the place because they didn't even have radio beacons at first. We didn't know where they were and we had no compasses.

BS: *Did a lot of the selection have to do with the ability of an aircraft to get in? I mean, they had to have aircraft support. So, the aircraft kind of . . . are you saying they drove the site location?*

EL: The site location, at least for where we were, had to have water. So, they'd have ice so they could scratch - they couldn't build a runway. And they had to have . . . so the site location demanded that they either have a lake or the sea. You know I keep wanting to call that the Ross Sea.

BS: *The Ross Sea is in the Antarctic.*
EL: Yeah. I was going to say . . . Beaufort?

BS: Ross spent 5 expeditions in the Arctic, too. Well, the Beaufort Sea was way to the north. You know, that's way out there.

EL: Well, anyway. I'll come up with the name of it. But, as far as I knew, that's why they picked them. Now, I was very much in demand to be co-pilot on the flights because I was a navigator and the biggest single problem we had was navigating.

BS: That's why Byrd became a navigator. He was a pilot first.

EL: They couldn't find the darn places and they were getting lost. As a matter of fact, the Flying Tiger Line was very fortunate. We lost some airplanes, but we never lost a single person up there. Now we were flying side by side with Associated Airways and Associated Airways, though they were flying out of Edmonton, they were flying British built Lincoln? Lancaster?

BS: Lancaster.

EL: Lancaster four-engine.

BS: Bombers?

EL: Yeah. Well, they were . . .

(400)
BS: *They were bombers.*

EL: They made cargo planes out of them.

BS: *Converted them.*

EL: Well, they were a different design, but it was the same thing as the high-wing bomber.

BS: *So, literally, this is where you got your first Arctic polar navigation experience, as well as flying.*

EL: The navigation part of it is really no different in the Arctic than anywhere else. There was nothing. We didn't have LORAN. We had radio beacons. And they put in one beacon between Great Slave Lake and Cambridge Bay. Cambridge Bay had a big powerful beacon, though sometimes radio disturbance was such up there you couldn't even pick that thing up over 10 or 15 miles away. But, usually you could. But, they put Contwoyto Lake, which is about half of the way or two-thirds of the way between Great Slave Lake and Cambridge Bay or Bathurst Inlet, actually, they had a beacon there. It was a very low-power beacon, but they put that in especially for the establishment of the DEW line sites at Contwoyto Lake. Anyway, the reason they were able to establish it, I understand there was some kind of mining district at that point in time there anyway. And so, they had some sort of facility there. Not . . . it was just a mining camp or something. But, anyway, they had a radio there and we could talk to them. But, we had no weather. When we took off, we didn't know what we were going to get into.
BS: *No weather forecast?*

EL: No weather forecast, no nothing. We just went. And our timing was such that we always wanted to arrive there when there was some light. And then, of course, as the season got more into spring, we had more and more and more light all the time. And that created another problem. But, what I learned there, Brian. The important thing that I learned there was how to care of myself and my airplane in cold weather. It became, over a period of months, it became second nature to dress properly, to know what you should and shouldn't do and how to take care of your engines and your airplane.

BS: *How cold did it get? How cold is it at Great Slave Lake?*

EL: 35 below would be about as cold as we would operate.

BS: *In Central Canada there.*

EL: Yeah, it very rarely got below that. And I don't remember ever flying in anything below 35 below zero. Now, we flew contact. Now, sometimes we couldn't. We flew . . . the maps were pretty good in the areas where we were going and we always just map read, but sometimes we'd get into it and especially coming back.

(450)

Like, if we'd be coming back from Shepherd's Bay and we wanted to go to Great Slave Lake, well, you didn't have any compass for the first couple of hours. And if you were on instruments, you didn't have the sun or any stars or anything and we literally just used to set all the gyros and just average them all out and hope that within a couple of hours,
we'd be far enough away from the Magnetic Pole that the compass would start working again. I remember Bob Hamby and I, one time, were coming down and I was very good at map reading, and I'd bet him a case of beer that I could find out . . . there was a million lakes up there, but I could spot where we were within 15 minutes. And I won. It took about 14-1/2 minutes, but I'd . . . I wasn't even on the same map that I started reading on when I finally found us, but I won a case of beer and Bob paid off when we got back.

BS: *James Ross Straits. Is that what you're trying to think of?*

EL: Could be. So, it was something Ross.

BS: *Right here. James Ross Strait.*

EL: What does it say here?

BS: *Coronation Gulf. And Queen Maud Gulf.*

EL: Yeah, those all sound familiar. Here's Bathurst Inlet, and as you can see from Yellow Knife, it's almost in a straight line. Now, Contwoyto Lake was right in this area somewhere.

BS: *Here it is here. C-o-n-t-w-o-y-t-o.*

EL: OK, now here's Parry Point.

BS: *Yeah. So, it goes from Parry Point to . . .*
EL: To Boothia and it's here.

BS: *Almost all of Canada.*

EL: We called it the Central Sector. But, about 35 degrees was close. We learned to use and how to use our oil dilution systems. We learned how *not* to use them. We learned that when you didn't have any oil pressure, especially flying the DC-4s, things would freeze up and you never would get any oil pressure. And you would check your oil pressure, that you had it, by shifting the blowers. If you'd shift the blowers and shift the propellers, then you had oil pressure whether your gauges showed it or not. And we flew half the time around there with no oil pressure indications whatsoever.

BS: *But, you knew you had oil.*

EL: We knew we had oil if we could shift the blowers and we could control the props. And we had special covers for the DC-4 engines. We didn't on the C-46. On the DC-4, we had special winter covers that went in front of the speed rings, or on the speed rings.

(500)

BS: *Pre-heaters? Did you have pre-heaters, too? Engine heaters?*

EL: They had them at the sites. We didn't carry them. But, we did have an Auxiliary Power Unit. Every airplane had it's own Auxiliary Power and when we were on the ground, we never shut that off because if you didn't get that started, you weren't going anywhere. But, if we did get stuck at a site, which I never did, but if you did get stuck at a site, they had heaters that they could heat the engines back up and heat the oil tanks up
enough to get us started again. It was quite a learning experience and the people that flew up there were literally risking their lives. But, it was almost like World War II all over again. It was for a good cause and somehow or other it made it OK. There was a general understanding that nobody was going to get fined or have anything go against his record for anything that happened up there. We were flying illegally all the time. I mean, we were over grossed, overweight, doing things that broke every rule and regulation almost in the book. But, it was the only way you could get it done. Sometimes we'd go up there, couldn't find . . . the weather would just be bad, foggy, couldn't find anything and we'd have to come all the way back. So, we always carried enough gas to make it back to Great Slave Lake.

BS: *You never exceeded that, if you couldn't find a place and searched around. You had no abort field other than going back.*

EL: Well, you could go to Bathurst Inlet and get gas. At first, that would be the only place. Not Bathurst Inlet. I'm sorry. Cambridge Bay. You *could* get gas at Cambridge Bay. But, we were hauling gas up there. We weren't supposed to go up there and get gas and come back. If you could get in to any of the sites, why you'd dump your load wherever you were. You were supposed to go to a site, but if you couldn't get into that site and you could get in somewhere else, you'd go there and dump the load there.

BS: *So, some places got a load they didn't expect.*

(550)

EL: Yeah. Some places were easier to find, like Cambridge Bay. They had more freight than they knew what to do with and other sites that were hard to find. We had one we
called Jenny Lind Island - a floating island. We called it a floating island because we
never could find the darn place. It never seemed to be where it was supposed to be. And
we used to track out on Cambridge Bay. Out over the ice, there's no landmark. There
were just no landmarks at all, and so we'd track out on the ADF towards where Site 22
was supposed to be, or Site 20. I can't remember which it was - we called it Jenny Lind
Island. And sometimes we'd find it and sometimes we'd go . . . the sites were all about 50
miles apart and if . . . or were they 25 miles apart? Well, whatever they ended up, that's
what they were. We'd track out and we thought we were doing it the same way every
time, but one time we'd find it and the next time we'd go right by it and never see it.

Now, something else came up that we found out when the weather got a little
warmer, that you had to be absolutely meticulous about oil or gas or anything spilling on
the ice. We didn't realize that because it didn't bother you in the wintertime. You could
drop some gas or oil on the ice and nothing would happen. But boy, once the temperature
got anywhere near freezing, those bad spots became immediate sinkholes. And that was
something that we did find out. Now, later on, they really started flying in some heavy
equipment. By the way, we not only flew in fuel, supplies, tents, later we started flying in
modular sections of buildings. And these were the mess halls and structures for the
people who were going to do the construction when the ships came in with the real work
stuff. And this whole purpose of this operation was to get a nucleus of facilities and
people there so that when the ships could come in the summer, they would have a place
for those people to go right to work and build the site, because they were trying to build
this, if I remember correctly, and have it operational within a couple of years.

(600)

And of course, the ships had to get in. If they didn't get in, I don't know what they were
going to do. I don't know if they could have flown it all in if they had to or not. But, later
on in the spring, once we got runways about 5500 ft. long or 5000 ft. long, and got
homers at these stations and radios so they could give weather report and what not, then
the Air Force started flying in C-124s.

BS: *And when was this the Air Force started flying in?*

EL: That would be in the spring of '54, I believe. And they were flying C-124s into the
same places we were, but they had to get the little bigger runways and what not for them.

BS: *Onto the lakes?*

EL: I'm sorry?

BS: *Onto the lakes as well?*

EL: Yeah. Actually, I'm trying to remember which sites were lakes. I can't remember all
the sites.

(End of Tape 1 - Side A)

(Begin Tape 1 - Side B)

(000)

EL: It was a learning experience all right up there. No doubt about that. We learned
about navigating without electronic aids. We learned about cold weather, and we learned
about how to take care of ourselves and what was important and what wasn't important. The priorities have to change when you're flying in that type of environment. They did get it all built and it was successful and Queen Charlotte Airlines, Flying Tiger Line, or whatever you want to call them, were doing the same thing out of Churchill. Different group of fellows, but they were flying the same type of equipment. We had a DC-4 crashed at one of the sites. The guy was making a circling approach and he dug a wing and went cart-wheeling across the ice and believe it or not, nobody was killed and they flew the airplane out of there eventually. They sent a crew up and worked on it for a while and actually flew it out. We had a C-46 crashed at Shepherd's Bay doing a circling approach. Ran out of altitude and ran into the ice and went sliding across the thing. But, we never killed anybody. But, Associated Airways did. They lost a couple of airplanes and a couple of crews.

BS: *Who's Associated Airways?*

EL: They were a Canadian counterpart, flying British Canadian airplanes. And most of their problems . . . one was an overloaded take-off out of Edmonton, that didn't clear the freight cars at the end of the runway and killed everybody on that. And then another one was coming back from Shepherd's Bay or somewhere and got lost and they didn't find them for about 10 days. They lost most of the crew on that because of the cold weather. But, I think that the Air Force did a good job in the C-124s. They had the facilities by then. They had the homers at the sites. They had the weather reports from the sites. They had the better runways. They even had lights, beacons and what not to help them.

BS: *But, you were there first.*
EL: Well, yeah, but unfortunately, we didn't keep the ice clean enough and that became a big problem that spring. I was leaving there just about then, but it . . . wherever they dumped any oil or what not, it would really ruin the ice in early spring.

BS: They have the same problem at McMurdo.

EL: Funny part was that I don't know why we didn't know it before hand. We weren't that careful and we should have been. But, anyway, I went back to the Flying Tigers, flying regular domestic routes and international routes flying for them.

BS: What year was that?

EL: This was by the summer of '54. Then, I was down at San Juan, Puerto Rico, and a fellow at Island Grandee Naval Air Station there . . . I think that's it or something like that . . . he was at the Officer's Club over at the beach and I was talking to him one day and he wanted to fly around the world at the Poles. And he said when he was in the Navy, they thought about doing it in a PB2Y3 Coronado and I was interested because I was a . . .

BS: Who was this?

EL: I can't remember his name. He was a Commander.

BS: Where was it?

EL: At San Juan, Puerto Rico. And he said the Navy didn't go through with it, but they were going to fly a PB2Y3 Coronado over Antarctica. And this was just right after the
war, I guess. And we got talking about it and our Arctic experience and flying Coronado’s and what not, so we had a lot in common.

BS: Did this have anything to do with Operation High Jump, maybe? Were they thinking about doing it during High Jump?

EL: I don't think so. I think it was just someone's bright idea before hand and it got shot down somewhere in the Navy hierarchy. But, that was the thought I'd ever heard of... now I haven't got that quite right, because this had to be before '54, because I was flying with Bill Odlum and that was earlier.

(50)

And he was talking to this Commander as well and he got the idea to get a B-29 or a B-50 and do the flight. And I was navigating with him then and I said, "OK, I'll navigate for you." Now, Odum was killed in the air races at Cleveland. In fact, that was sort of the end of the air races at Cleveland, when he was killed. And when he was killed, that was the end of that idea. And I still had it in the back of my head that it would be neat to fly around the world over the Poles. Nobody had ever done it. Well, things went along and I continued to fly for the Flying Tiger Line, flying mostly in the United States between the west coast and the east coast and some flights to Europe and quite a few flights in the Pacific. We progressed to DC-6s and then Constellations and then into turbo-prop CL-44s and then finally in the 707s and DC-8s and 747s and the airline expanded and grew.

BS: You were the Commander of the 747s?
EL: Yes. The last 10 years of my career I was Captain of a 747. Along about 1969 or '70, I got the idea again about flying around the world over the Poles.

BS: Had you already researched Amelia Earhart?

EL: No, that all came about the same time. And so, I started reading about people who had flown around the world over the Pole. I knew about Bill Odum. Odum had flown around the world in a B-26 - the Reynolds Bombshell. The Reynolds ballpoint pen guy. He flew speed time around the world. And I'd read about Amelia Earhart flying around the world. And I was trying to find out how those people financed those flights because it's an expensive proposition. And one of the things that I got fascinated with while doing that reading and studying was Amelia Earhart. She financed all of hers by lecturing and the reason she was successful at lecturing was because her husband was a publicist and newspaperman and promoter and knew how to publicize and make a name for her so she could be a draw when she made her lectures. But, she was going to be the first woman to have flown around the world and she'd be the first person to have flown around the world at the Equator. And I thought that was kind of neat because she was flying around the world at the Equator and I wanted to fly around at the Poles - opposite things. We'd pass each other twice. Once, near Timbuktu in Africa and the next time around Howland Island in the middle of the Pacific at the 180th meridian. So, anyway, my wife got the bright idea, "Well look, how much is the least amount of money you could possibly do this on without being ridiculously . . . ?" I said,"Well, there's a couple of good twin-engine airplanes that could do the job. They have a good reputation and they're good cold weather airplanes or reasonably cold weather. And one of them is a Piper Navajo and I could probably do that in 1970 dollars for about $50,000."

BS: When did you get married?
EL: 1946. May 12th, 1946. We'd been married for twenty-some years, about 24 years by then. And I said, "Are you game?" And she said, "Well, I'm game if you take out a big enough insurance policy on yourself." So, I found a Navajo that belonged to a fellow by the name of Hap Harper there in the San Francisco Bay area, a local entrepreneur and what not.

(100)

And I arranged to lease his airplane for several months and he allowed me to modify it to my purposes. I put a lot of extra fuel tanks in it and got it all up to stuff and put the right navigational equipment in it and decided to just do it we. So, my wife acted as my promoter and PR person and I found out about how to set world records and I got the flight sanctioned by the Federation Aeronautique International and the National Aeronautics Association.

BS: *Flight was sanctioned in advance, huh?*

EL: Yeah. It has to be to be a world's record. Therein lies a story, too. So, anyway, we got it all ready to go. And I talked my company into getting one of the manufacturers, Delco Electronics; to supply me with an inertial navigation system, which I knew, would be a real nice thing to have in the Arctic or in the Antarctic. Especially the Antarctic.

BS: *Who supplied the inertial navigation?*

EL: Well, Flying Tigers did in cooperation with Delco Electronics. Delco Electronics in Milwaukee, were manufacturing them - the Carousel 4 for the 747s at that time. And I
went back to Milwaukee, and talked to the head of the outfit back there and they weren't too keen on this, but the people who were working in the shops were. They thought it was a lot of fun. So, they agreed to design it and install it and fix it all up so it could go into a Navajo and use the Navajo's electrical system and what not.

BS: *Who did this again?*

EL: The shop personnel and engineers and what not. They did it all on their own.

BS: *Delco.*

EL: Delco, yeah. It's a division of General Motors. And they just had a ball with it and they designed it so that it could come out of the 747 and go into a Piper Navajo and use it's power system. They hooked it up so it would run the auto pilot and . . .

BS: *I want to back you up a little bit. The flight was sanctioned in advance by . . .*

EL: Federation Aeronautique Internationale.

BS: *So, tell me what is the Federation Aeronautique Internationale?*

EL: OK. Every country has it's own . . . well, not every country, but most countries have their own aeronautical association. The US has the National Aeronautics Association - NAA - and they've been in business for a long time and they're still in business and they control all of the records and everything. And they control sporting events and issue sporting licenses and what not. Their mother organization is the Federation Aeronautique Internationale. In other words, the national organizations belong to the international
group, so worldwide, you have one common control over records and events and that sort of thing. And they set the rules and regulations.

BS: *You say that you registered in advance for this.*

EL: They sanction you for the flight.

BS: *But, suppose you go out and set a record while you're flying and you don't realize it's a record, until you get back.*

EL: No good. It will not be recognized. It won't enter their record books.

BS: *How did they pick up Chuck Yeager’s, which was top secret for a long time? The military kept records.*

EL: I really can't tell you. You'd have to ask the NAA how they do that. You have to apply in advance and you have 30 days to do your thing. And nobody else can do it during that time. In other words, you're going to spend all the money and what not to do it, somebody doesn't come in and beat you out . . .

BS: *Using your information.*

EL: Yeah. Using your information the day before. And so . . .

BS: *Not like the races across the Atlantic and Lindbergh and Byrd and others.*

(150)
EL: No. No, this is . . . I know the NAA was in effect and I think the FAI was in effect. Those would not have been official records. They were after prizes that were offered by newspapers and things like that, at least I believe. There was no prize for being the first person flying around the world over the Poles. No money to come back from it at all. The only thing you do is establish world records and you would get recognition through the FAI.

BS: OK.

EL: So, you can claim anything you want, but it costs money. Each record costs a certain amount of money and they call it homologation. To homologate a record afterwards costs $600, in those days, cost $600 each. I don't know what it costs today. Probably three or four times more. That's a lot of money. I set about 15 world records, but I only claimed three of them and there were about 5000 reasons why I didn't and they were all dollars. I just couldn't afford to claim all those records. It could have cost so much money to homologate each one of them.

BS: What were the records?

EL: The fastest solo flight around the world in a Class CE airplane over the North and South Pole. A record from Pole to Pole and a record from Equator over a Pole to the Equator.

BS: Those were the ones you claimed.

EL: Those were the ones I claimed.
BS: *What about the ones you didn't claim?*

EL: Oh, all sorts of records for flights to 7 continents . . . Now, in order to be a record, you can have firsts - that's something else - but, to have a record has to be speed, time or distance or altitude. It has to be a finite figure and so somebody can beat the record now. They could beat my world's record and they would hold the world's record for that class of airplane or what not. But, nobody's ever made the flight in that class of airplane again and probably never will, or not for a long time. So, that record will be good for probably 50 years or a 100 years or so, if not forever. They have various classes and, like I say, it's usually for speed. How long it took you, how fast you made the flight. Or, it can be for how long distance flown or it can be for time between point to point. But, it all has to be done in advance. You can't do it first and then claim it later.

BS: *OK. I understand. So, now you're just leaving Delco with your new navigation system installed in your aircraft.*

EL: Yep. I flew the airplane back to Milwaukee, and they installed a Carousel 4 in it. And we test flew it and it was late at night by the time we got around to the test flight and it was in October. It was a beautiful clear night and we took off out of Mitchell Field at Milwaukee and flew west towards Madison and wham. I ran into a goose. You know, it was kind of dumb. I was flying VFR about 1500 feet off the ground . . . oh, maybe 1000 feet off the ground and flew right through a flyway. I should have known better. Anyway, they were up there flying at night and I didn't see them and they didn't see me. One of them hit my horizontal right hand stabilizer . . .

BS: *How many pounds - a goose?*
EL: It did a job on the right hand stabilizer. So, we went back. We didn't know what had happened at first. But, by the time we got back to Mitchell Field, we figured it out, that we had hit something. And we looked it over. Structurally, it really didn't do any damage, so we beat it to fit and painted it to match and took off and headed for San Francisco with my new toy.

(200)

This time, though, I stayed out of the flyways at night. I flew back to San Francisco and then on November 5th, 1971, I took off out of San Francisco International Airport for Fairbanks, Alaska, on the first leg of the flight around the world over the Poles.

BS: So, you flew to Fairbanks first.

EL: That was my first stop.

BS: So, did you have any passengers? Marie come with you?

EL: No.

BS: She fly ahead?

EL: She flew ahead on TWA. In fact, she was flying over the North Polar route to London the same time I was flying over Spitzbergen and what not and actually, the TWA plane heard me and told her that I was doing fine.
BS: *So, you flew to Fairbanks as the first leg.*

EL: Yeah. That was a good icing test for my airplane because I flew over the Gulf of Alaska and we had some good icing, moderate clear and rime icing.

BS: *It handled real good?*

EL: Yeah. Well, I used Ice-X. I had boots, and I had electric props, but I used Ice-X on the boots anyway.

BS: *Explain Ice-X.*

EL: Ice-X is a sort of a petroleum jelly like thing. You'd smear it all over your boots before you ever took off. I did that on every cold, any leg where I was going to have icing conditions, I'd always make sure I had a fresh smearing of Ice-X all over the boots. It seemed to help a lot. I hit those boots and it did a great job.

BS: *OK. So, you land in Fairbanks?*

EL: Landed in Fairbanks.

BS: *How long did you stay in Fairbanks?*

EL: I stayed in Fairbanks . . . well, don't hold me to these. I'd have to get out my logs. I believe I was there about 16 hours.

BS: *Did you sleep?*
EL: Yes, oh yeah. I got a good night's sleep.

BS: *You had these bunks all set up in advance? Or just went there and said, "Give me a bunk?"*

EL: No. Found a hotel or whatever. In most places, it worked out very well. Punta Arenas, I had trouble.

BS: OK.

EL: But, that's another story. Anyway, Fairbanks . . .

BS: *And then from Fairbanks?*

EL: From Fairbanks, I was going to fly to Stockholm, Sweden, via the North Pole and Spitzbergen and over by Point Barrow. And I took off in the morning and everything went fine. Went overhead at Point Barrow. Weather was pretty decent. Then it got dark about then and went on over the North Pole and down over Spitzbergen and past Bear Island. I remember that because as I was coming into Norway - I was coming in at Tromso - Stockholm weather was marginal and I didn't have . . . I had plenty of gas. Don't misunderstand me, but I didn't have a *lot* of gas and I wasn't all that familiar with Stockholm and the area, so I didn't want to stick my nose in there with minimal fuel, minimal weather. And so, with Tromso wide open and clear, I landed at Tromso and added fuel to bring me back up to weight again and then was there a couple or three hours and then took off for Stockholm. The weather was getting better at Stockholm all the
time. The weather was moving out, so a couple hours delay at Tromso, improved the weather and gave me more fuel than I knew what to do with.

(250)

BS: *Tell me, when you hit the North Pole.* . . . *did you . . . ?*

EL: One thing, then we'll go back up to the North Pole. When I was at Tromso, there was a fellow going to Bear Island in a single-engine airplane of some kind and he was very interested in the weather at Bear Island and between there and Bear Island and I told him it was definitely broken clouds at Bear Island and it was scattered between there. And I remember that and he was all by himself in a single-engine airplane going out there to fly, which I had just come in on and I thought he was a pretty brave fellow.

BS: *Where's Bear Island?*

EL: That's right where they found wreckage from Amundsen's plane when they were out searching. It's north of Norway there between Spitzbergen and Norway. And you wanted to go back to the North Pole again?

BS: *Yeah. Did you circle the North Pole when you got there or anything like that?*

EL: No. I was at 13,000 feet because I wanted to stay in the cold enough air so I wouldn't have any trouble with icing and because my fuel was a factor, I didn't want to get ice and have to burn extra power up with that. So, I stayed either in cold air or on top, and at 13,000 feet, I was still in it, but it was so cold, that I wouldn't get any icing. And went right over the Pole with the inertial navigation system. Unfortunately, I didn't get
any pictures because I'd used up all the film in my camera. And I wasn't able to take a picture of it going over the North Pole, because I didn't have any film.

It started getting daylight. And by the way, on the way down, just after I passed over the North Pole, I planned this flight in great detail ahead of time. And in case I lost my electrical system, there would be no inertial navigation system, there would be no autopilot, and there would be no compass except a wet compass. Well, at the North Pole, you don't have very much of a wet compass. You have a bit, and it gets better the further you get away from the Pole. But, I had planned the flight for my take-off out of Barrow and everything, so that when I went over the North Pole and head . . . of course the critical thing here is to head to the right south.

BS: You landed at Barrow?

EL: No, I over-headed. When you cross over the Pole, now everything's south, and you want to make sure you've got the right south. You don't want the south that goes to Russia. You don't want the south that goes to the middle of the Atlantic Ocean. You want the south that goes to Norway and Spitzbergen or Spitzbergen and Norway. So, I'd figured it out that the moon would be about 15 degrees off to my left at that point in time and then I knew that, as I left the Pole, my wet compass would be getting better all the time because I was getting further away from the Magnetic Pole. So, an hour later, it would be right in front of me and then an hour later, it would only be 15 degrees off to the right. So, I could use the moon as a very easy reference to get me headed in the right direction toward Spitzbergen and Norway. I'd forgotten all about that. I'd planned it that way, but I'd forgotten about it. But, after I left the Pole and the auto-pilot and the INS turned me supposedly for Spitzbergen and Norway, I wasn't on top at that point in time, but shortly after I broke out and there was the moon off to my left about 15 degrees. And then I remembered. And what a nice feeling that was. So, then I took a three star fix at
that point in time. I had it all backed up with celestial and I planned the flight over the South Pole so that I'd have the moon and the sun at least 45 degrees opposite each other so I could use them for celestial. And both of them in southern declination.

BS: *Did you pick the time to fly?*

EL: Yes, oh yeah.

BS: *So, that's what drove the dates that you took off from each of the spots.*

EL: The dates and the times, yeah.

BS: *The moon and sun conditions at the South Pole were the determining factors.*

EL: That's right. And the other overriding factor was the temperatures. I wanted to hit the North Pole as early in the season as possible. I wanted to hit the South Pole as late in the season as possible. Put it that way. And so I had about 20 days between the North and South Pole. Every day it was getting colder at the North Pole, every day it was getting warmer at the South Pole. So, I hit it about right. I planned it that way and I hit it about right. It ended up at about 30 below zero . . . 39 below zero at the South Pole and 30 below zero at the North Pole. So, I kind of balanced them out and that wasn't an accident. That was all done on purpose. And then I had to balance that with the celestial part of it. Now, the celestial part of it was to have over the South Pole . . . I wasn't worried about the North Pole so much, but the South Pole, you really have to have celestial navigation in case you lost your electrical system or if the INS went haywire or what not. And that means the moon and sun both have to be in southern declination. Otherwise you're not going to see them. And that's what drove the flight. I had a 6-day time window to get
across Antarctica where I would have the conditions I needed for celestial navigation and I left Punta Arenas . . .

BS: *Let me back you up before you get there. You're in Stockholm.*

EL: Yeah, we're coming into Stockholm.

BS: *Where'd you go from there?*

EL: We went . . . we . . . my airplane and I, took off and went down to Stockholm and landed in the middle of the night at Stockholm.

BS: *And Marie was there?*

EL: No. Marie flew to London. And I stayed overnight in Stockholm, and I think I stayed a day and a half in Stockholm, the reason being I didn't press these flights. In case something went wrong, I left enough slack. It was sort of a leisurely trip until I got to Punta Arenas, because I had to be there and leave on the date that I wanted to leave. And when I got to London, I had left two or three days because if I had any equipment problems or what not, it would only take maybe 12 hours to get something shipped from New York to London and get it worked on. And it's a good thing I did because I had radio problems and they fixed them in London.

(350)

BS: *You'd planned to go to London beforehand?*
EL: Oh, yes. Every stop on the way. So, I took off from Stockholm. I was there about a day and a half and had a beautiful flight down over Copenhagen, then over to London. I landed at Stanstead Airfield. Oh, by the way, at Stockholm, I landed at . . . it's the secondary airport. Not the primary one. I flew into Stanstead Airfield and my wife was there to meet me and we spent most of the time while I was in London trying to get the radio fixed - the HF radio. I had two HF radios. One was just a little 10-channel job and the other was a real good 20-channel job. And the real good 20-channel job wasn't working worth a darn, but the 10-channel job was keeping me going.

BS: *Single side band?*

EL: Yeah, they were good radios, both of them. And the one was a new model and that's the one I had all the trouble with. Guess what you call that. I should have known better in the first place than to put a new model in. But, anyway, they were both Sunair radios. One was a 10-channel - I can't remember what they called it. But, the other one was a 20-SB. I remember that. And it was a 20-channel radio. They were good radios, but one was dependable and the other one wasn't. But, they fixed the one that wasn't dependable, and it worked pretty good the rest of the way.

So, I had two HF transmitters, and I had a trailing wire antenna and so my communications were really quite good. And I had all the single side band and everything like I was supposed to. I had no troubles with communications in Antarctica. I had trouble with communications over the North because it was just a bad propagation night.

BS: *Ionospherics.*

EL: Yeah, and I was out of contact for several hours, though I was listening to a KLM . . . was it KLM? I think it was a KLM going over the North. I'd hear him on VHF. He was
talking to somebody else and I could hear the one side of the conversation from about 400 miles away from air to air. But, I never did contact him and I listened to him for a long time. But, I tried to contact . . . in those days they had a radio station at Barrow and they had one at Thule, I think, and I never could get either one of them. But, TWA did hear me talking to, I believe it was Norway. Maybe I was talking to Keflavik, I'm not sure.

BS: *They had you line of sight, though.*

EL: Yeah, I was always pretty much there. I could pick up one of the other jets that were at high altitude, on VHF on guard frequency. But, the flight was rather routine. It really was. It was a matter of sitting there and making the thing happen.

(400)

BS: *So, from London, where did you head?*

EL: OK, London, I got everything working good and we took off and the next stop was Ghana, Accra. I never could . . . I don't know why, but you know you have to get diplomatic clearances to fly over all these places and I could never get clearance from Morocco. And so, I ended up going down over the Atlas Mountains and then down over the desert over Morocco and I didn't have clearance. I just went anyway and never contacted anybody or anything. I just went on down and across and landed at Accra, Ghana.

BS: *Was it still a colony then?*
EL: No. It was a country. And there was a . . . I had been in England, at Stanstead, training CL-44 pilots for Trans-Meridian London, and one of the crews happened to be at the hotel there in Accra, so we had a little mini-reunion while I was there. But, at each stop, I had so many things to do. I had to do my own flight planning and I had to do my own fueling. I had to do my own hotels and everything and I had to . . . the press got more as we went along. And, so I was busy. And then each flight averaged about 16, 17 hours long and I was pretty tired after that. So, I had to get a good night's sleep, too. And it worked out, but I was pretty busy at every stop. Almost every minute was accounted for doing something or other.

BS: How much fuel did you have? How many hours of fuel?

EL: I had approximately 24 hours, if I was full. Now, I didn't fill up all the time because the airplane was about 50% overloaded if I was full. I only filled it when I needed to. The fuel system that we devised was pretty good. I had a dump system where I could dump my fuselage tanks and I had a fuel burn out where I would burn out the fuel in the fuselage first and keep the weight out in the wings until later. Actually, it wasn't bad. And then, of course, if I was heavily loaded, I'd stay away from turbulence. I wouldn't go flying through any cue clouds or anything. I managed to keep all that. And it worked out very well. I never really felt apprehensive about the airplane at all. It hummed right along and as the flight went along, I got more and more confidence all the time, in the airplane, in the systems and in my inertial navigation system. I'd never flown with one of those things before and didn't trust . . .

(450)

BS: Weren't sure it would work.
EL: I wasn't . . . I didn't trust . . .

BS: Were you going to depend on it? No. Typical pilot. . . all that new stuff will kill you, huh?

EL: We took off out of Accra, early in the morning, and I always tried to plan my flights to take off right at dawn so it would be cool and so I'd have as much daylight as necessary and I headed straight for the equator at the Prime Meridian, zero degrees latitude and zero degrees longitude out of Accra, and it took about 3 or 4 hours and I was down to there. And then I hung a right turn and headed for Recife, Brazil. I landed at Recife, and I just overnighted there. By the time I cleared Customs and Immigration and fueled the airplane and paid the bills and got a cab and got to the airport, I think I had about 4 hours sleep. It was time to get up and go back to the airport and take off again.

You know you would think, oh you're on a world flight, people will treat you nice. I think if anything, they made me dance through more hoops than ordinarily. But, then, on the other hand, I was used to flying and having our people on the ground take care of all that stuff for me, and so I just probably didn't appreciate all the work the people had done all those years. When you're flying internationally, there's a lot of paperwork.

BS: Oh, I know.

EL: So, everything was going along fine and from there it was just a short 7 hour flight down to Rio de Janeiro and that little dark-haired girl called Marie Long, my wife, was in Rio waiting for me. And you ought to have seen what she broke out there. She had the press out there. She was learning her trade. There must have been 150 reporters that met
us at the airport. So, we were beginning to think we were important. And we were invited... we were going to stay in Rio two or three days, and I was having trouble with my INS, but not in the sense that you might think. When I got into the warmer climate, and I'd turn on the INS, it would shut itself off and it would give a warning code that the power wasn't right. And I'd had this trouble in Accra for the first time. That's the first time I'd been in a warm climate with it. I had telephoned or wired the people back in Milwaukee, and they had been working on the problem and they finally figured out what it was. The power supply system to transfer the 12-volt power supply to 400 volt AC was marginal, that is to say.

(500)

And in the hotter weather, it got more marginal. And so, there's a system built into the INS so if you don't have the right power, it'll shut it off. It won't take it. So, I put the switch on, the INS computer would look at the power and say, "I don't like that power," and it would shut it off. And I couldn't get it to turn on. And after 8 or 10 times, finally it turned on and it was all right.

BS: *After you climbed up where it was cooler.*

EL: Well, no, you have to do all of this on the ground.

BS: *Oh, you do.*

EL: You have to align the thing on the ground. It takes about 15 minutes to align it. But, anyway, I didn't know what was wrong except that I had to work the thing about 10 times before I finally got it to go on. So, they figured it out. They'd sent a guy down from
Milwaukee to Rio to meet me there with a modification so that it would look at the thing and delay for a few microseconds before it would shut off. Because the thing would get hit by all of this power and it'd go uuuuh, but it would pick itself up off the ground and within a tenth of a second, it was OK again. So, it would delay shutting the thing down for a 10th of a second or so, and if it got back up to half way looking decent, it would accept it. So, he met us at Rio and we spent a lot of time out at the airport with this $100,000 piece of electronic equipment spread all over the ramp with him with a great big soldering iron working on these little electronic parts. I sure hoped the guy knew what he was doing. He did. And he modified the thing in the field.

Kind of an interesting story about that is that in order to supply the power that he needed, they called the Brazilian Airline to supply us with a ground power unit and they brought one over and it was there all day with us when we were working on it. We got a bill for $800 an hour for that thing. I think it was about a $9,600 bill for that power unit. We had no idea what it was costing us. I got the bill and I forwarded it to them. They eventually paid it. But, anyway, they fixed the INS so it wasn't doing that anymore and by the time we got out of Rio, the next stop was Punta Arenas down in Chile.

BS:  Why did you pick Punta Arenas?

(550)

EL:  I worked on that one a long time, because Ushuaia is about 100 miles closer to the Pole, but Punta Arenas had a VOR - it had a good approach, good airport, daily international service, so I could get something shipped to me in 24-48 hours if I had to. If I went to Ushuaia, they had two flights a week. They didn't have a very good approach into there.
BS: *It's flip-flopped now.*

EL: Is Ushuaia a better airport now?

BS: *About 7000 foot runway, modern terminal. 747s every day. They have flights from all over the world.*

EL: They had 24-hour tower, 24-hour lights, Customs, Immigration, the whole thing at Punta Arenas, so I picked that.

BS: *I've done both. Well, back when you did it, it was just a little puddle jumper airfield. And that was scary. It might look good on a map, but you had to take off usually into the mountains.*

EL: But, I flew on down to Punta Arenas and the INS worked great. The guy had made a good mod. I never had any trouble with it again. And when I landed at Punta Arenas, it was about 10 o'clock at night and my habit was to take care of the airplane when I arrived. No matter how tired I was, I wanted to get the airplane taken care of first. But, it was at night. There was no fueling and everything was shutting down and so, luckily a little guy there was a Piper dealer. He was the southern-most Piper dealer in the world. I don't know what that meant except that he had the franchise. Chile, at that time, was under communist control or socialist control, and they weren't 100% friendly. Individuals were all right, but the government was just a little standoffish, but that was OK. Except that there was no place for me to stay because Fidel Castro was coming in on the cruiser, *Rivadavera.*

(600)
He was visiting Chile, and he was coming into Punta Arenas on the cruiser for an official visit and there must have been 500 newspaper reporters in town. They'd got every hotel room there was. So, the Piper dealer finally found me a hotel room or sorts. It was or sorts. I really felt uncomfortable and I'm used to sleeping just about wherever I lay my head down. But, I really felt uncomfortable because I had all my cameras and all my money and stuff with me and I didn't feel very secure. Especially since the slope of the floor was at least a 15-degree angle, like the whole thing was collapsing. Anyway, I had a good night's sleep. I got up the next morning, went down and had a wonderful breakfast and even though nobody could speak English and I couldn't speak Spanish enough to do too well, everybody understood that everything was going fine and I enjoyed myself very, very much and if I ever went back to Punta Arenas, I'd stay there again. They were nice people.

BS: They knew that you were going out across Antarctica?

EL: Yeah.

(End of Tape 1 - Side B)

(Begin Tape 2 - Side A)

(000)

BS: This is Tape 2 of Elgen Long's talk about his experience in the Arctic and the Antarctic. We ended the last tape looking for food in Punta Arenas. Elgen, it's all yours.
EL: OK. Well, I found the baby food and I thought that that ought to be pretty safe, so I bought a whole bunch of different kinds of baby foods like custard and what not that might be appealing to my taste. I wasn't really interested in my taste. It was just some nourishment that I was going to need and I didn't want to eat on the local economy for at least 12 hours before the flight and during the flight. Hey, I found out those little babies are eating pretty good. It wasn't all that bad. So, that's basically . . . I had all my emergency stores and what not, but that wasn't for consumption during the flight. That was in case of emergency. I had, by the way, enough supplies to last me for at least 6 weeks. And I had things like cook stoves and emergency clothing and sleeping bags and tents and what not that would keep me alive under almost any conditions I was running into for at least weeks, as long as I wasn't hurt too badly.

BS: Polar Ice Cap?

EL: That's a pretty tough one - the Polar Ice Cap. It's dark and sastrugi's pretty . . . you know, it all depends on how you hit.

BS: Well, you were in daylight at South Pole, weren't you?

EL: South Pole was, yeah. Well, as it turned out though, it was pretty bad weather. But, I took off out of Punta Arenas right on time, within minutes of when I'd planned it.

BS: When was it you took off from Punta Arenas? Just the date.

EL: Oh, boy. I'm trying to remember exactly. It was probably about November 21st, maybe November 20th. And I took off in the early morning hours again, and I headed straight to the South Pole. And the weather was beautiful. There's a mountain right on the
track or very close to the track between Punta Arenas and the South Pole that's very near or just on the other side of the Straits there that I worried about, but it was bright and clear and I didn't have to worry about that mountain at all.

BS: *You mean in Chile?*

EL: Yeah. Just on the other side of the straits there. I can't remember the name of the strait. Straits of Magellan . . . I don't know. Whatever. Beagle Straits? I can't remember. But, anyway, the weather was really just crystal clear and beautiful. And I flew across the strait, and as I was going across the strait, here came the cruiser, *Rivadavera*, with Fidel Castro aboard it. I was a little bit afraid of about flying . . . I was heading right straight for it. I was a little bit afraid about flying over that thing, being that the president of Cuba was on board. But, anyway, I kept on going down and I actually took some pictures of the cruiser as it was making it's way up the strait.

BS: *You did?*

EL: Yeah. I have them somewhere in my file. And when I went past Cape Horn, I was snapping pictures and everything.

BS: *The mountain was Cerro Sacramento.*

EL: Cerro Sacramento. It was a pretty high mountain.

BS: *It's the one that they've got noted as the high point here. So, it's not quite on a direct course. Well, I guess it is. It's right on your course.*
EL: Pretty close.

BS: *Looking at the map, here's Cerro Sacramento and here's Punta Arenas, due north.*

OK.

EL: I remember worrying about that.

BS: 2,800 meters.

EL: That's about 8,000 ft.

BS: Yeah.

EL: So, it was beautiful and clear and I didn't have to worry about that mountain. So, things are going my way. It started off . . . when I went across the Straits, past Cape horn and over to the Peninsula, the weather was just super. Visibility was 150 miles and it was just a beautiful day. So, I contacted the . . .

BS: *Where did you hit Antarctica? Do you remember the Headlands?*

(50)

EL: Yeah, I came right down that parallel from Ushuaia and it seems like I went right over . . .

BS: *Alexander Island?*
EL: Yeah. And there was an American Station . . . Palmer Station, I think.

BS: *Yep. Palmer's right up here.*

EL: OK, I was in radio contact with them and I talked to Palmer Station and they told me that Mac Center wanted me to not waste any time. The weather at the Pole was marginal and the weather was getting worse at McMurdo.

BS: *So, you'd met with the Navy folks before that?*

EL: Oh, boy. Yeah. Therein lies a story. OK. We're going to back up now before the flight. And we have to go back about a year, year and a half before the flight. I was flying DC-8s at the time. My main route was out of New York, and I would fly to Anchorage, Alaska, usually via Chicago, and from Anchorage to Tokyo, and the flight would continue on to Seoul, Korea. And I went out to the airport in New York at Kennedy one night to pick up my flight and my goodness, had a bottle of scotch, bottle of gin, and sandwiches stacked to the ceiling with shrimp and what not and I thought, boy, what VIPs coming around the Ops room today. Is somebody going out with us? Who in the world is it? They said, "Yeah, you've got a couple of VIPs on your flight. They're going to Korea for the inauguration of the President of Korea." And it's Admiral Arlie Burke and his wife, who was, at that time, just left being Chief of Naval Operations for the Navy.

And so, I invited Admiral Burke up into the cockpit and he rode the jump seat and I invited his wife up into the cockpit, too. We had a great navigator's seat there that would have made her very comfortable, but she preferred to be in the deadhead seat in the back. Anyway, Arlie . . . Admiral Burke rode jump seat all the way, and as we were going across Canada, I was talking to him about this, that and the other thing, I said, "You
know, Admiral Burke, I'd like to ask you a question. If I was trying to get permission from the Navy for an operation that involved the Navy, can you give me any advice on how to proceed?" And we'd had a preliminary discussion about that and he had a general idea of what I was talking about. And he thought for a minute and he said, "Well, the best advice I can give you is, don't ask somebody that can only say "No," because you're going to get a "No." I mean, that was pretty obvious. Anyway, he gave me his card and he says, "If you have any trouble in Washington, why, give me a call and I'll see if I can help you." So, my wife and I were in Washington, about 6 months later or so, and we were trying to get an appointment to see the Head of the Antarctic Support Forces. Now, those are mean guys, those guys that are Head of the Antarctic Support Forces. Little dig at you, Brian, there. Anyway, we were over at the Navy Yard - 10th St. or 10th Ave. or something in Washington, and Captain Swinburne was acting at the time. I couldn't get in to see him and he wanted no part of me. So, I called Arlie Burke's office and told him what the problem was and he asked me where I was and I was really only a few blocks from where he was, so he says, "Well, come on over to the office and I'll see if I can help you." So, Marie and I went over to Admiral Burke's office and we got ushered in and I told him that I was trying to get an appointment with Captain Swinburne to put my proposition to him about flying over Antarctica.

(100)

And he reached over, punched the intercom and asked his secretary to get Swinburne on the phone. Phone rang about 45 seconds later and it was the usual, "How are things, Charles? How's Millie?" and all that. I don't know if those names are correct . . . I don't remember. "Listen, I've got a young fellow here that would like a few minutes of your time to talk about something about flying. I know him as a pilot and I know him to be reliable. Would you have any time for him?" "Yes." "He's here now. About 20 minutes?"
"OK." "Twenty minutes will be OK." "Yessir." And that was it. So, we were in to see Captain Swinburne. Went right over to the Navy Yard and within 20 minutes, we were in his office. Well, he didn't want any part of us. So, his Operations Officer was Captain Navarette, and he called him in because he wanted witnesses that he was polite when he said "No." We laid out our proposition to him and although we got the definite feeling all we were going to get was a "No," we made a good presentation and it was kind of hard.

BS: You and Marie?

EL: Yeah. Mainly myself, but we made a good presentation and it was kind of hard to find any real way to say "No." We weren't just talking off our heads. We were supplying flight plans and all sorts of data and what not and showing the depth of planning that we had done. So, now, they were looking for some way to delay saying "No," until at least we weren't right in front of them or until they could think up some good reason to say "No." And it was obvious they weren't going to say "No" at the moment. They were going to study it before they said "No," and Captain Navarette, in preparation for that, asked us, "Oh, where can we get in touch with you? Where are you staying?" And I said, "We're staying over at a friend of ours over at Crystal City, in his apartment over there. He's on the Navy Fighter Desk and he lives in Crystal City. We're staying with him. Bob Aulmac. He's a Commander." "Robert Aulmac?" "Yes." "He's Godfather to my children." Well, needless to say, we ended up getting permission to fly into Antarctica. Now, you tell me that there aren't circumstances and what not in your life that just happen. I don't know how they happen, and there's got to be some luck involved there somewhere. So, we got permission to fly in.

OK, now we are flying in. It's about a year later, and everything's really going fine. The flight is becoming almost routine. Now, this is the crucial leg. Flying across Antarctica . . .
BS: I want to get back to the planning. Did they run you down to Gene Van Reese?

EL: No. First time I met Eugene Van Reese was at McMurdo. He was there at the time when we came in.

BS: He was the new guy then. He replaced Swinburne.

EL: He replaced Swinburne?

BS: Yeah.

EL: OK. And they had sent a C-130 . . . they didn't have as much confidence in this thing as we did. They'd sent a C-130 up to the Pole on a regular mission, but timed it so that it would be in the area when I was in the area so it could rescue me. Anyway, I really appreciated that. Kind of wish they hadn't done it because they had done it in bad weather and everything at the Pole. The visibility was about a half mile and the wind was blowing like crazy.

BS: C-130, that's ski equipped.

EL: Not too big a deal.

BS: Not too big a deal, no.

EL: Anyway, they were worried about how I was going to be able to find McMurdo or to even find the Pole. I finally got in contact with them on VHF. They were calling me and I
heard them on guard, I think. Either that or whatever their standard frequency was, and they asked me a couple, three questions and I told them I was about 45 miles from the Pole at that time and I had high confidence in my position and that I was at 13,000 ft. on instruments, but I was confident that my position was correct.

(150)

So, then the C-130 took off, so he'd be in the air and he could kind of escort me and they gave me the weather at the Pole and they also gave me the weather forecast for McMurdo and it wasn't very good. And they urged me, don't go sightseeing. Get in because it's closing down at McMurdo. Though my alternate, which was Cape Hallett, was good. It was supposed to be good all the time.

BS: *Was Hallett manned then?*

EL: It was manned, but it was very marginal. It was just a place to get down out of the air.

BS: *That's what we used it for.*

EL: So, the C-130 warned me that there was the Queen Maude Range out in front of me and mountains up to 18,000 ft high and this, that and the other thing, and I had programmed my INS to take me to the head of the Liv Glacier and then across to the Beardmore and then right down the Beardmore Glacier. Well, by the time I got to the Liv Glacier, I was underneath it and the Beardmore Glacier was just clear as a bell and . . . .

BS: *You shot the Beardmore?*
EL: Yeah, I came sliding down it.

BS: *We call it "shoot the Beardmore."*

EL: Is that what you call it? Oh, I had a good tail wind coming down there.

BS: *50 feet in a Herc.*

EL: And Mt... oh, what is it? The mountain at the base there. It was clear as a bell. I had it made. All I had to do was go across the Ross Ice Shelf to McMurdo Sound. So, I think the C-130 was quite disappointed because I was having a ball and what not and they had risked their lives to come out there and save me and I was having too much fun to be saved. But, I beat the weather in to McMurdo and so did the C-130, and I met the guys up at the mess hall and thanked them for their escorting me and what-not. But, actually I think I knew where I was better than they did.

BS: *You had better navigation.*

EL: I had better navigation.

BS: *They didn't have inertial navigation for a number of years after that.*

EL: Well, that's the interesting part about this whole flight... one of the interesting things. I got a call... I was only there about 18 hours and I got about 6 hours sleep and the rest of the time I spent fueling the airplane and I went over to Shackleton Station?
BS: *Scott Station.*

EL: Scott Station. The New Zealand Station. And they took me down in a crevasse that they had there and I'm a little claustrophobic. I didn't like that at all and I got sliding down that crevasse. I really didn't care. I knew I had to come back up. It wasn't so bad going down, but I didn't think I was going to like it coming up. Anyway, it turned out fine.

BS: They took you to survival school there then.

EL: I guess that's what they called it.

BS: *I had to do ours.*

EL: Had the dog down there. Anyway, I got some pictures of all that and it was very interesting and it was fascinating. For a guy that only spent that little time there, I got a good tour.

BS: Took good care of you, obviously.

EL: And Eugene picked me up in the Gray Ghost and took me around and delivered me to the plane and the guys, all night had kept it covered and kept pointing it around into the wind. The wind had gotten pretty bad there And the weather was clearing up for a little while, then it was going to come right back down again. So, we fueled it up and . . .

BS: Did you use 115-145?
EL: Yeah, 145. 115-145. That's the only thing they had.

BS: That's what you normally took in them?

EL: No. 100 octane is what you normally took.

BS: This was a little heavy for you. Didn't burn . . .?

(200)

EL: No, no, problem. I checked with the plug manufacturers and with Lik__ing on it and they said, "No problem." And I didn't. I had no problem with it at all. 115-145 worked fine and the plugs showed it that it had burned real good, even though it was a lot heavier lead.

BS: Didn't burn the tips of your plugs off.

EL: No.

BS: Did you change them in New Zealand?

EL: No, I never changed them. And when I got back, they took the plugs and they checked them all over to see how it worked. They were interested, too. And then they chromed them and made little stands out of them and what not and distributed them to various people. I still have one of two of them. But, when I got back to the States, just to digress from the trip for a second, I got a call from Gene Van Reeve after the season was over when he came back. And he wanted to know more about that INS. And they finally
got some Littons for the C-130s down there because they should have had them before then, even.

BS: *Took a long time.*

EL: But, they didn't know how well they would align. See, that was the highest latitude. Now they were certificated for 80 degrees . . . that they would align in 15 minutes up to 80 degrees of latitude. That was the certification they were approved for. Well, as you know, McMurdo is pretty close to 80 degrees.

B: 78.

EL: And this was the highest it had ever been aligned from a dead start. And so, Delco was very interested in that alignment. The alignment was great.

BS: *So was Gene Van Reeve, huh?*

EL: So was he, afterwards. And I was keeping very meticulous records of the INS. That was part of the deal. And I was keeping very meticulous records of all the errors and everything on alignment rates and everything. They worked very, very well. And so I feel . . . that, by the way, was the first solo flight around the world ever made with an INS.

BS: *Is that right?*

EL: But, I didn't claim it now.

BS: *Well, I'm going to put it down anyway.*
EL: I didn't have that $600. Anyway, then there is no such record, but it was a first. The other interesting part of it is that I think it helped one or two seasons of the Navy guys to get the INSs a little earlier than they would have gotten them otherwise because I think Gene Van Reeth got on them to get something like that for them. They went to Littons instead of the Carousel. I don't know why. But, whatever . . .

BS: Bill Courtney probably had something to do with it because he was on the team that built that for Litton and he took it to the North Pole as part of the test program to learn how to align it at the Pole - the North Pole. They landed up there.

EL: Well, anyway, it worked good and I'm glad. Now, the next two things . . . well, let's . . .

BS: Here you are in Christchurch.

EL: Well, no. We're back at McMurdo and the weather's getting lousy, so they tell me I'd better get out of there even though I was enjoying myself. I took off and headed straight for Sydney, Australia. And by the way, that's the first solo flight ever made from Antarctica to Australia.

BS: They'd made them from Australia to Antarctica.

EL: This was the first solo flight ever made from Antarctica to Australia. And I had about 100 knot tail wind all the way . . . not all the way, but a great part of the way up to Tasmania. I made landfall at Hobart and I went right over the Durabell Coast. Right over the South Magnetic Pole.
So, now I had been to the North Magnetic Pole and the North Pole and the South Magnetic Pole and the South Pole. A real busman's holiday.

BS: *You didn't fly over the North Magnetic Pole.*

EL: I did earlier in the Boothia Peninsula when we were . . .

BS: *Oh, OK. But, not on this trip.*

EL: On this flight, no. Although, we did make all seven continents eventually.

We have been talking about records and firsts. I believe I was the first man to cross the Antarctic Continent solo via the South Pole and land on the continent. In the final analysis, that may end up being my greatest claim, the first man to cross Antarctica via the South Pole alone.

So, I landed in Sydney and that little dark-haired girl, Marie, was there already. And she's really learned how to turn the press out now. Now, she's got not only the press, she's got television, radio and everything else out. We're making front-page news now all over the world and the flight's starting to be fun for everybody, including myself. We stayed in Sydney for a couple of days. I had to rechannel all of my radios for the Pacific frequencies, now that I'm all through with the Antarctic frequencies and the South American frequencies and Atlantic frequencies. And so, Qantas . . . I had all the crystals made ahead of time and they switched them all and retuned them for the Pacific, the rest of the route out. And we were in Sydney for a couple of days and really had a great time. And the Australians are always great hosts. And next stop was Nandi and Fiji and that
was just a little short hop over there and after that I took off for the Equator at the Prime Meridian and on the way, I was going by Howland Island, which is where Amelia Earhart disappeared. Going into Howland, even though I'd been there a number of times during World War II in PBYs flying on patrols out of Canton Island, I used celestial navigation like Noonan had done and just used the wet compass and I'd put a hood over my INS and went to Howland Island using wet compass and celestial bubble octant to see if I could find the island and I did. No problems at all. In fact, the island was right in front of me. I think I would have found it even in a rain shower.

BS: *Bubble sextant or octant?*

EL: Technically, it's an octant, but that's all right. It's the same thing. Octant, sextant. One of these things is a sextant. They divide the 360 degrees into 6 parts and the octant divides it into 8 parts.

BS: *That got you interested in . . . you were interested before this, though.*

EL: Yeah, I'd been interested and I'd been out there during World War II to the island. That was just 5 or 6 years after she'd been there and disappeared. So, there was no reason that I could see why Noonan couldn’t find it. It just gave me more interest. And when I left Howland, I went to the Equator at the 180th Meridian, the International Date Line, and that's why I called the flight the "Crossroads Flights," because it was the crossroads at the Poles. All the meridians converge. That's a crossroads of geography. And at the Equator, the prime meridian, the Equator at the 180th meridian, is the crossroads of time.
So, the four corners of the world, if you want to call it that. And it's a busman's holiday. And by now, I'm really enjoying this. My airplane and I are just having a ball. The darn flight was so well planned that I just didn't have any troubles or anything. So, now I'm spending my time listening to music as I'm flying along at night and I can tune in Honolulu or whatever on my ADF. Now, I landed, though, at Wake Island.

BS: *That was planned?*

EL: Yes. All of this was planned. And just coincidence, it happened that that night as I was there, the last westbound Pan American plane was coming through. It was stopping at Wake Island. They'd been flying in there since 1935 except during World War II when the Japanese occupied it. And it was the last flight coming in there and all of the Philippino mess cooks and stewards and what not were leaving on that flight to go home and they'd left one clerk to take an inventory and shut the place down and he handed me a pillow case and a couple of sheets and I was the last guest of the Pan American Hotel at Wake Island. Just coincidence. I didn't plan that. It just happened that way. Now, there was still an east bound flight coming through and that was going to pick up the clerk that was there that handed me the pillowcase and he told me, "Don't worry about them. I'm not going to wash them." But, for the last flight, I mailed two or three covers. And, by the way, I carried about 300 covers with me on the polar flight.

BS: *Postcards?*

EL: No, envelopes with a regular . . .

BS: *Are you a philatelist?*
EL: Yeah, to a very limited degree. Hey, we were trying to figure out some kind of way to get our money back out of these things. If you spend $50,000 . . . I didn't mind spending my half, but my wife didn't care about spending her half. So, when I got to Wake Island, and after I took off out of there, then the next flight was up to Tokyo and kind of an interesting thing happened on the flight. I believe it was the Coast Guard, built a tremendous tower at Markus Island and the tower - I don't know, 500-600 feet high. It was a tremendous thing and it was all lighted and all that good stuff. And you could see it 50 miles away, easily. And as I was coming into Markus Island, I could see the tower sticking up there and a full moon sitting right on top of it. I mean, it was like it was part of the tower. It was just a strange coincidences of things all happening at the same time. My approach and it was just sitting right exactly on top of the tower like it was balanced on top of it.

BS: Why'd you go to Tokyo?

(350)

EL: Another continent. I wanted to go to all seven continents. Somebody said, "Well, Tokyo's an island. That's not part of the continent." "Oh, I guess when you go to London, you're not going to Europe." And that settled that argument. I got into that, too. No, I went to all seven continents, great opportunity. Like I said, it was a busman's holiday and I'm really having a ball. I'm enjoying the flight and every place I go, I'm a VIP and the airplane is just running beautifully. I just didn't have any trouble at all. But, now the trouble starts. No real trouble. I go out to the airport at Tokyo and by the way, that little dark-haired girl is in Tokyo waiting for me again there. Marie met me in Tokyo as well. We head for the airport and they don't have a forecast for me to Honolulu. Well, they don't do forecasts for anything less than 500 milibars any more, so they said, or
something. I don't know. You know, when the Japanese are embarrassed, you can't get a straight answer out of them or anything. So, I couldn't go without a forecast because Honolulu was really pretty much marginal on the range. If I didn't have the right winds, why, in looking at the upper air charts, it didn't look all that good to me. So, I decide the safe way to do it was . . . I had plenty of time. I allowed a couple of days in Honolulu, so I decided to go back to Wake Island again. So, I just went on back to Wake and after Wake, went to Honolulu.

BS: So, you're back in Honolulu. Marie met you there?

EL: No, Marie is heading for San Francisco out of Tokyo and I take off out of Honolulu, and going to San Francisco and I'll be darn, going eastbound, I don't run into headwinds. So, I end up two hours late getting into San Francisco. That's the furthest off of my time schedule I ever got was going into San Francisco. And it was because of the winds. I had strong headwinds.

BS: Did you have lots of people waiting for you?

EL: Oh, yeah. There was a real crowd of people. And, in a way, it was kind of bad. I intended to arrive there about 10 o'clock or 9 o'clock in the morning and the reason being, we planned it all. It was a Friday and that was December 3rd. And, by the way, it's almost exactly 30 years ago. It will be in November, or December. December 3rd. It'll be 30 years. Because we knew the news cycle and if you got there early enough that they could get it on the news cycle, you could be on all weekend. But, by being late, I missed it. I missed the news cycle. But, I'll tell you . . . I arrived in San Francisco. I had a wonderful . . . even Shirley Temple was there. She came down and my kids went to school with her kids and she came.
BS: Where did she live? San Francisco?

(400)

EL: She lived in Woodside, California, right near the San Francisco Bay area. Actually, she just lived about two or three blocks from us. I lived on Stockbridge Avenue and she lived up on Eleanor Drive, just up above us. And it was nice of her to do that. My mother was there and a couple, 300 people. Woodside High School Band came down and played for us and we had a great time. And then, the next morning I went down to the local newsstand and there were 5 newspapers out there and we were on the front page of all five of them. So, we felt real good about that.

BS: Great.

EL: And Marie was there to meet me. That little dark-haired girl beat me back to San Francisco. Now, altogether, this was the longest sanctioned solo flight ever made. And I believe I flew about 36,000 miles. And the NAA, I asked them to homologate it and it took several months and they homologated it. And that meant they checked all the records and everything and authenticated that the flight had been made and certified the records and submitted it all to the FAI and they certified it and the NAA petitioned that or I should say nominated me to receive the Gold Air Medal and the FAI approved that and in 1972, we went to Paris and received the Federation Aeronautique Internationale Gold Air Medal for outstanding sport pilot in the world for that year. And President Pompidou received us at the Palace Elysee and we were received at the City Hall in Paris and signed in the same book that the other famous explorers had signed in that had been greeted there and it was a fantastic time. And in the receiving line at the Palace Elysee, there was
a Russian and American astronauts receiving space medals and they insisted that we be at the head of the receiving line because we had done it on our own and didn't have some big government backing.

BS: *The Russians and the Americans both?*

EL: Yeah, the Russians and the Americans. Scott was receiving the Space Medal that year. And I can't remember the Russian that was receiving it. Anyway, we were all together for about a week around there during all the festivities.

BS: *So, all those guys were pilots.*

EL: Oh, yeah.

BS: *Nowadays, you can be an astronaut and be a rock.*

(450)

EL: Either that or a millionaire and $20 million bucks. But, it was a lot of fun and people ask, "Why did you do it?" And I guess probably my favorite answer is, "Well, I don't know. It cost us $50,000, but gee, we got invited to Paris, presented the Gold Air Medal by the FAI and what not. I don't know? Is that worth $50,000 or not?" I don't know. But, besides that, we had a ball.

BS: *Did you ever recoup any of your money?*
EL: Yeah. Piper Aircraft, they wouldn't give me the time of day before the flight. But, after the flight, they thought that was a pretty good deal and they commissioned Doug Allen, Sound and Scene, to produce a movie about the flight and he did, called "A Man, a Plane and a Dream." I'll have to get a copy of that for your . . .

BS: *I have it.*

EL: Oh, you have it.

BS: *Yeah.*

EL: We're having it digitized from the original and put into a CD. I'll see that you get a copy of that, too. That'll stay good for a long time. But, they paid me $50,000 for the rights to do that and I think we ended up $2,000 in the hole.

BS: *So, you made it back after all.*

EL: Made it back after all. But, before the flight . . . And then I got some other honorariums also. We made all our money back. I'm pretty sure. Plus, we had a great time. It was worth the $50,000.

BS: *Even if you hadn't gotten paid back.*

EL: When I was flying in to San Francisco, I was sorry the flight was over. It was really just, everything was just going great.

BS: *Where's your medal?*
EL: I have it at home.

BS: You got any photographs of it?

EL: Yes.

BS: Can you make one and send it to me?

EL: Sure.

BS: I'll put it in your file.

EL: OK.

BS: So, are you going around giving talks on this still?

EL: Not really. I did a little bit at first, but see, I was on vacation. I had to go right back to my DC-8 and go back to flying again.

BS: Have you got photographs of flying across the Arctic and the Antarctic? Do you have a slide show?

EL: Yeah.

BS: The reason I ask is that I have a . . .
EL: I don't have it together much any more. I still have it, I guess, together, but I don't do it any more.

(500)

BS: *I brought your name to Carl Erb after I talked to you on the phone the other day about this flight to the South Pole in the middle of winter and he mentioned something to the effect . . . he's the head of the National Science Foundation Office of Polar Programs and he said, "Gee, that would be interesting to see how he did it." So, you had a co-pilot in your venture. You mentioned your dark-haired lady who followed you.*

EL: She wasn't my co-pilot, but she traveled along with me.

BS: *She was your co-planner.*

EL: There you go.

BS: *I meant co-pilot, though, because she's flying with you in spirit.*

EL: There you are.

BS: *Do you agree on that?*

EL: I agree on that and I'll add to that that I flew the longest solo flight ever sanctioned by the FAI and received the Gold Air Medal for it. I flew 36,000 miles. I left San Francisco and met her in London, Buenos Aires, Sydney, Tokyo, and she was back in
San Francisco when I got there. She flew 48,000 miles. She didn't get anything. She got the booby prize - me.

BS: *She got you. Well, she didn't think it was the booby prize. But, you mentioned way back in the start of your talk about the South Pole, that she got involved with the planning and was the one that suggested that, you know, you were looking for how to fund this, that you could possibly do it yourself.*

EL: Yeah, we couldn't raise any money anywhere and she suggested we take a loan out on the house and do it.

BS: *Would you have done it if she'd said, "No?"

EL: No, I don't think so.

BS: *Would you have done it if she hadn't, say before that, even . . . if she hadn't gotten involved in the planning? Did she help you to solidify your resolve?*

EL: I'm not sure she just didn't get tired of listening to me and wanted me to do it or shut up, to be absolutely honest about it.

BS: *She was the hell of a good partner in all of this.*

EL: Yeah, she was a great partner. Has been for 55 years.
BS: Well, let me ask . . . you talked about going into Howland Island. You got involved with Amelia Earhart planning and eventually wrote a book on Amelia Earhart. Did you do that before this flight? Well, you must have.

EL: Yeah. I started out a couple of years before, just learning what Earhart had done. I didn't really learn anything. I just read a couple or three books and found out the essence of how she planned her flight and I studied a lot of other people's flights.

(550)

Byrd's flying and what not. Boy, he knew how to raise money and Earhart’s husband knew how to raise money. But, I never could figure out how to raise money. It's a tough game.

BS: Byrd said he'd never met an explorer that wasn't broke. Which wasn't quite true. Lincoln Ellsworth wasn't broke. He never had to raise money.

EL: Well, he had the money to start with I think, and that's wonderful.

BS: Plenty of money to put . . .

EL: It takes money, you know, every expedition, every explorer; every scientist is always fighting money. My prime thing on that is Tesla. I mean, where would the world be today if he'd had unlimited resources to expand his research into things that people didn't even know what he was talking about.
BS: One time you were working on another expedition to possibly go and see if we could find Amelia Earhart's plane.

EL: Um-hum.

BS: You still thinking about that?

EL: Yes. Actually, we've made a lot of progress on that since the book's come out. The book has laid out the information and it's generated a lot of interest and some people who know how to raise money are now working on that and when they raise the money, we'll go look for it. And what it boils down to, in a nutshell, and again I give my little dark-haired wife the credit for this line, "You're never going to find it if you don't look where it's at." And we've never looked 17,000 feet under water where it's most likely where Amelia Earhart’s airplane is. And it's not that difficult, really, when you get into it to figure out about where it's at. It's a searchable area. It takes quite a bit of money. The people are out trying to raise that money now. The technology is here. It's only been here for just a very few years, but the technology is here now. We'll find it, and when we do, we'll answer a lot of questions and maybe or maybe not, we won't answer all the questions, but you know, it's part of history. And if you're going to base the future by studying the past, you'd better have the right story about the past or else you might just make the wrong judgment about what to do in the future. So, I think it's important to finally settle that Amelia Earhart thing once and for all.

BS: I think we can end this right here.
EL: All right. Sounds like a winner. By the way, that dark-haired girl (in May, 2003, my wife for 57 years) has a full name which I believe has not been mentioned previously, Marie Katherine Long.

(End of Tape 2 - Side A)

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End of Interview