Norman Glover interview by Joe Stevens 1999 September 2.
Recorded on video at the studios of KMXT TV.

NG: My name is Norman Glover. My connection with Kodiak goes back to the construction of the loran transmitting station Spruce Cape. I arrived in Alaska on 11 June 1950 I had graduated as a civil engineering major from Columbia University on the 8th of June. Things were very difficult job-wise in the states and I was fortunate enough to pick up an appointment as a highway engineer with the Alaska Road Commission. Very reminiscent of what you have seen in Northern Exposure I arrived in Valdez Alaska three days later wearing brown tweed jacket, button down blue shirt with a regimental stripe tie, gray flannels, penny loafers turning up for my first job out of school. They put me on the back of a truck and sent me 187 miles to a little town called Paxson which at that time had a population of two. There were about 18 Cats all waiting in a row for an engineer to give them some line. And so, still dressed with the tweed jacket I set up a transit in the middle of the road and gave them about ten miles of line so they could get started.

JS: What is line?

NG: Centerline and stakes to build the preliminary road out of Paxson. This was the road plan between Paxson and Cantwell. Which is now called State Route 8, the Denali Highway. It was kind of fragmentary in its design and it was necessary for me to run most of the preliminary line between Paxson and Cantwell, which is just under 140 miles that summer as well as jumping back and forth to give stakes for the road construction.

Subsequent to that late that summer I was in Juneau for a meeting and at a restaurant or bar called wing-dings owned by a man named Irving who had a collection of glass eyes that he would wear. At that time, since we had just gotten into the Korean War as of, I think the 27th of June, he was being patriotic and was wearing one with an American flag. He was very very patriotic and was buying drinks for all sorts of servicemen. I had been a Naval reserve enlisted man at the end of the second war and being in a "reserved"[exempt] job with the road commission I was not being called up.

I got into a discussion with a Coast Guard officer who I later discovered was a mustang commander who was the chief naval engineer for the Seventeenth District there in Juneau and I made some derogatory remarks about the Coast Guard and he looked at me and said, "If you're so damn smart, why don't you come show us how to do it?"

I had just enough whiskey inside of me to where I said, "I'll do that very thing."

So the next morning I went down and applied for commission in the Coast Guard. They immediately put together a examining board and had me take a very very simple test. Three officers sat there and discussed with me what I had been doing and my education and what I intended to do with my life and what have you.

The next morning I found that I had been accepted as an applicant for commission in the United States Coast Guard as ensign. One of the problems they had of course, they were having airplanes falling out of the sky all over the Aleutians and southern Alaska while trying to resupply our forces in

Korea and they needed to get a loran transmitting station on the line out here in the Gulf of Alaska and they needed an engineer desperately.

I had returned to my job, by the time they got the paperwork done, up in Glenallen and the interior where we were doing the first paving in the interior of Alaska and I got a telegram saying that I had been accepted and please report to Juneau for further transfer to officer indoctrination school in New London which I thought that was just great so I quit my job with the ARC and resigned from the Naval Reserve.

I arrived in Juneau and they lugged me in to see the district commander, he was a Rear Admiral named Joe Greenspun. Because of a very prominent nose and a hairless head he was called the Bald Eagle. He informed me that while I had orders to go back to officer's indoctrination school to learn which knife and fork to use and how to wear a tie, he was not sending me back and he was asking me to volunteer to go out to Kodiak and become officer in charge of construction out here and since the paperwork hadn't been completed on my commission he was going to send me out as a civil service employee and then have me sworn in out here which they proceeded to do later. This gave them the advantage that when it was necessary to have a civilian civil engineer I was a civilian civil engineer and when absolutely necessary to have an officer I became Ensign Glover.

I was sworn in on Kodiak by the commander of the air detachment. (It wasn't an air station at that time.) Lt. Cdr. Elmer A. Crock who is a very very straightforward, very very methodical officer. They took me down to the ship service store and I bought myself a khaki uniform because all I had at that time was a couple of plaid shirts and some working khakis. Some seaman second class proceeded to hem the trousers and jacket cuffs and I was in uniform.

Crock was a very methodical and very very meticulous officer and I remember about three years later he was executive officer at the air station in Salem Mass. and took some photographs of three flying saucers which came over at high speed over Salem Mass. It was in all the newspapers and everybody thought was to say the very least a scam if not a delusion but I've always said if Elmer Crock said those were flying saucers I believe they were flying saucers.

So I went out to the station at Spruce Cape. We had a contractor out there who was running around in circles. He had incomplete plans and did not know what he was coordinating or how he was getting his materials up. We started running like hell to try and get this Gulf of Alaska loran chain on the line. We were going to be one of the stations here at Spruce Cape. The other stations were at Yakutat and the third was on Biorka Island off Sitka and they were way ahead of us on schedule.

The other officers in the air detachment were the exec, a Lt. named Don Luzius, who I later saw when he was a Lt. Cdr and head of the air detachment or air station at San Diego, and a Lt. named Bill Murphy who I later served with when he was commander of the station in Salem Mass. The other Coast Guard units here at that time were a couple of buoy tenders, buoy snatchers as we used to call them, WAGL's, Sedge skippered by Lt. Billy Ryan who made Lt. Cdr. almost immediately after I arrived here, the second was the Bittersweet captained by Lt. Herman Rogall. I believe the numbers were, the Sedge was 402 and the Bittersweet was 389 or 398. I was at the golden plank ceremony of the Bittersweet in Woods Hole Mass about three years ago when

they celebrated her fiftieth anniversary then they proceeded to turn around and give her to the Estonians who renamed her, are still using her to this day. I think they kept the numbers but changed the designation from WAGL to WLB (or light icebreaker, seagoing).

Along about that time we got our first enlisted men who were going to help put the station on the line, and the prospective commanding officer who was Ltjg. Herbert J. Lynch (who made full Lt. within a month or so of arriving). I saw Herb in San Francisco about three years ago. He had retired as a captain. He was captain of the port of San Francisco, and I believe had been chief of intelligence for the Coast Guard.

The United States did not have a tremendous defensive force in Alaska at the time of the beginning of the Korean War. There was one under strength battalion of infantry somewhere scattered around the territory. There was a group of P-80's, the forerunner of the F-80, the Shooting Star, the first of our jet fighters, split between Elmendorf AFB (at Anchorage) and, I think Ladd Field. One of the pilots there was a captain named Doc Blanchard who had been an all-American football player (he was enormous). I was privileged to see about six people trying to squeeze him into the cockpit. I don't know how he would have gotten out if he'd had a problem and had to bail out.

At Kodiak the Navy had one seagoing tug called the Bagaduce, ATA, two P-2V's, which were sub hunter planes, and one propeller fighter, an F-4 of F-6F Hellcat, I think, which was the private toy of the captain of the air station who was a former fighter jock. The major air force for western Alaska was the Coast Guard's two PBY's. Flying in them was like flying in a beach umbrella. They could do maybe 115 or 117 knots going downhill with the wind behind them. They were kind of short on range and altitude for making it out very far into the Aleutians.

I remember later on there was some consideration of lengthening and improving the airstrip on Unimak. They were thinking of having "atom bomb tests" out in the Aleutians which many people believed was a cover for getting a nuclear capable force up into Alaska in case they had trouble with the Russians or the Chinese. Of course MacArthur was at that time yelling he wanted to nuke the Koreans and Chinese.

I was asked to go out and do a survey and put together a plan for extending that airstrip which at that time was able to take the PBY's or the C-47's or C-46's that were being used, I think, by Wien or Reeve airlines for cargo. I've forgotten which one flew out there, but they would come in periodically and they could just barely squeeze into the strip, at least the C-46's could. The C-47's, the old DC-3, could squeeze into almost anything. The problem the PBY's had was they couldn't carry enough fuel to fly around the peninsula and they didn't have the ceiling to fly over the mountains, so their way of doing it was flying over the "Port Heiden Elevator" at Naknek, a glacier which under the right conditions had a big updraft which given the right aerology they were able to get a boost of couple a thousand feet and then just sort of coast down on in saving fuel. But it was an interesting trip.

I think about 20 years later I got into a similar plane which is run by Antilles Airboats down in St. Croix and I remember looking at the pilot and saying you know it's older than you are and the last time I was on one of these things she lost her hydraulics and we had to keep bouncing her until the wheels flipped down and locked and sure enough it happened and we had to land on the water. Didn't have that opportunity around Unimak that day

because there was a lot of ice in the water. In any case, it was a very educational experience for a 21 year old at that time being officer in charge of construction where your nearest boss was twelve thirteen hundred miles away and sort of had to rely on common sense or uncommon sense and Marks Mechanical Engineer's Handbook.

JS: What did you build at Spruce Cape?

NG: We were building a loran transmitting station. I don't know if you know what they are. It's a long range aids to navigation which depends on a series of timed electronic signals. The difference in time between the signals gives you a plot with three signals, which gives you a series of hyperbolids around the world so that there are only two places on the world where you can get this identical signal and if you know which hemisphere you're in, it's fairly evident as to which of the two locations you're at.

This station was composed of a couple of thirty-two foot wide diameter Quonset huts, one for quarters building and the other for transmission and power building.

JS: Were they in line with one another?

NG: Not quite, they were in series, but they were slightly out of line. They had a jog which was required by the topography.

JS: They joined them later.

NG: We joined them initially. That little joint, that jog, bowlegged, broken legged, corner there was part of the original construction. Because of the signal we were putting out (which required a three-hundred foot diameter buried copper-wire ground system) our signal was one megawatt which required a tremendous amount of grounding. Almost anything that was out, if it wasn't grounded or protected, would have been fried. I've seen somebody drop a handful of nails in the ground system during the construction, or left out a hammer, and when you would get a megawatt coming out of that station, the hammer would get so white hot that the hammer head would explode. The nails exploding was like hearing big firecrackers out there.

JS: How tall was the tower?

NG: It wasn't a tower, it was an eighty foot stick. Eighty foot out of the ground. A hundred foot stick.

JS: Just one?

NG: One. And we also had another stick for our communications antenna but because of the press of time we didn't have time to build a ground system for that but we were able to relocate the location of the antenna that was the communications antenna.

JS: Was this oriented on the north side of the peninsula?

NG: No, the loran antenna was oriented just about on the south side of the peninsula oriented just a little relative to the length of the peninsula about 15 degrees to the southeast. It was generally facing, I don't remember the azimuth, but it was pretty close to east-northeast. Maybe due east, or pretty close to it. The other antenna of course, the communications antenna,

was oriented toward Anchorage. That was around the cape on the north side. We didn't have a ground system. Because we were pushed to go on line, I took a coil of wire and threw it in a little pond that was at the foot of the antenna.

We were pushing very hard to get things in. It became apparent, unfortunately, when the equipment arrived that someone had done a good thing for us. In order to have a sound signal without injuring the building, which was metal, it was necessary to ground every piece of sheet metal and every piece of the metal ribs to the foundation by tack welding at two points against every adjacent piece of metal then checking the building over and over again to see that we did in fact have a totally grounded building. And inside that we built a room which was entirely grounded building it with 2x4's with copper mesh inside and outside then covering that with plywood. Theoretically the nails were just short enough so that the nail tips would not touch each other and we had a totally grounded room to put the T-137 transmitter and A-138 amplifier to get this big heavy signal.

It became evident, in either December or January, that someone had done a very nice thing for us, somebody had given us the latest equipment rather than that which was specified. Unfortunately the equipment was too large to come in through the door of the building. So I found myself in January on Kodiak, with a combination of rain and snow with enough wind, which was coming just about horizontally across the island, tearing the wall out of the Quonset hut and then the wall out of the grounded room, putting the equipment in and then trying to get the thing regrounded and on the line. We did it eventually but it was interesting.

Strangely enough about thirty years later, I met an engineer at ITT. I was at that time working for them. He was at that time assistant director of planning, or something. What a planner. He was the man who made the decision to send us the new equipment rather than the equipment that the building was planned for. He and I had a long rather acrimonious discussion on that subject. Yes. At the time, I could have torn his head off.

I mentioned before these were built in Quonset huts. The Quonset hut was developed at Quonset Rhode Island which was one of the Navy civil engineering corps's major stations. It was from a basic design which was put together by a Royal Engineer's officer named Nissen in the First World War. This cylindrical design seems to have gone on and on forever. The Quonset hut was put together on light-gauge cold formed metal ribs which formed a half cylinder. The top half of a sewer if you wish. Then you had nails which were to be driven into these sheet metal light-gauge formed ribs. The ribs were of two pieces of metal tack welded together, but it had a ripple in them. The two pieces of channel which were put together had a grove between them and a ripple in the web so that when you drove the nail or screw into it, it would be clinched by the ripple in the web which was a very clever way of designing it. It does very well. (They later used that for nailable steel joists for nailing plywood sub-flooring on in construction after the war.) Then of course, sheet metal was applied to that. If you used nails they normally had a lead head which would spread out as they were driven to make the hole comparatively weather tight. We would use nails in the valleys of the corrugations. Connected at the top of the corrugation they had a self-tapping screw with a little neoprene or rubber washer on it. You'd have to draw it down on that. Then of course we painted the thing on top of that with portland cement paint.

I mention the Quonset hut because many of the buildings which still are probably in use somewhere around Kodiak which were used in the Second World War at Ft. Abercrombie and at the naval station were Pacific Huts which were in the same cylindrical form but they were made out of 2x4 lumber on twelve-foot quarter arcs with a piece of particle board on outside and inside with a wooden spacer in between and full of fiber insulation and they could be hitched together without further framing with a simple strip of pressed wood screwed or nailed at the top. It would be set either on a plywood platform or a reinforced concrete platform.

During the period when we were building we had been doing some studies on foundations in permafrost and what have you up farther north with the road commission. We attempted to build foundations just by putting in a four-inch slab and digging a trench which we would use for the perimeter, putting in as a perimeter form a corrugated piece of cement asbestos and then backfilling it. We found that we were getting as much (Because we were typing to keep the frost from getting down under the building and heaving the foundation up) and we found with a four foot piece of inch and a half cemesto board that we were getting as much resistance or insulation against frost as we could get with a twelve-inch concrete block or even an eight-inch concrete wall. That did speed up some of the construction, but here we actually went down with footings about two feet wide and then a concrete wall about eight inches thick but we went down about four and a half feet to keep from getting frost heave under that.

The buildings were heated with number two diesel oil. We had our own engine-generators which provided not only the power for the station but also the power for the lighting as well as the signals.

JS: That was a megawatt transmitter running on a generator?

NG: A one megawatt transmitter.

JS: Were the generators in a structure?

NG: The generators were in one of the two structures. They were in the same structure as the transmitter-amplifier. The other structure was a quarters building. We also had a two-bay garage which separated the transmitter-amplifier section of the building from the engine-generators. The station was supposed to be an eighteen-month station at that time, which didn't make the young men who were going to be stationed there very happy. It went on-line as per schedule on the first week of February 1951.

JS: Today we know that as Loran "A".

NG: No, that was loran "C".

JS: It was loran "C" in 1951? One-hundred kilohertz?

NG: As I remember it, that's the way it went on-line. It was loran "C".

JS: Was there any loran here before that?

NG: I do not believe so. I believe the only thing you had here prior to that was HF-DF (Huff Duff).

JS: The Coast Guard HF-DF operator at Chiniak in '45 said during a snow storm they had two guys come in looking for supplies from the loran station at Narrow Cape.

NG: They might have... there was loran at Cape Sarichef, and I think it was at Adak, and up on Murder Point at Attu.

JS: So you don't know really whether there was one at Narrow Cape or not.

NG: No I don't know. If it would it might have been some sort of temporary location. You know, during the Korean War, we had mobile stations which were put together.

JS: This was '45.

NG: No, I don't know if there was one on line there. There was no loran in the Gulf of Alaska in 1950.

JS: What year was this you built Spruce Cape?

NG: Spruce Cape went on-line on the first week in '52.... The first week in February 1952. It was cold and wet. And we weren't quite sure whether we were winning or losing the Korean War yet. They had a new commander of the air detachment, a man named John McCubbin. He had some of the pilots out there kind of frightened (chuckle) because he had them out practicing torpedo runs with these PBY's and these guys would come back, you know, and get them in the "O" club and all they could say between drinks was "117 knots and doing torpedo runs". We were sure he was going to make admiral and very frankly, I saw him last, I think in '73, and he was in fact a rear admiral down at headquarters. Yes. A very tough but good man.

JS: Are you in contact with people today.

NG: Some of them.

JS: On the internet?

NG: No. I do a bit of traveling still and did a little of consulting work and as I say, I visited with Rocky Lynch, Herb Lynch, in Oakland about three years ago. One of our petty officers was a fellow named George Pellozzi. I had remembered that he came out of a little town north of Hartford and I was driving through Connecticut several years ago and I picked up a phone and asked for an operator to see if she could find somebody and lo and behold I caught him and he was up there. He'd gotten out of the service and gone to engineering school to become an electrical engineer for Combustion Engineering Co. and he was retired by this time.

I tried retiring about fifteen years ago. It didn't work. I have lived and worked on six continents, everyplace except Antarctica. I was going to there in '56 but I got married instead.

JS: In retrospect which would have been the better decision?

NG: I think I made the right decision. I'm sorry I missed Antarctica. An old admiral I worked for wanted me to come with him. He kept writing me at Christmas for many years telling me I'd made the mistake and I would have made admiral.

JS: Can you describe the road from Spruce Cape into town back then?

NG: It was a road on the south side, I guess it's the southeast side, of the cape. I noticed today a piece of it still is in service, not in service, but it exists. This is the area where just about joins the existing road at a pond about 1400 feet in from the tip of the cape. This pond was our water supply system. We put in an eight-inch cement-asbestos pipe and a filter there. We did not have any water treatment but that was our only water supply system and I remember once in the winter of 1951 that it did freeze up and I remember getting up to have a glass of water at night and running the water and tasted kind of funny, turning on the light and it was chocolate brown, it sure wasn't chocolate milk.

JS: Did Kodiak have telephone service?

NG: Yes it did, but it was adventurous. We had no phone out at Spruce Cape at that time. Phone meant a drive into town. I fact one of the men who worked part-time on the project was Leif Norman who I understand stayed in Kodiak for many years. I stopped at Normans, he's dead unfortunately. We used to send a great many of our normal routine messages into town, have him just call them in. Otherwise I'd have to trot out to the base with a message form or go down if one of the ships was at the town dock.

JS: Leif's daughter is still here. Were the phones in town dial or manual?

NG: You'd dial.

Interesting thing about the construction... When I'm out at the base I noticed you have some of the housing that's on this little sort of a hill that's still there. This was built in 1951 for the Navy. They built a hundred and forty some units out there as I remember, and they sent us a special projects officer a commander from Washington, his name, I think, was Jack McFadden. While he was here he was transferred onto the permanent party at the Naval Station and of course he wanted to bring his family up and he was put on the list at the bottom of the list. He refused to approve the houses for occupancy until he went to the head of the list and became number one. I remember seeing and talking to him about that about ten years later up in Rhode Island at Quonset Point one day.

This fellow got out of the service certainly within ten years after that, put his time in, and went to work as head of construction for a firm called Eggars and Higgins, or Eggars partnership, which is a very prestigious designer of churches and college type buildings. Haven't seen him since. Haven't seen too many of the people from Kodiak other than kept in touch with some of them in the service.

JS: He was a Coast Guard officer?

NG: No he was a naval officer. CEC. I'd been navy enlisted man myself in the CB's before I went back to college.

JS: Forty-third CB's built a lot of Kodiak.

NG: I was with the seventh and the 102nd. Didn't make it [To Kodiak].

JS: Do you remember anything about the communications radios you had at

Spruce Cape?

NG: Except for comm relay by the cutters or air detachment, most routine communications at that time was run by what was basically called ACS, The Alaska Communications Service, which was basically Signal Corps enlisted men living on the economy. They did everything from clerking to running the signaling keys in whatever we had for equipment.

JS: You had ACS personnel at Spruce Cape?

NG: No. When we went on line finally, we had our own sideband where we would speak to the cutters here and the air detachment, but we were able to also speak to Nan Mike Jig which was Coast Guard in Juneau.

JS: This was on AM, probably, wasn't it?

NG: Yes.

JS: Maybe on the 2 meg band?

NG: Got me. Long since forgotten if I ever knew it. Nearly fifty years sort of dims the memory a little bit.

JS: The old ACS station is right next door here [to KMXT]. It's still there. Where we are sitting now is called Signal Hill.

NG: Probably had a couple of masts and halyards here for signaling.

JS: A lot more than a couple. This whole hill was full of rhombics.

NG: Place has a lot of history.

JS: Did you get to see NOJ, the Coast Guard Commsta. It's close to the airport.

NG: I see the old Coast Guard air detachment hangar is still there. I remember that runway. We had a lot of enlisted aircraft pilots in those days.

JS: I remember the last one was John Greathouse.

NG: There was one named Cooper. He wore the round white hat. He was airplane pilot first class. I saw him later when they'd made him ensign. The Coast Guard was funny, Ensigns carried a bit more clout because they had a tendency to take chief petty officers and make them ensigns. Because they had a great deal of restriction on the number of warrant officers they could make so they could make temporary ensigns a lot easier. This Cooper would be flying as the command pilot with a two-striper lowering the wheels and operating the radio for him and that sort of thing. They were good pilots. One of them, Roy Flatt who had just been made up from chief to Ltjg. He was out here at that time. I had forgotten that. I saw him later down in the eighth district when he was flying out of Keesler AFB and unfortunately he'd been with one, bad weather, plane that put a wingtip into the gulf while landing, while trying to make a pickup on a rescue and the plane cart wheeled and went down like a rock. He was the only one to get out. He was not feeling very happy about flying at the time.

JS: Do you know where Elizabeth City Coast Guard is? That's where I come from.

NG: Yes. North Carolina. There used to be a lot of the old coast guard families down there, the Midgetts, the Tilletts, the Salters, the Merritts. We finally got a Midgett up here in the seventeenth district and I remember when he reported on board, the captain looked at him and said, "You having trouble with your family boy?" Evidently he had been playing around with somebody else in the family's wife and the family had a council and decided to ship him as far away in the coast guard as they could.

JS: Did you get around here to do much exploration of the old WWII stuff.

NG: A little bit, not much, we were pretty much under the gun to get that station on the line. I used to spend a lot of any spare time down on the rocks on the southeast side of the cape there. When I was commissioned, they didn't have time to send me to indoctrination school and officer candidate school and they figured they weren't going to teach me any more about engineering, my degree out of Columbia was pretty sound. The district commander had me in to look at me and to just check and see how many heads I had. In the five or so minutes he spent with me, the only advice he gave me was not being too familiar with the troops because I was alone and needed to reinforce my authority and putting ten percent of my salary in common stock. I should have listened to him more closely. I'd be a richer man today. I spent a lot of time down on the rocks talking to the seals. We had a lot of them in those days [that] used to hang out there. Unfortunately towards the end of my tour I think the seals were starting to talk back.

JS: How come those two Quonsets ended up at an angle like that?

NG: I think it was just the topography. That was the site. There was going to be some further housing up on the hill. There is an 18 foot by 40 foot pad where we had built another Quonset and it burned during construction. And they evidently never sent up another replacement building, it doesn't look like they ever built anything beyond that. It looks like I picked the right year to come, the 32 footer is on the books for demolition.

JS and NG then rambled off topic and ended the interview.

[On April 25, 2000, Norman sent in some spelling corrections and other minor corrections to this document. These have been incorporated.]