Bill Miller

Interviewed by Hilary Hilscher

July 1, 2000

Tape 1, Side A

Hilary: I'm talking with Bill Miller on the 1st of July up here at his home in Mt. Vernon, Washington, and I want to start, Bill, with the span of time that you had in Alaska. Tell me a little about what you found for communications when you first went up there.

Bill: Okay. Well, I went to Alaska in 1937 -- in May I think it was -- to Anchorage and spent a year there before I did anything else with the ACS (Alaska Communication System). And it was, of course, a much different town then than it is today. Anchorage wasn't a big city then and in 1937 had maybe a couple thousand people in Anchorage, if that many. And it was totally different. We used to get our mail there just addressed to an individual and city, no street address, no box number or anything on it. I have still got some envelopes in my scrapbooks just addressed to me Bill Miller, City. Try it now and it wouldn't do.

But Anchorage at that time was the biggest ACS facility in Alaska. It served as a collection point for messages to and from all the whole territory, from Kodiak, Fairbanks, Nome, Point Barrow. All the sites fed their telegrams into Anchorage and then, from Anchorage, distribute them to wherever they were going in Alaska or back down to the South 48 states to Seattle. It was a busy place. Everything was handled by Morse code and if you weren't a good code operator, why, you ended up with the odd jobs that had to be done such as delivering groceries and this sort of thing.

But it was a great experience. I spent a year at Anchorage at the radio receiving station that received the signals from the other locations in Alaska and piped them down to the operator, which was in a building half occupied by the *Anchorage Times* newspaper and the other half by ACS.

And the following year an opportunity came where they needed a replacement operator at Nome and I jumped at the chance to get away from what I was doing at the time in Anchorage, and went to Nome. That turned out to be a trip long remembered. I left Anchorage on the 4th day of May, just exactly a year from the time I had gotten there, and I didn't get to Nome until the 4th of July, two months later. As they had done for years – well, since they started ACS or the WAMCATS (Washington Alaska Military Cable and Telegraph System), everybody that came to Alaska, Interior Alaska, in the summertime — they would ship you by boat up to St. Michael and then the guys would go up the river, up the Yukon to Interior Alaska. And if you were moving from within Alaska, why, you went to... got to the Fairbanks area or Nenana, and took a riverboat down the Tanana from Nenana, then down the Yukon to St. Michael and another boat from St. Michael to Nome. And this is the route I followed when I went from Anchorage to Nome and it took

just two months to the day – where today, you know, you hop on an airplane and you're there in Nome to Anchorage in three to four hours. Things have changed.

Hilary: What did you do in Anchorage, Bill, and then what did you do in Nome for ACS?

Bill: In Anchorage I was... I had people, a couple of us, we worked at what they called the radio receiving station which was located on Government Hill and we kept that place going 24 hours a day. They received... they had a whole bunch of radio receivers at the location and each one of them tuned to a different station and we just had to make sure that they were operating and tuned properly so that the code operators located downtown could hear the signals come in from outlying stations and copy the traffic or whatever it was. Everything was telegram. There was no telephone service or anything in those days. So that's what I did there.

When I went to Nome, why I... Nome was smaller operation. We had four people at Nome where in Anchorage we had I think it was thirty (tape skipped)... everything in Nome. You were radio operator and you worked with the public, did the counter work, accepted telegrams, you collected money transfers and this sort of thing. Anything to do with the telegram you did. I was a radio operator there for a year. I would come to work at one o'clock in the afternoon and I stayed there until I got all the traffic, all the telegrams sent and received that were available, and then I could close the station down.

Hilary: When would that be?

Bill: Oh that would be anywheres from five o'clock to midnight.

Hilary: What did you like best?

Bill: Pardon?

Hilary: What did you like best doing in Nome?

Bill: What did I like best? Oh, it was... aside from the radio operating, which I enjoyed -- just sit there and copy code all day. But it was easy for me and in the summertime you were very busy and in the wintertime you were not. Then aside from that, Nome was a fun town. There was a lot of activities that you could get involved in. There were two or three small airlines in Nome and one of them Merrill Air Service I got connected with (skip) equipment and the airplanes running and you'd get an opportunity to fly on trips where they were hauling freight someplace. Why, they always wanted somebody to go along to unload the airplanes and load the stuff up and I would do that. I didn't get paid anything for doing it but I just got the trips out to wherever they had a flight.

Hilary: What kind of communications did the airlines have at that point?

Bill: Well, they didn't have much. Hans Mirow had a ground station in his office there, which he could (use). Chuck Buck was there at that time and he was working for Hans as a

radio operator and he would sit there in the office and operate the radio equipment whenever they had a flight someplace so Jack Jefford, or whoever was the pilot, would have a small radio set in the airplane and they could communicate back and forth.

Hilary: Was that voice at that point?

Bill: It was voice, yeah.

Hilary: That was voice.

Bill: Most of that stuff was home-built for the first few years of it, starting in the 30s, late 30s, when they started to get the equipment they could put in airplanes and it worked very well, but it took... somebody had to be in the office there in order to keep contact with the airplanes.

Hilary: What kind of range did they have with that equipment?

Bill: Oh, they could talk from like Nome to Anchorage or Nome to Fairbanks if radio conditions were good. No problem that way. And almost anyplace that they would fly to up there. Pan American had a similar system. They supplied the mail service and passenger service from Fairbanks and Nome and they had a series of stations across the way that the pilots could keep in contact with as they flew from Fairbanks to Nome and back again. It worked very well and gave a lot of safety to the airplanes. A number of times there were incidents or something. Good thing they had communications, otherwise you'd spend weeks looking for them. But it kept people busy and provided me with a lot of fun and activity.

Hilary: How long were you in Nome?

Bill: I was there just... I spent a year there and then I went to Kotzebue. I was up at Kotzebue for three years just about. It was a one-man operation. There was just myself at the Kotzebue station and I did everything there. Collect telegrams, message from schoolteachers in the outlying regions and relay them to them, messages that came in from most of the stuff from Juneau and get weather reports and forward that down to Nome and Anchorage and Juneau and Seattle. During that period of time, the weather bureau got pretty busy and (reports) went in daily and more often -- maybe some cases, several times a day -- weather reports so they could forecast weather for the pilots and so forth as they were getting more and more active.

Hilary: Now you... you're talking mostly about civilian, commercial traffic.

Bill: Oh, yeah, almost entirely, yeah.

Hilary: But you were in the military?

Bill: Yeah. Well, that was there wasn't much military up there at that time and it wasn't until the Army started getting ready for World War II that the military came to Alaska. There was a little military in southeast Alaska, but that was about the size of it. There was nothing at Fort Richardson (during) the 30s and early 40s before Pearl Harbor, (skip) and military were really opened up.

Hilary: So you were in Kotzebue for three years?

Bill: Yeah. I left there just before World War II started. I got to Seattle, I think it was July or August of '41. I was there when (the war came and) ACS got busy at that point.

Hilary: And at that point, what did you do from then on?

Bill: Well, I when it started I was a radio operator for ACS and had a little technical background and they needed somebody that knew how to install and repair radio equipment and I was one of the guys that they grabbed very quick. They started a big program to expand, ACS building a lot of new stations out in the Aleutians and to the west and throughout Alaska and that's what I did during well the whole war. I spent almost the entire war out someplace out in the Aleutians, mostly at Adak, and some at Attu, and Kiska and Dutch Harbor and Umnak and wherever they had a military base. Why, ACS built a radio facility so they could have communications in and out of there. (Skip) ...the war effort and (be) on the end of it for a while.

Hilary: When you think about that time out there, what do you remember as being the main challenges that you had to put up with, that you faced?

Bill: During, well... we didn't have many challenges before the war but when the war started we had lots of them. Where do you get the material? Where do you get the people? And although you got lots of people, not many of them knew anything about communications but they were generally bright, eager people and they able to learn and willing to do whatever had to be done and that was the main thing. (Also) getting material and getting it shipped and have some kind of a plan what you were going to do at every location and they were always pretty sketchy. I've got messages that are sent to me that just tell me what they wanted done and I was to go and do it and they were... For example, I got one when I had finished building a station at King Salmon, had two guys with me. There was three of us that built the radio station there in a couple of months and then I reported in that I was done with that and it was operating. Well, the next thing I got (was) a message that says, "Your crew to go to Kanakanak and rebuild the station." That's all it said.

Hilary: So however you could do it they wanted it done?

Bill: They wanted it rebuilt. They didn't say what or how or and they shipped a whole bunch of junk in there, antenna poles and this sort of thing. You just had to use your imagination and look at what you had and then put it together, but that's pretty much the way it operated. Adak -- I spent a lot of time there. It turned out to be a big station and one time

we had (skip) you had to have all kinds of communication in and out, an endless job. You had something going all the time, adding to it, but had to do it all in the way (in every) detail for ACS. I had a general idea what they wanted and you just went and did it.

Hilary: What were the rewards at the time? The challenges were men and equipment and no direction. What was -- when you think back about that-- what was real satisfying to you about that period?

Bill: Oh, just it was, you know... you got a lot of satisfaction out of having a free hand to do pretty much what you wanted to do and whatever came into mind in getting something built and having it work satisfactorily and also busy during the war years. You didn't have time to really worry about anything. The main object was just to keep the stuff working and keep whatever was needed going. You just did it. Tremendous job in doing just that. Things could have always been better but they were always adequate, I thought.

Hilary: You had other people who were pretty skilled to work with or you had some of the old-timers at that point?

Bill: Well, yeah, they were mostly the old-timers, you know, (who) you started out with. I think ACS had something like 140 people when the war started and when it ended they probably had, I don't know, 2,500 or more. And they were, for the most part, young guys who came to ACS and a lot of them came there because it gave them a choice of being in the war effort and being in the military and not getting shot at very much.

Hilary: What happened with you after the war?

Bill: Well, I stayed with ACS for the most part. I was lucky. Once, right after President Roosevelt died and Harry Truman became President, he decided... he was a friend from Congress with Mon C. Wallgren and with Senator Magnuson...and Truman decided to come out to very shortly after he became President. He came to Seattle, to Olympia for a vacation and ACS got a message one day that he was getting into his airplane and coming to Seattle and going to spend a couple of weeks out there with Wallgren and Magnuson and it turned out Nick Bettis (sp?) too. There was a group of them, four of them, that were old acquaintances and they took over... Truman somehow got the Fish & Wildlife (U.S. Fish & Wildlife Service) boat, the *Teal*, which was government owned. It was about... I don't know... a 125-foot boat and they just took it over and made a private yacht out of it for Truman's vacation and cruised up and down Puget Sound fishing and fooling around playing poker mostly. But ACS got told to provide somebody as a radio operator and good cryptographic person that could code and decode messages for the President and assign him to follow the President around during his vacation and for some reason they picked me.

So I got a call late in the afternoon and was told to be in Olympia by morning because that was when Truman was arriving and get on the boat and do whatever he (needs) to keep in touch, so have radio equipment to receive any messages that were sent to him

from Washington or wherever, and deliver them to him and get it back into the system. So that's what I did for two weeks with him.

The way I met him was pretty unusual. I was on the boat. The boat was tied up in Olympia and I had gotten on it before he arrived and didn't even know for sure when he was going to show up, but it was a nice sunny day and (I) had nothing else to do so I was up on the upper deck of the thing and had the radio equipment all checked out and operated and was laying there and I heard somebody climbing up the ladder right alongside of me where I was laying right by this ladder that had come up the side and I heard somebody climbing up. I paid no attention to who it was or what because there was a lot of activity on the boat and pretty soon some guy stuck his head over the deck and he says, "Hi, I'm Harry Truman." That was the way I met my first President.

Hilary: Tell me about the equipment you had onboard. Was this Morse code at this point?

Bill: No, it was Morse code, yeah. And we took cryptographic equipment. I had a cryptographic set that was a classified thing that I couldn't decode messages. All his traffic came coded up so nobody could read it. (Skip)... submitted and you run it through the machine and get a legible, readable copy out of it and then take an outgoing message you also operated in the cryptographic machine and in-code it and you would transmit it by radio. But the radio equipment was just what was normally on shipboard and, of course, the Seattle ACS office had a big set-up that sent to and received from it and they paid a lot of attention to me on board because of the (presence of) Truman and Magnuson and Wallgren. Why, it was pretty important to keep track and provide them the service they needed. We spent a big part of the time on the boat but there were other days when they went ashore and (I'd) go into the governor's office and hang around there for a day or so and then (go) back on the boat.

Hilary: What rank were you at this point?

Bill: I was a warrant officer at that time, I think I was.

Hilary: Did you go in as a private in Alaska?

Bill: Yeah. Yeah. (I was still in ACS) when Truman left, you know, I thought that was the end of all that, but about a year later I decided I had had enough of ACS for a while and wanted to do something else. I was at Tok Junction at that time.

Hilary: Now how did you get from Seattle to Tok? You volunteered to go back up?

Bill: No. The guy in charge of ACS came to me one day and... I had been down to Seattle off and on during the war. I'd get down there for a few days and they'd send me back and finally the fellow in charge of the war was... the war was over by the time and then he shipped me back to Anchorage and I stayed there awhile and then went to Tok Junction and was there for, I forget (how long).

Hilary: But then a one-person operation again?

Bill: No, it was... Tok Junction was a big station. It was a junction point for the wire line communications that went north and south on the highway. Went south through Canada to the telephone company in the US and went on to Fairbanks and it branched there at Tok and went down to Anchorage so it served Anchorage and Fairbanks by telephone line. So Tok was a busy place. I don't know -- 30 people were there at that time. Got enough of it there after a year or two and asked to be transferred back east. I got the idea I wanted to go see Washington, DC, and see something else in the military and the next thing I knew, why, I was... I got a set of orders to go to Washington. They had assigned me at that time to the White House to be part of the group that provided the White House with their communication services. They kept an Army group there. Somebody was on duty all the time in both cryptographic work and (skip) communications work for the President and White House staff, and any time the President traveled. In those days they traveled mainly by train, but they still had an airplane that Roosevelt had gotten: a C-54, the "Sacred Cow".

Hilary: Now what kind of equipment did you have at this point with the White House?

Bill: Well, they had a well-organized facility, you know. I was not the (only) one there by any means and there was...

Hilary: Had a lot of voice at that point? Did you still have Morse code?

Bill: We had Morse code somewhat, but we had a lot of voice stuff too. But when you traveled on the train, for example, you had a radio set up on the train. They had a car that was nothing but a communications car and you maintained contact by Morse code when you were traveling on the train wherever they chose to go but it was mostly a trip to New York or trip down South some place to Georgia to play golf or go fishing.

Hilary: And Truman was your President or Eisenhower, at this point Truman?

Bill: Truman was President. And I did that for a year and then Eisenhower was elected and, of course, he brought in all his friends and the old gang, the biggest part, of them went back to doing something else.

Hilary: And that included you?

Bill: That included me, yeah.

Hilary: And what did you go back to?

Bill: I went back to ACS.

Hilary: And where?

Bill: Back to... let's see, what happened to me then? I went back to Seattle and then to Anchorage. I stayed in Anchorage until 1957. At that point I decided I had 20 years in with ACS.

End of Tape 1, Side A

Tape 1, Side B

Hilary: ACS?

Bill: What they had done was a big change and they had built the DEW (Distant Early Warning) Line. The military had built the DEW Line across Canada, but they didn't have a good solid connection into Alaska from the end of DEW Line up by Point Barrow, so they built what they call the White Alice Communication System. It was built under a contract by the combination of the Air Force, the Army, and the FAA that got together and told them what they wanted in the way of communications, which involved the building of about right around 30 stations in Alaska that extended all the way from, well from Point Barrow south, connected all the AC&W [Aircraft Control and Warning], the aircraft warning system stations, which were located at like Cape Lisburne and St. Lawrence Island and Sparrevohn, Romanzof, and throughout Alaska -- all of these places -- and tied them back into Anchorage and subsequently back down by wire line to Colorado. There they maintained a big central unit to process all the reports from these Aircraft warning stations that were presumably there to detect any enemy activity -- from the Russians, is what it was.

When they built the thing... just about the time they got it done, why, they decided to contract the operation of the White Alice System to somebody and put it out for bid. And ITT/Federal Electric Company got the contract to operate the...to supply the people and operate the system for four years from that date and it was a big contract for ITT because it was one of these cost-plus deals where you spent whatever you thought was needed to keep it running and you got your money back plus ten percent.

Hilary: And so you went to work for ITT?

Bill: I was lucky and got the job as being the operations manager of the thing.

Hilary: And what did that mean?

Bill: Well, it meant that I was the operations... I was in charge of the operation of all these sites, the communications equipment in them, and we had a subcontractor, which fell under my general jurisdiction, Morrison-Knudsen Company. We contracted with them to take care of the buildings and run the power plants and the airports. And these places were out in oddball places and they all had airports at them, airfields -- and somebody had to keep them going. So we contracted with MK to do that kind of work and MK

also... Many of those stations were isolated facilities and you had to have mess halls and dormitories for the people, and MK provided the cooks and so forth so everybody got fed and (it) took care of whatever building maintenance was required... and they did that.

Bill O'Neill, who worked for MK at that time and was an old-time Alaskan -- you may be familiar with him. There is one of the buildings out at the University of Alaska that is named for him, the engineering building (*Ed note: resources building*). He was in charge of the MK operation, so he and I were together all the time, traveled to these 30 odd sites at least once a month. Every one of them we got to over four years and it was a great improvement for communications.

Hilary: Tell me about that jump that happened at that point.

Bill: About the what?

Hilary: About the jump in technology and communications and what that represented.

Bill: They provided... used the radio frequencies, which were not particularly susceptible to fadeouts or sunspot activities that caused interruptions to service. It was immune, pretty much immune to that type of stuff. So you had a very reliable system and it utilized equipment with (which) ACS had very little experience with prior to the modern day telephone facilities like all these sites had: direct telephone service more (reliable) than from... Anyplace that there was a White Alice site, you could pick up a telephone and talk back to the states just like you were talking across town. And the reliability of it! It was standard telephone equipment. Most of it was built by Western Electric Company and since they had the contract to install it, why, they used their own equipment and it was good, no question about that.

Hilary: You had better communication from some of these remote sites than people in town did.

Bill: Oh, yeah, yeah. Well, at that point, the bigger towns like Anchorage and Fairbanks, they benefited from all of this too and some of the other locations did. Nome, for example, got service, (and) over at Kodiak, a lot of other places, Bethel. They all got vastly improved communications. So that was a big change when they got that White Alice System going and I was just lucky to (work there). After four years of it, why, they put the thing up for bid again because it was one of these government deals. They didn't like...towards the end they started complaining about the cost-plus arrangements and they put it up for bid again and ITT lost the contract. RCA got the contract at that time and they took over from that point. I could have continued stayed on with RCA but I didn't want to. I decided I wanted to go back to school and get a degree, which I hadn't gotten previously.

Hilary: Good for you.

Bill: I left Alaska and moved down to Seattle and got into the University of Washington and went there for three and a half years while (skip)...in general business administration and I went back to work for ITT for a while. They sent me to Europe. They had a big contract

there for building a communications system that ran from Spain to eastern Turkey. I did that for a couple years.

Hilary: And what when you say "communications system', what kind of technology?

Bill: It was very similar to what they had what we put in and operated on the White Alice.

Hilary: So it a tropo scatter system or...?

Bill: It's what?

Hilary: Tropospheric scatter system?

Bill: Yeah, yeah. Microwave and tropo system. It was largely just a copy of the White Alice system they put in, but that I got tired of Europe in a couple years and came back home and went back to school again.

Hilary: Back to UW again?

Bill: Pardon?

Hilary: Back to UW?

Bill: Yeah. I went to UW for awhile and after to graduate school.

Hilary: In business?

Bill: Yeah. And run out of money at that time 'cause I had two kids in college along with myself. One of them was finished by that time but the other one was still going to school. So I fished around and went back to work for a communications engineering outfit in Washington, D.C. for a few months. And at that time, why, Comsat came into being and one day I was riding in an elevator down... I had been to some kind of a meeting in downtown Washington and got on the elevator to go home and here was a guy that I had known for years and had been in the Army with and he asked me what I was doing. I told him I was working for Page Engineers outfit. He said, "Why don't you come to work for Comsat." "Who's Comsat?"

Hilary: Who was the person who you ran into?

Bill: A man named Alton O. McClain. He was a retired colonel from the Signal Corps I had known for years and years. He started out as an enlisted man and he got commissioned during the war and ended up to be a (skip) retired at that time. I didn't realize that he was retired when I had met him but he had recently also just gone to work for Comsat through his former boss in the military...(he) was another person who knew General Samson.

Hilary: George Samson?

Bill: Yeah. And so he told me... I talked to him a little bit and he told me about what Comsat was doing. They were going to start a satellite system, which... I had no idea what it was about. I said, "Well, I'd think about it." And about a day or two later, I got a call from General Samson, who I knew from the Army and (he) wanted to know if I would come to work for him at Comsat and so I went and talked (skip) took the job with Comsat.

Hilary: When... what year was this, about?

Bill: This was 196_ (skip) I think.

Hilary: We can look that up, too, yeah.

Bill: I've got it. I think it was '65, late '65.

Hilary: And you were still in D.C. then at this point?

Bill: Oh, yeah. I was there. I moved there to go to work for this Page Engineering group. Stayed with Comsat then for 18 years. They were just getting started.

Hilary: Moving on to Comsat – where you had come from tropospheric scatter into the satellite age.

Bill: Yeah. I wasn't sure what a satellite was at that point. But they had started... I've got... Comsat launched what they called an Early Bird. They built two of these and launched the first one, and the second one is now in the Smithsonian. What do they call it? The Space Museum or something. They gave it to them.

Hilary: So the second Early Bird is there?

Bill: Yeah. And then here, 15 years later, they had an anniversary of it. The thing was still working 15 years later and this is... They put out another one of these things just to show people what they looked like, and I've got big pictures of it, of the satellite itself. They just finished these, this one, when I went to work for them building them. And they just launched it and they just started this service which provided telephone service between the United States and England and Germany and (skip)... kind of bothers me. I think France had a station too. They provided voice service to and from the United States and to England and Germany and France (skip) satellite. The thing provided just 120 voice circuits or one television channel. It was either/or, not both. When you wanted to run a television program, you shut down all the voice circuits and ran the TV programs. So that went on for... Immediately we started building a bigger satellite which... The satellites were actually built, not by Comsat, but by a contractor let by Comsat to Hughes Aircraft. And Hughes actually built the satellites.

We had a group of guys that we sent out to California to live at Hughes while they built these satellites and worked with them to make sure we understood what we were getting into. It worked out real well. The next one was just a little bigger than this, than the Early

Bird, but it provided more circuits and you could also run a TV channel at the same time so. And then they built other earth stations. My part of it was... The first thing I did after getting oriented and educated in Washington as to what was going on with Comsat — why, they decided to build a satellite station here in Washington (State) over at Brewster. It was north of Wenatchee about, I don't know 50 miles or so, (skip) and the contract with various people to provide the building and big antenna.

Hilary: And you're talking big antennas at this point?

Bill: Yeah, it was 98 foot in diameter, big dish thing. I've got lots of pictures of it if you want that kind of thing. (Skip) Job was supervised... what the contractors were doing and get it, made sure it all went together and was workable when they were done and at that time – why, they had completed building a bigger satellite, what they call IntelSat II (International Satellite II) and they launched it. When we got this station finished in Brewster, and was ready to operate it, and they launched the satellite and the first one they launched, we lost. Something went wrong with (skip) still reusable satellite but only usable part time because we couldn't see it 24 hours a day. Some days, part of the day, it was behind the earth from you were and so (skip).

Hilary: It was not geostationary?

Bill: No, it wasn't. Far from it.

Hilary: Now, how did you then get connected with Alaska again?

Bill: Well, I went... When I got through with Brewster and building the thing and that took about six months. Then they wanted somebody, Japan was building a station and they wanted somebody to go over there and bring some Japanese people over here. And George Samson decided I should go to Japan and (skip) over there and while I was over there, why, they were also at that time building a station in Hawaii and something went wrong in Hawaii with the guy they had in charge of that and he spent – didn't spend the right amount of time supervising. He was politicking around Honolulu and they had to make a change, and I got a call in the middle of the night one night from Samson and (he) wanted to know if I would go to Hawaii and finish that station.

So I went there and I stayed there for pretty near three years, completed the station and operated it for Comsat. At that time, after about three years of that, why, the subject came up about building another station. Well, they were building one in California and one in West Virginia. They thought, well, they maybe should build one in Alaska too. So they sent... Samson sent me and another guy to Alaska to just kind of talk to a few people and see what their attitude about it was so that is what started the thing and eventually I ended up there on a full-time basis for a couple of years.

Hilary: Who did you talk to and what made you convinced that Alaska would be a good spot?

Bill: Well, I think we thought that before we actually went. I was trying to get the public oriented. Oh, we talked to the governor -- let's see, Wally Hickel. I think it was Hickel (who) was the governor to start with. Oh, we talked to a lot of people. The main reason I went... simply because I knew a lot of people up there and I could get access to them, talk to Augie amongst others, Bramstedt, and newspaper people -- Bob Atwood -- and people that ran the Anchorage News. And talked to mayors of Anchorage and Fairbanks and just kind of spread the word what we were thinking about -- or Comsat was thinking about -- and what was their attitude. Almost without exception, well, most of them thought it was a good idea. They were anxious. The idea of getting TV and good voice service and other types of service sounded good, but not everybody was convinced by any means and they couldn't see... It was a lot of money involved to put it in (skip) and wanted to make sure Comsat was going to pay the bills.

Hilary: Now RCA or the military at this point still had the basic communication system out there?

Bill: Yeah. The military was not very enthused. They first didn't really believe it. You had to convince them that it was a good system and would provide them with lots of good communication. They just were complacent and didn't... a few of them were all right. They had (skip) command headquarters. I got acquainted with a few of them and (skip) Amos Ross, who was an Air Force colonel, was pretty enthusiastic and he had to convince the higher hierarchy of the Army and Air Force both that it was a good thing and that was a little hard to do. ACS came up for sale and RCA was already up there on the White Alice contract and they (were) fighting it because they didn't want to lose the contract. That was what it was amounted to, I think, and (skip) and they drug their feet and eventually they bought ACS. And then they were afraid Comsat was going to replace them. It was just lots of political and personal company viewpoints about it. So it took a long time to get the thing passed, get the FCC to approve it, and to spend the money to put the Talkeetna station in, but it eventually came to pass.

Hilary: Now Comsat came in almost as on a venture, didn't it? To put...it was almost like a business venture (for) Comsat to put the earth station in?

Bill: Oh yeah, yeah. Comsat paid the cost of Talkeetna totally and provided the telephone service. It had a hard time getting the ACS people and RCA to agree to use it. And the idea of expanding the satellite service out into other localities... They couldn't see money... Comsat was not willing to spend all the money that (was) required to provide satellite stations all over the place and the state at first didn't want to invest money in it and RCA didn't want to put their money in it. They didn't think it was necessary or whatever. Mainly money was the problem, so it took a long time. Really, the state had... When they (the military) sold ACS and RCA bought it, at that point they (RCA) pretty much were forced to agree to provide satellite service in a number of the outlying communities. I forget the exact number (skip) stations but they did agree to it and by that

time, why, you could build a much smaller satellite station than we took up there on the demonstration program which Comsat did (skip) on their own. Didn't want the demonstration program but eventually agreed to it and the state was starting to get interested and Bill Egan was governor and he got very interested in it. But he didn't have the money he felt that they could spend to build these Bush stations. But the contract RCA agreed to buy, when they bought ACS, called for them to put in these outlying stations and they did, and they were able to do it cheaper by that time and (skip) designed equipment. We originally had a demonstration program. When we put the demonstration program on, why, it took a bigger dish as the satellites were not high-powered but later on got bigger (skip).

Hilary: What was the significance of that demonstration project?

Bill: Well, it opened a lot of eyes I think. We took (it to) Juneau and Kodiak, Bethel, Nome. Point Barrow and ran it there for a week or so at each location. We took in TV sets and set those up in the schoolhouse or wherever we could get a space for people to come and look at it and (skip) their interest. The Native people decided this is not so bad either and (skip) people liked the idea of having live TV rather having it on tape which some of them did have and some of them didn't have. I think it had a big effect and it sure affected Governor Egan's attitude on it because he came (skip) when we put for a week down there or more. I forget the exact number of names but Egan come up with his wife and we had this stuff in a little portable shed -- shelter -- and you could get just about three people in there, very close quarters, and it was equipment. He would sit there by the hour and watch whatever was going on it so he was very interested in it. Every place he went... he was traveling quite a bit -- when we got set up, like at Point Barrow, we called somebody in. I arranged to call him first.

Hilary: So it was both telephone and TV?

Bill: Telephone and TV, yeah. And he was back in Washington, D.C.-- I think it was a state governors meeting, something like that going on -- and when we got it set up in Point Barrow, why, I called him. I placed a call to him. And the first call out of Point Barrow really by satellite... and he wasn't in his hotel room, but Mrs. Egan, when she found out who was calling, she said, "Just a minute." She said, "Hang on." So she went down and drug him...

End Tape 1, Side B

Tape 2, Side A

Hilary: Demonstration project...

Bill: Anyhow, Mrs. Egan got him out of a meeting he was in and brought him up to... and he came running up to the hotel room and I talked to him for maybe ten minutes from Point Barrow, which he was excited about. We did the same thing every place we took it, and

he was always ready to talk and be a part of it. He really was enthusiastic about it, but a lot of other people were too. Augie Hiebert was another one that devoted a tremendous amount of time to pushing for satellite communication to come to Alaska and really had, eventually, a lot of influence. Egan and Hickel and Miller, Governor Miller, and Augie, particularly had connections with Bob Bartlett, who was the senator from Alaska at that time. He got them interested in it and Bartlett got interested in it. So a lot of public pressure and the newspaper for the most part supported it, the idea of it, anyway. Eventually it came to pass. It took time (skip) and there wasn't any one person who did more than any other, although George Samson had an awful lot to do with it coming to pass because he was the chief Comsat guy that was making the decisions to do these kind of things. And if he hadn't of supported it, why, it was just wouldn't (skip) -

Hilary: Comsat didn't stay a player in Alaska after the Bartlett earth station. How did that change?

Bill: That happened because... Comsat would have stayed but in that period of time the satellite earth stations that we had -- Comsat had -- let's see, there was Talkeetna; Brewster, Washington; Andover, Maine; Hawaii; and California; Edum, West Virginia; and Guam. We had -- I had forgot all about Guam. I spent some time out there when that... but they had these stations and they were jointly owned by government decree. Comsat didn't own a hundred percent of them. When they established Comsat, Congress and President Kennedy okayed -- because the legislation, to go in... to be passed by Congress which set up Comsat, but it didn't give sole ownership of it to Comsat. They were afraid, I don't know, politics... situation... where they didn't want to create a monopoly, I guess, and they had a lot of pressure from the big telephone companies to get a share of it so the government directed that Comsat would own fifty percent of the satellite stations on the earth and the satellites themselves were all owned by an international consortium, which Comsat set up but it consisted all of the foreign countries that got involved. But the earth stations were owned by half by Comsat and the other half was owned by AT&T, Western Union International, and RCA. And consequently, everything Comsat did, well, they owned the majority interest of it. They had to get approval pretty much from these other telephone companies before they could do anything and that's when AT&T got into trouble with the government for being a monopoly, why anit-trust broke AT&T up.

At that time, they also decided that Comsat should be to these other companies (skip) and Comsat was forced to sell their half interest in these earth stations and give them to whoever wanted them, buy them, I guess. So they were forced out of the satellite business, earth station business, at that point in time, and that was really a fatal blow to Comsat. Most of their money was made, well, two ways: by their partial ownership in the satellite system itself and the ownership in the satellite earth terminals (skip) to give up the earth stations why that cut their income down (skip) and management of Comsat was (skip) retire why you did.

Hilary: Bill, when you think back on this incredible span of communications history that you played a part in, the technology, the connection among people and all, what do you think was the hardest thing that you dealt with in your career, the challenge that you had?

Bill: Not that I... the biggest thing was trying to keep everybody happy and in getting the FCC, for example... anything Comsat did, you just about had to get the FCC approval and that was difficult to do. The lawyer people are not going to like what I think about it but we had too many lawyers. I think at one point we had something like 39 on the staff.

Hilary: That was quite a change from ACS days?

Bill: Yeah, when we had one maybe. They all had... everything you did, you had to have approval, a lawyer, and these guys -- mostly you'd get your approval usually but when it came to the FCC, you just didn't (get) it a lot of times. Comsat tried to start a domestic system like exists now with all the domestic satellite TV systems. This is one thing satellite Comsat wanted to do. In fact, I (skip) set up a domestic satellite system and a group of guys working on for me and with me (skip) with the international earth stations (skip) and it wasn't for them and they stayed out of it and the people that were interested in doing something like that retired and left (skip) and virtually nonexistent (skip) disappearing.

Hilary: Yeah. Well, you know, the opposite question of that one is what were some of your biggest challenges? When you look back from 1937 to all through your years with Comsat, what are some of the things you're most proud of?

Well, I think, the start of the satellite system. I think the efforts in Alaska, they eventually Bill: paid off and this, well, I didn't have a lot to do with it what happened eventually I had a lot to do with the way it started. Today there is what 150 villages that are served by satellite and you know they all got any number of TV channels no matter where they are and telephone service. Heck, I get calls now and then from some guy (skip) number you can call and get some place in the Arctic, like out at Kotzebue up on the Kobuk River. There's people that make their living by having guys come up there to go fishing and hunting and so forth, and they all got 800 numbers that you can pick up the telephone and call them and find out, you know, how much it costs. And the fact is that I get a lot of amazement and satisfaction out of that. You know, I had quite a bit to do with that coming to pass. Not that I was involved in the actual implementation of that up there, but I certainly had a lot to do with the start of the satellite business and what it eventually grew into, no matter what anybody thought about it. There was a lot of people who tried very hard to kill it to begin with, it but it eventually prevailed and they must feel pretty good about it, too.

Hilary: Is there anything we haven't talked about or that we started to talk about and didn't finish that you can think of before we look at pictures? Why don't we... we're talking about the satellite demonstration project here, and how did the antenna and all the equipment get around?

Bill: Well, Governor Egan was enthusiastic about the thing and he made available the services of two airplanes. What the heck were they? C-123's? They were a fine airplane that the National Guard had and would carry a lot of freight. I've got pictures of them in here. He made them available and we (loaded) the equipment from wherever we had it, like they took it into Juneau from (skip) we disassembled the thing and then called for the airplanes and then they came in and we loaded them up again and they took it from there to (skip).

Hilary: The earth station, the dish itself?

Bill: The whole.

Hilary: The dish and an equipment shack or equipment little module.

Bill: Yeah. There's, well, that's the one.

End of Tape 2, Side A