DOB: Today is the 30th of December, 1998. This is Dian Belanger. I'm speaking with Paul Noonan about his experiences at Wilkes Station in Deep Freeze II.

Good morning, Paul. Thanks for talking with me.

PN: Good morning, Dian.

DOB: Tell me something about your background: where you grew up, where you went to school, what you decided to do with your life, and in particular anything from those places that might hint at how you would end up in a place like Antarctica.

PN: Well, I grew up in South Boston, which is part of the city of Boston—we were really in the city. It wasn't a very fancy neighborhood by any means. It was cold-water flats and coal stoves and all. I remember as a kid lugging buckets of coal up out of the basement.

I went to the local schools there. And I went to Boston Trade High School, which was in the center of the city which meant I took streetcars and subway to get to school. I graduated from high school in 1949—

DOB: In Boston?

PN: Yes. From Boston Trade High School in 1949. So I remember quite well World War II era, though my dad was too old to go in. I had a lot of cousins and all who lived upstairs in a tenement house or next door, very close, who were involved in the war.

And we lived just a few blocks up from a dock area, so there were always ships coming in there, so there were always a lot of sailors around. I remember that.

The South Boston Navy Yard was close to where I lived, and you could go down and see the ships, and occasionally they'd have an open house. This was in later years after the war. I guess I always got interested in the Navy just from being in that environment.

I tried to get in the Navy when I graduated from high school in 1949. In '49, the Korean War hadn't started. World War II was over, of course, for a few years, and they were cutting back the military quite a bit. So they weren't taking anybody, practically.

So then in 1950, Korea broke out and I tried again, and they were taking everybody.

[Laughter]

PN: So that's how I got in the Navy.

DOB: Did you go to Korea?
PN: No, I didn't. I went to boot camp at Newport, Rhode Island, which had been closed since World War II. They reopened it when Korea broke out, and the first four companies—I was in Company 4—were the first group to go through during the Korean War. I graduated from boot camp.

In boot camp you took these tests, sort of aptitude tests, and I had thought about going into the submarines. I'd been aboard a few subs on tours and stuff and it kind of caught my fancy. But my company commander said, "Well, with your grades you could go to a school and all, and you should do that." I figured he knew what he was talking about, so I opted for Airmen School.

They sent me to Memphis, Tennessee, to basic Airmen School where you learn about airplanes and how to handle yourself around them, on the flight deck of an aircraft carrier, that kind of thing. There you took more tests, and it ended up that with my grades I was fairly up in the class, and I had one of the top choices. And I opted for a rating that I could fly in.

During high school—I should mention this—what I majored in high school was an aircraft maintenance course for three years. So I was always interested in airplanes.

So at that time, photography was one of the few ratings left that you could fly in. So I said, "Okay, I want to be a photographer." You didn't have to have any experience or anything—they just went by your grades. So I ended up going to photo school in Pensacola, Florida.

When I was in photo school, there were a lot of veteran photographers there going to advance photo schools. We lived in the same barracks and all, and we talked to them and would hear about their experiences and everything.

I had a friend who was on an aircraft carrier off the coast of Korea at the time in the winter, and he was writing to me, and he said, "Don't do it." [Laughs] It's the worst place in the world to be on the flight deck of a carrier in the winter.

In talking to these other photographers, they said, "Well, if you get into the aviation end of it on a carrier—if you end up on a carrier, a carrier's photo lab is sort of like a factory. You have processing machines and all this stuff, and their job is aerial photoreconnaissance and so forth. And it's not what you think of photography as. It's more like working in a factory."

So I took their advice, and when I finished photo school—here again you had your choice by grades—I ended up picking an assignment to the headquarters of the 10th Naval District. I'm not exactly sure where it was. They told me it's in the Caribbean.

So I ended up going down there to a small public information laboratory in the Caribbean, and since it was small, there were only three of us there. There was a chief, a reserve first
class came in, and myself, and I was just a seaman. The chief was very supportive. I was sort of the worker bee of the group, I guess, so I got a chance to experiment a lot with photography and do a lot of public information stuff, magazine covers and things like that. And I really enjoyed it, and it was a learning experience for me.

I was young, single, I was nineteen, probably partying too much. There was a lot of partying went on in San Juan in those days. You could go to the club and get two rum and Cokes for a quarter.

And I thought after I was there about eighteen months, I thought this Navy life is pretty good. But I also realized it wasn't the real Navy, and I thought, well, if I want to stay in the Navy, I'd better find out what the other half is like.

So I put in for a transfer, and I asked for a cruiser knowing that I didn't want to get into the factory mode of the carrier lab. A cruiser lab is small. Chances are if I got one it would be my lab. They only have one photographer aboard a cruiser.

And it just happened that the USS Worcester, out of Boston, had just finished a yard period, and during the yard period their photographer had left the Navy. He didn't reenlist. The ship was getting ready to go on a shakedown cruise followed by a midshipmen cruise, and then a six-month Mediterranean deployment, and they needed a photographer just as my request came in. And bang, I got orders in two weeks.

DOB: How did you find out about opportunities in Antarctica in all of this?

PN: Okay. After I finished my tour of duty on the Worcester, my next assignment was to the Naval Weapons Proving Ground in Dahlgren, Virginia. I was at Dahlgren when requests for Antarctic volunteers came out. I volunteered, and I got a nice letter saying, "Thank you but at the time we don't need you," is basically what it amounted to.

So I went and bought a car, and I had the car about two months and then I got a letter "Welcome." What happened is the fellow who was one of the photographers couldn't pass the physical—there were some problems. So they called me. I was one of the next guys on the list, I guess, I don't know. But I got called anyhow and went to Davisville, Rhode Island.

DOB: Did you have any prior cold-weather experience?

PN: Just Boston winters. [Laughs]

DOB: Okay. So you went to Davisville. What happened there to prepare you for the ice?

PN: At Davisville, the first thing was they had this group of psychologists, and psychiatrists I guess, who screened everybody. We took these batteries of tests and they asked us questions like "Why do you want to go to the Antarctic?" and all that kind of thing.
My answer was it was an adventure, and that's really the way I felt about it. It was somewhere I'd never been; I wanted to see it if I had the chance. I really joined the Navy to see the world. I really felt that, and that was the big theme in those days. It was a friendlier world to the U.S. in those days.

So we took all these tests, and then we were given physical training. We were part of a Seabee unit. MCB Special is what the unit was called. So we did the military thing of exercising, trying to stay fit because the elements would tax you down there, more or less.

But our main role was to access all the supplies for our discipline—mine being photography—for all the bases and all the ships that would be going on the expedition. Davisville was the staging area for the operation.

So that's what we did during the summer months is the supplies would come in, we would crate them for each individual base or each ship, and that's what we did all summer, really.

DOB: Who decided how much, for example, photographic equipment and what kinds of equipment?

PN: They were decided by, from what I understand, people in the staff at Washington. There were photographers in the photo offices in the staff at Washington who were old polar explorers, but I think they were a little out of touch with photography possibly at that time, I don't know, because we got a lot of stuff like bulk chemicals and stuff like this that were never used—not at my base. And the handling of those things was just a big waste of manpower. There was a fair amount of that, but overall I think they did quite well because most of the equipment worked well.

We learned down there like you use a camera outside, you don't take it inside and let all the condensation get on it because as soon as you take it out again, it's going to freeze rock solid. Well, what I did was in one of the tunnels outside in my lab—the tunnel connecting to the other buildings, which was a wooden tunnel, but it was all covered with snow, of course, after the first blizzard—I built some shelves, and I would keep one set of gear out there so it would constantly stay cold. It never was brought inside.

DOB: So you had warm cameras and cold cameras.

PN: Exactly.

DOB: Complete sets.

PN: Right. And I imagine the other guys did the same thing. I don't think it was that unique, but I learned the hard way. No one told me to do that.

DOB: What did you know about the Antarctic continent before you went there?
PN: Probably nothing. I just knew where geographically it was located. It was cold and there were no living people down there. You didn't have any polar bears, I knew that. Not much else about it, really.

There was a lot of buildup on TV and in the papers about this operation, especially in the New England area because Davisville, Rhode Island, being the staging area and some of the icebreakers were out of Boston, so that area got a lot of press.

I remember seeing the shows on . . . what was that TV show? Wide World or something? I can't remember now. It was a very popular national television show. They did a lot of stuff on the staging of the expedition and so forth. Through that we probably learned more about where we were going and what we were going to be doing than the exercising and all we were learning there.

DOB: You went on the Arneb to Antarctica?

PN: Yes.

DOB: What stands out in your memory about that trip?

PN: Well, one thing that does stand out in my memory, and it always has, was the departure from Norfolk. We had left Davisville, and the ship pulled into Norfolk to pick up some supplies. And that morning that we departed—and we knew we were going to be gone for over a year—it was a rainy, dreary morning. We were lined up by the rail, there was a band playing on the dock, and there was almost nobody there. And it just seemed a little strange.

DOB: It sounds forlorn.

PN: Yes, it was, sort of. That sticks in my mind for some reason.

DOB: How long did the trip take?

PN: That's a good question. I can't remember exactly.

DOB: Weeks?

PN: Well, I guess, too, you'd have to say the trip to where, because . . . we went down through the Panama Canal, we had the initiation ceremonies on board. And of course the ship had been down the year before, so all crew were shellbacks, and all of the Seabee unit, mostly, had never been across the equator. So the crew had their fun with that.

We went to New Zealand, and we spent, I think, a week in New Zealand before we headed for the ice. I believe we went into McMurdo first, but I'm not sure of that.
There were different task groups in the task force, and the Arneb mission was to carry the
supplies and the people for the bases at Cape Hallett and Wilkes Station—Wilkes Station
being the one I was going to stay at.

I don't remember if we headed directly for Cape Hallett or if we went into McMurdo first,
then went to Cape Hallett. [Actually, the Task Group commander diverted the Arneb to
McMurdo Sound after it arrived off Cape Hallett on December 19, 1956. It returned to
Hallett on December 29th.] But in trying to get into Cape Hallett, we had severe weather
problems.

We got trapped in a really bad storm, I believe it was New Year's Eve, where the
Arneb—there was an ice shelf that the icebreaker had made the turn around a corner of the
ice shelf—I think it was the Northwind, but I'm not positive. It was a Coast Guard breaker.
I get confused. I made several trips down there with different breakers.

The breaker had gone around the corner of this ice shelf, and the Arneb got pinned up
against the side of the ice shelf before it could get around the corner. So we had a corner
situation with the icebreaker sitting over here, so to speak, and the Arneb pinned up
against—say this is the ice shelf—pinned up here.

The pack ice, which extended out for several hundred miles I'm told, was being blown by
hurricane-force winds down on the ship, and it was just popping the hull—squeezing the
ship.

I was up on the bridge taking pictures, and I overheard some conversation between the
captain and the exec about the possibility of having to abandon ship. They had every
pump they could have—we had a frogman team aboard to do some blasting for the ramps
to haul the equipment on the ice shelf. That's why they were there. But the frogman
team was sent down into the cargo holds in their drysuits, I guess they were, because the
cargo holds were flooded. Their ordinary damage control teams couldn't go down in
there in that icy water to try to shore up things. So the frogmen went down and they tried
to shore up the hulls, the beams as best they could. But the ship was still taking on
tremendous amounts of water.

I have some pictures of the pumps dispelling the water. It's like a waterfall going over the
side of the ship, it's going out so fast.

The only thing that really saved us, I guess—because the ice shelf was breaking up between
us, too. That was cracking. So you were looking at going from the frying pan into the
fire, so to speak, to get to the icebreaker. The icebreaker couldn't get back to us. But
they were thinking we might have to attempt to get over to the icebreaker.

Fortunately the wind stopped, and that is really what saved us—saved the ship from being a
total mess.
They patched it up somewhat, and it was ordered to proceed to McMurdo Sound for evaluation as to whether or not it could go on with the rest of the operation. So we went to McMurdo Sound, and at McMurdo Sound they heeled the ship over by swinging the tractors and the landing craft out on the port side to bring the starboard side up above the water line so they could weld and repair the cracks.

There was a good deal of cargo that was damaged with the water and wasn’t usable, but it wasn’t that bad that we couldn’t go ahead.

So we went back, but by now it was getting later in the season. They dropped off a contingent at Cape Hallett, left them there, and the Arneb and one of the breakers, the Glacier, proceeded on to Wilkes Station site.

DOB: When you started to approach the continent, what was it like? Were you surprised at what you were seeing? Describe it to me.

PN: Not surprised, but I guess in awe of the magnitude and the splendor of it. To see these huge icebergs and— they told us one time there was a huge iceberg that we passed that had broken off the ice shelf, and they said it was almost as large as the state of Rhode Island according to the radar they tracked it with.

So to see those things was really something, and to see an occasional seal or the penguins, because you’ve been at sea for a long time, you haven’t seen anything, so anything is a novelty. But of course this was the first time in my life I’m seeing them anywhere, so that was a novelty. But the continent itself is by far the most awesome thing to behold down there.

DOB: What about it?

PN: I often thought that I was fortunate being at Wilkes for a couple of reasons, one being its geographic location. It was on the coast, but yet it was one of the northernmost bases, and therefore had almost seasons. And it had exposed land surfaces. It wasn’t all ice and just white and barren. There wasn’t any vegetation, but there were rocks and rock formations from glaciers and so forth.

Of course it didn’t take long that most of them got covered up when the first cold weather came in, the first blizzards. And with the . . . can we stop a second? I want to ask you something.

[Pause in recording]

DOB: So you were approaching Wilkes Station then at the end of January of ’57?

PN: Yes.
DOB: And I have read that Wilkes Station was built in less than three weeks. Tell me about it.

PN: Well, in less than three weeks they left us. [Laughs] Yes. By then it was getting late in the season, so they were concerned with the ships getting trapped—

[Interruption]

PN: Wilkes was at 66°.

DOB: Sixty-six degrees. Okay. I'm sorry for the interruption. We were talking about Wilkes Station and the ships coming in late in the season and having to leave quickly.

PN: When we arrived at Wilkes Station, the concern was the lateness in the summer season. So what they did was they asked for volunteers on the ships' crews to augment the Seabee unit.

Now the Seabee unit, somewhere I heard they were going to be there like a month-and-a-half to build this base. But what happened was, because of the damage to the Arneb and running late, they split the Seabee unit and left part of them at Hallett to build that base, and went on to Wilkes. So you had a smaller contingent there to build this base.

So they had all the ships' company—electricians, plumbers, damage control men, anyone that had building skills of any type—they augmented the Seabee unit with those people. And they worked around the clock. They worked eighteen-hour shifts, at least, for . . . I can't remember. It seemed they were there two, maybe three weeks.

And basically what they did was they got the ship unloaded, and that was a big, huge task. Loading the landing crafts, bringing them in to the beach, and hauling them up with tractors, hauling the sleds out of the boats up a ramp that the frogmen had blasted in the permafrost. See, this wasn't ice, it was permafrost, and they had a terrible time trying to get a ramp that the tractors could haul these heavily loaded sleds up.

They finally got that going, and they worked very late. It was getting dark even. I remember them setting up a campfire down for the beachmaster who controlled the traffic—the boats coming in to the beach—with a fifty-gallon drum down there blazing to try to keep people warm and also to give them some light, because it got to the point where it got dark. Not really dark, but it was getting dusk-like.

Well, they got the ship all unloaded, and they built the structures of all the buildings—the two barracks buildings, the chow hall, the garage, and the one other building that was sort of a recreation building—they got those structures all up and they got the powerhouse going, and then they departed.
So there were twenty-seven of us there—fifteen Navy men and twelve scientists, as I recall—and we worked at least eighteen hours a day, seven days a week through I believe it was the first of July that the IGY program started? Yes. In order to get the base up and operative and running by the first of July, that's how we did it.

DOB: What were *you* doing all this time? Were you taking pictures of them doing it or were you building?

PN: One of the first tasks I was given—I was a photographer, but at this point I didn't have a photo lab because that wasn't high on the priority list.

And the first snowstorm we had, which wasn't long after the ships left, we discovered that we could be in big trouble because all the equipment and everything was out in a . . . I guess you'd call it like a huge staging area that was on the ice. It was on land but it was ice-covered land, and all the ships just loaded all this stuff off there, but they didn't sort anything.

So we had all of the equipment for a lot of the scientific disciplines, the equipment to repair the generators or the tractors, everything was out there. My photo supplies, the weathermen's supplies, everything.

When the first storm came, we suddenly realized you couldn't find anything, so this became a fairly good priority. So the Officer in Charge designated me to straighten this mess out.

There were two Seabees who were driving D-4s with forklifts on them and me, and I would go out and wipe snow off this pallet or crate and find out what it was, and direct one of these guys to pick it up and put it in a certain area. And I did that for weeks, just to get this thing straightened out.

DOB: An important task to be sure.

PN: Yes. It worked out all right.

DOB: Where did you put it?

PN: Just on the ice, but we knew what was where. The weathermen's stuff was here, the mechanics' stuff was there.

DOB: Did you have shelter for most of the supplies or were they just left outside?

PN: They were left outside, yes. They were well packed, but they were left outside.
When things slowed down a little after the—we had one Seabee builder who was in charge of—the first blizzard we also realized you couldn't get from building to building, so one of the big tasks was to build some wooden tunnels connecting the buildings, which we did.

DOB: So Wilkes did not have tunnels at the beginning.

PN: No, Wilkes didn't have tunnels, but we soon realized we needed them. Of course everyone helped pitch in, and under the guidance of George Magee, the builder, we constructed the tunnels.

Of course I kept saying, "When are we going to build my photo lab?" Well, eventually Magee got to help me a little and showed me things to do, and I built most of the lab myself, which was fine. It was a good experience.

But then I learned to be a carpenter, I drove a tractor, I did some welding. Helped Mac weld some cleats on the tracks that we were hoping would keep the tractors from sliding sideways when we tried to go up the glacier. It had mixed results. I had had a little welding training in high school in the trade school I went to, so I could help Mac with that.

And then we got into the IGY program, and there were several of the scientific disciplines whose work was recorded photographically on film and all, so I assisted them in developing their material and so forth in the lab. Mixed chemicals for them, that kind of thing.

DOB: I want to ask you about your photography in a minute. I was reading, however, that scientific leader Carl Eklund wrote that "From the beginning our men claimed Wilkes as the number one station in Antarctica." He went on to talk about that it was very clean and neat, and I saw that in the crew's book housekeeping was shared and maintained to a high standard and so on. Do you agree with the statement and, if you do, to what do you attribute the overall truth of it, that it was the best?

PN: Well, I agree, yes. But I didn't see all the other stations. I did see McMurdo, and McMurdo was, I guess, like a metropolis compared to ours, and it had metropolis problems.

But what would I attribute it to, I would attribute it to people. Carl Eklund and Lieutenant Burnett. Carl, of course, being an old polar explorer—and I don't know this to be a fact, I wasn't privy to any conversations with those people in regards to this stuff—he probably realized that living close together like that, that there were two things that gave you pride in your own living quarters because you could easily become a bum, so to speak. We didn't bathe that often down there, so keeping your living quarters clean and sanitary and all was important.

DOB: Did he insist on that or did you just do it?
PN: Well, Carl wouldn't. If anyone insisted—no, no one insisted because everybody did their share. But the military officer, Lieutenant Burnett, would've been the one who insisted as far as the military people went.

We were berthed where the military were in one barracks and the scientists were in another, plus the two officers: the doctor and the officer in charge of the station. So there was some separation there, but they kept their quarters clean. They didn't expect the military to keep their barracks clean. They did their own and we did ours.

There was one detail that I don't believe the civilians were involved in, and that was hauling the honey buckets off. I think that was strictly a military task, and we shared in that—the military shared in that.

But I think Lieutenant Burnett was . . . he was sort of soft spoken, but yet he could be firm. But I saw very little time when he had to be firm. He struck me as being a good leader for a young officer. But then again, for the most part, all of us were volunteers. We wanted to be there . . . at least I believe so. It was certainly my feelings.

DOB: That was true in other stations, but they didn't all have as happy an experience.

PN: Yes, well, we had a few problems. I don't know if you want me to talk about those problems.

DOB: If you'd like.

PN: We had one incident where there was an altercation between the cook and one of the chiefs down there who was the Executive Officer militarily at the time. The cook ended up being court-martialed later.

I talked to the commanding officer of the unit—who wasn't at Wilkes, of course, I think he was at Little America—Commander Flynn. I met him in Boston after I had come back, and he was stationed there and I talked with him. He said that the court-martial was thrown out after they got back and that it shouldn't have happened. The chief had some psychological problems; he shouldn't have been down there in the first place.

That was part of the battery of tests we took before we went down there. They were trying to determine what kind of people would be best—if they're going to put a bunch of people together in that kind of environment, what kind of psychological makeup should they have.

Also we heard—I don't know if that's true—that this was also probably one of the things the Navy was looking into was to try to use these determinations to decide what kind of people you'd put on Polaris submarines. They're going to be out there close-knit living together for months at a time.

And we took psychological exams down there on the ice periodically. A lot of people found that a little unsettling because the questions they would ask you in the tests—they
were written tests, no one asked you. They gave you this test and said fill this out periodically.

But some of the questions were, What do you think of your commanding officer or the officer in charge? and this kind of thing, and you would end up wondering if you had gripes against the person—or it would ask you a question like, Is there anybody down here you don't think should be here? or those kind of questions. And we were concerned, of course, with the confidentiality of this because you're turning right around and handing them back to someone that maybe you gave a bad grade. But no one refused to take the tests. How truthfully they answered is . . . you know.

DOB: But overall, it must've been a very—

PN: It was a congenial group. We got along quite well.

DOB: Okay. Let's talk about your work. You were a photographer. How do you go about organizing and providing a photographic record of what's happening at Wilkes? Or was that your mission?

PN: Yes. My mission, as it was explained to me before I went down, was to document the operation, the scientific effort as best I could in both still and motion pictures.

There were five photographers that wintered over: Cal Larsen was a chief at the time, and then there were four white-hats. Cal and I think it was Dick Hill went to Little America, and I went to Wilkes, Wally Cox went to Ellsworth, and I think it was [Elmo] Jones went to McMurdo.

But anyhow, most of us were still photographers and hadn't had any motion picture training. Cal had been an instructor with the Navy's motion picture school in Pensacola, Florida, so we got an abbreviated course on motion picture photography before we went down, but none of us had very much experience in that.

So after we got the base operable, I was given pretty much a free hand in what I wanted to photograph and what I thought should be photographed. The scientists, if they had anything in particular they wanted photographed, of course I would do that.

So I just set out to document the day-to-day activities there in film and movies, as best I could. We didn't have a lot of lighting equipment, and the buildings didn't have a great deal of power that you could set up a lot of lights anyhow, so the interior motion picture effort wasn't the greatest, I'd say. But I think we got a pretty rounded picture of what life was like there.

DOB: What happened to all that film?
PN: It was sent back to the Navy to the Navy archives which used to be in Washington. Years later, someone in the Pentagon, some bean counter, got a great idea they should combine all the military archives into one out in California and ship—

[End Side A, Tape 1]

[Begin Side B, Tape 1]

DOB: You were saying that all of this documentary record went to an archive in California.

PN: Yes. They combined the archives of the three services and sent them to California, and unfortunately they didn't have the staff at this place to handle the stuff properly. A lot of people had no experience in handling original negative motion picture footage, and the stuff wasn't stored properly. I've talked with film producers over the years who have gone up there to try to find something, and they say it's just a disaster. So much valuable material was just lost, mishandled. So that was kind of a shame.

I believe most of the still files are still around. I think the Navy held onto most of that.

But my photographic efforts were one of the—the first what I'd consider a major effort down there was to go on an exploratory trail trip with Carl Eklund, the scientific leader, Dick Cameron, who was the chief glaciologist at the time, and ... let's see, there was John Molholm who was a glaciologist. I can't remember if that was it on that trip.

But what they wanted to do was to find—they wanted several things. They wanted to find a site to do the glaciologist work which meant—down by the main base we were sitting on permafrost and so forth, so they couldn't dig into the ice very well, so they wanted to get far enough inland to be free of that. They wanted to get up on the ice shelf to do the glaciology work, and they also wanted to study the weather effects away from the coastal waters. So we ended up with a site, and I believe it was approximately fifty miles inland and an elevation of about five thousand feet.

DOB: That sounds farther to go than one would need.

PN: Well, I believe that's how far it was. They figured, I think, for the weather and all, they had to get far away to get the true difference of the weather in there as opposed to by a coast. So that was very interesting to go on that trip and document that. And then through the year periodically I would go back and document their work as it was progressing down in the pit and so forth.

And also I went on several replenishing trips to haul supplies and fuel up to them with Mac. McIntyre was the Seabee mechanic, and he was the main guy when it came to driving the tractors anywhere of any length because he was the only guy who could really fix them if we had a problem.
We went on one trip up there—the first trip after we went up and came back, we realized how difficult it was to find the place again. So we decided that we needed to mark the trail somehow, so a trip was set up hauling several sleds of empty fifty-gallon fuel drums to lay along the trail as markers.

This is where we discovered that the tractors were having an awful time getting up over this glacier to get up to the ice shelf area. They would slide sideways and so forth, and that's when we experimented with welding these cleats at right angles to the tracks to kind of slow down the side-sliding and all that. It worked to some degree—it helped. So I went on the trip with laying the trail and all there.

And another trip I remember very well was a small resupply mission in the winter when it was dark with Mac in a Weasel, hauling a small sled on the Weasel, and the blowing snow was such up there that—Mac was driving—he couldn't see. So I opened the hatch in the top, and I would stand up in the hatch with my head out the top and try to spot one of the barrels, the trail markers, up ahead and tap him on the shoulder to go right or left.

We did that, we got to the base, and Dick Cameron came out of the shack when we arrived. It was dark, and as we opened the door, of course, there was a light came out and it shown on my face. And Dick Cameron said, 'Oh my God, get in here,' and I didn't know what he was talking about. My cheeks had all gotten frostbit. I didn't realize it. I guess they were stark white. I didn't get any permanent damage out of it, but I guess it was a little startling to him at the time. But that trip went okay.

There was another trip, though, I can't remember too much of the details, but Mac had to make—the tractor broke down or something and he had to hike . . . I can't remember who he was with. I wasn't on the trip. But Mac hiked a long ways over the ice, and his feet were bleeding and so forth before he got there. But it ended up okay.

No one at Wilkes got seriously injured. That was probably our greatest fear. Wilkes Station in those days was out of range of any available aircraft and no ships could get in, so if anything happened there, we were stuck. There were some other bases, I gather, during the winter they had emergency flights in for seriously ill people. But if that happened at Wilkes, there was no way they could get to us, and we knew that.

DOB: You had a medical officer, but that was it.

PN: Right.

DOB: How well equipped was he?

PN: He was fairly well equipped, I believe, for emergencies. He was right out of school, not a lot of experience. I helped him one evening stitch up Mac's hand. Mac was working on
the flue in the galley or something, and he sliced it open on a piece of corrugated metal and needed stitches. But I think that was probably the most serious injury we had that I recall.

DOB: Lucky.

PN: Yes.

DOB: Or careful.

PN: Right.

DOB: The photography equipment that you used when you were taking all of these photographs, I'm assuming that it was state-of-the-art for the '50s, or not?

PN: A little of both, I guess. In the early '50s when I went through photo school, you were taught photography with a 4x5 speed graphic. The Navy had not gotten into the 35mm 120 cameras back in those days. You lugged a big speed graphic around with you or a bigger view camera.

DOB: How many cameras would you have?

PN: I had two 4x5 speed graphics, I had two 120s—and these were new to us and they were relatively new. I think they were called Omegas which took 120mm which gave you a two-and-a-quarter by two-and-three-quarter-inch negative which was somewhat unique, and one of the beauties of it was it had all large controls. You could operate it with gloves on. You advanced the film not by winding or anything, but by pulling a lever. It slid out and so forth. I remember what some of the other controls were like. I don't know if it was designed specifically for cold-weather use, but it had features which were desirable down there.

DOB: It certainly would help, wouldn't it?

PN: Yes. The motion pictures we had, we had the old standby 16mm Filmo, and we had the Kodak Special Twos, I believe they were called. They were 16mm and took a magazine which was very advantageous down there because you certainly didn't want to have to load and thread film out there on the ice with your fingers freezing and the film being very brittle. So you could load up the magazines and take them out and shoot them and just bring the magazine back inside. Or even unload the magazine in a changing bag out in the tunnel so you could even keep the magazine out in the tunnel so it wouldn't get warm and get condensation in it.

DOB: Would you have several of any one kind of camera in case you dropped it or lost it or broke it?

PN: Yes. I had two Kodak Special Twos and the Filmo for movies, and I had two speed graphics, and I think I had two—I think they gave us two of everything.
DOB: Did the film crack?

PN: I didn't have that problem, no.  I've heard static electricity was a problem for some at some times.

DOB: I've read in the literature that cameras were winterized for cold-weather use.  What's that all about?

PN: Basically, as I understand it, they take all the lubrication out of them.  We didn't winterize them.  They were sent to a special R&D place at the naval station in Norfolk, Virginia, I believe, for the winterization process.  And basically what they do is take all the lubrication out, any grease or anything you might have, so the cameras just run dry.  They run rough, but they run, where the lubrication would freeze right up and they wouldn't run at all.  So I understand that was the main way to winterize back then.

Now they probably have cold-weather lubricants that they use in cameras.  I'm not sure.  Of course now, I guess, they'd use video cameras which don't use film.

DOB: A different world.

PN: Yes.

DOB: I want to move on to another subject but not before you've said everything you want to say about the photography.  So if there's something else, please tell me.

PN: I tried to photograph anything that I thought would be interesting.  I photographed the guys buffing the deck in the barracks, I photographed the scientists doing their work.

There were some phenomena in the heavens that I tried to photograph and got fairly decent results, things like . . . I don't remember exactly.  I think something was called a paraselene.  It looks like you've got two moons in the sky.  I think there's a picture in here of that that I took.

DOB: Like sundogs?

PN: Does the sun do that also?  I believe what it is it's like ice crystals that reflect an image so it's like a mirrored image.  It was something I'd never seen before.  I did a time exposure.  I had to do it in several stages because you can't cover the whole sky with one point of the lens.

One of the things that Lieutenant Burnett and I did was to go to a region near the base there and map it.  He took all the readings with his sextant and recorded them, and I photographically recorded them using a—it was an F-56 aerial camera which took a seven-inch by seven-inch negative.  I made a cradle to put that on a tripod and would do overlapping panoramas of the region from a fixed point.  And therefore we could get
some I believe they call them ground control points are what you need to record these for mapping purposes.

So that was done, and then Carl Eklund picked a geographic spot for each person at the station and named it after him, whether it was a point on a cove or a cove itself or a hill formation or a little island or something. So we all have a little piece of the Antarctic down there.

DOB: And did you photograph each one?

PN: Yes.

DOB: And that person would get a copy of that photograph?

PN: Well, I didn't—not individually, no. Everything that was named after someone was part of this mapping process, so it's in the photographs but it's sort of a panoramic . . . .

DOB: I see. And then did you develop all your own film while you were there?

PN: Yes. One of the things I did which—I don't know what the Navy thought about this—they gave us X number of rolls of Ektachrome which we could develop ourselves—35mm Ektachrome.

After we got into the year and all, a recreation kind of thing or something to get a little interest going, I gave a roll of Ektachrome to each of the guys down there—the scientists and the sailors—and told them go ahead and shoot what you want and I'll develop it for you. So we would have little photo showings periodically of pictures that the guys had taken.

I wasn't short-changing the Navy on this because everything I shot officially in Ektachrome for the Navy I shot on four-by-five sheets of Ektachrome which the Navy has in their files somewhere.

DOB: How much of your work was in color and how much black and white?

PN: I would guess probably still photography probably 70 percent was black and white and 30 percent probably color. Motion picture was all color. I'm not too sure of those figures but . . . .

DOB: Why were you using some of each? Was the color film at the time stable enough to—

PN: Yes, but it was also slow. The speed of the color film back in those days was pretty slow, so there were a lot of things that you needed a lot of light to shoot that wasn't always available. That was one of the things.
And unfortunately, I don't know if you're aware of this, but the first three years of Deep Freeze in the motion picture area, there was what I would consider a major error made.

At the time, Kodak was going through changing into new color film stocks, and rather than keeping a basic color film stock for the whole operation, each year they changed the film stock. I think they started with Kodachrome, and then they went to Ektachrome, I believe, and then to color negative or something like that.

But it ended up that they had all these incompatible films. If you wanted to make a documentary of the three-year operations, the films looked totally different. Kodachrome was designed as a—we won't get into that. But it's too bad because I know when we were putting some things together looking at some of the stuff, it just didn't seem to work.

DOB: Well, let's talk about some other things going on around Wilkes. For example, it didn't seem to me in my reading that there was a lot of work done in biology and zoology, and yet Wilkes had abundant wildlife around it. Tell me about the animals around Wilkes and what kinds of studies were done on them if you know about them.

PN: Well, there was a major study done by Carl Eklund on the skua gulls, and I did a lot of photography on that for Carl.

DOB: What was he trying to find out?

PN: I think he wrote a thesis on it. I don't know. I don't know if he went down with the intent of doing that or he just—when we found the skua gulls nearby—there was a penguin rookery nearby, and the skuas of course live off the penguin eggs. They steal the penguin eggs and live off them. And Carl was really into that.

DOB: What kind of penguins?

PN: Adelie penguins. Fred Charlton, who was the chief electronics guy down there, developed a little radio transmitter they put in a penguin egg, and we put a radio transmitter above it and Carl used that in his studies, which for back in those days I guess was pretty unique.

He captured and banded a lot of the birds, and we did that by firing a net from these cannons. Carl built these cannons so it was just like a piece of pipe, and we'd lay some bait out to entice the skuas in—some seal meat or something like that. And when you got a bunch of them out there, they'd fire the net and it would go right over them and catch a bunch of them, which he would band and let free.

There was a lot of work with the skuas with Carl. I believe he was writing a thesis on it or something, I'm not sure. He was an ornithologist—that was his field.
DOB: One other thing that seemed unique about Wilkes Station was that there was a lot of open water around it and islands offshore—the Windmill Islands. And I know there were a number of studies that were done on the islands as well as mapping them. How did you get to the islands? I understand there were some boat problems.

PN: Well, there were. Unfortunately for me, I wanted to go on those trips and I couldn't—there wasn't room. So I didn't get to go on any of those trips.

They did have some trouble. On one trip they had trouble with the Weasel. It went into a meltwater stream. Because of the rocks and the permafrost, there were a lot of meltwater streams around there that weren't obvious until you got on them and then went right through them.

But I did not get to go on the smaller trips out to the islands there.

DOB: Meltwater sounds like something that doesn't happen in very many places in Antarctica.

PN: You have to have black rock, I guess, is basically it or something for the sun to reflect off of underneath the ice, and it melts underneath the ice. And if you cross it and there's nothing under there but—it wears the ice out from below so you don't realize it's there.

DOB: How much and to what purpose were dogs used at Wilkes?

PN: Well, they weren't used for—they were more recreational, I'd say, really. Carl, being an old dogsled pioneer back in Admiral Byrd days and with Finn Ronne, Carl wanted some dogs down there, and I guess being the scientific leader he got the dogs. But I don't recall any real trips that the dogs were the main mode of transportation. Of course Carl had never had Weasels and tractors before, so I guess . . . .

And actually, other than going up to what we called the satellite station which was up on the ice shelf, there weren't many other trips taken far from the base. We stayed pretty close to home because the scientists, the Navy weathermen, the radiomen, their work required them to be there every day. They couldn't leave the station.

Now a few of the scientists could, like the glaciologists, get away for a while or something like that, but almost all the other people, their instruments required them to be there just about every day. So there weren't many trips away from the station.

DOB: Tell me about the weather at Wilkes.

PN: Well, I was really surprised that Wilkes, being one of the northernmost bases there—in fact I think it was the northernmost base there—was fairly warm. And being right on the coast exposed to open water during the warmer months, it was like on a bay. When we were there when they were building the base, you would be out there in—well, almost everyone wore thermal underwear, but you may be out there in just your thermal
underwear top sweating if you were doing physical work as long as there was no wind. If the sun was out and there was no wind, you'd be hot.

But also, I guess because of the ocean influence there, we got tremendous winds—storms. We'd get violent and sudden storms come up out of nowhere. But we didn't get the real low temperatures down at the main station. Now up at the satellite station where the glaciologists were working up on the ice shelf, it got a lot colder up there than at the main base.

We almost seemed to have seasons at Wilkes. Of course, Little America and those places like Byrd and the Pole, I don't think they had seasons, or not noticeable seasons.

DOB: What effect did Wilkes' location have on the long winter night phenomenon? Did it get dark?

PN: Yes, it did, but I don't think it lasts as long because it's further north. Like some bases may have had six months of darkness, we probably had four months. I'm not sure of that, but that's sort of what I—

DOB: Was it truly dark or would there be some light?

PN: No, it got truly dark for periods, yes.

DOB: How did that affect what you could do?

PN: Well, that's when I did most of my interior photography. That's when I shot most of the movies and stuff inside the buildings of the activities.

When we started out at Wilkes, we discovered a meltwater pond that was being fed by underground streams. I guess that were coming down off the glacier about probably a mile or a mile-and-a-half or so from where the base was going to set. And this provided a great source of fresh water.

To create fresh water was a very labor- and time-consuming process down there to melt all the snow to make water for the base. So we found this pond, and we started using that as our source of fresh water.

Well, in the earlier months, it was still daylight. You would take a Weasel and in the back you'd have a sled that would hold, I forget how large the drum was that we would fill up, and haul it down to our supply tank at the base.

One night I went up with Mac to fill up the tank—I don't know if it was night, it was dark, it might've been day—and it was a windy day and the snow was blowing and all. So I had a flashlight and I told Mac, I says, 'Well, I'll get out and walk ahead of you with the flashlight behind me, and you just follow the flashlight.'
So I'm walking along heading up towards the pond area, and I came to the edge of a snowdrift, which I didn't realize because it was dark in front of me and the light was behind me. And I fell off the edge of this snowdrift, which was not a big thing, but I went down into the hole between the snowdrifts, and I'm laying down there and I just had this vision of this Weasel coming in on top of me. That was what had me worried, but Mac stopped when he didn't see the light, fortunately. So I got up out of there.

But we went up and we'd fill up the tank and go back, and that's what would happen. A storm would change the terrain, where it was a simple drive one day, and a few days later the terrain would change because of blowing snowdrifts.

But unfortunately what happened, when it started getting real cold, of course this pond froze. So we put a little Jamesway hut out on the ice and put a little oil stove in there and poked a hole in the ice that we could get our hose in to fill the tanks. And we kept that going for maybe a month or so, and somehow a fire happened and it burned the Jamesway hut down. Well, the Jamesway huts, the panels of them are filled with fiberglass, which went into the water. So that ended our use of the pond.

So our nice water supply was kaput, so we had to go back to using the tractor and scooping up snow and putting it in the—they'd melt the snow in a burner like you used to tar roofs with, and that was time consuming.

**DOB:** Back to what everybody else had been doing all along.

**PN:** I guess.

**DOB:** Sounds lucky while it happened. There was no air support for Wilkes then, right, because it was too inaccessible?

**PN:** It was out of range and all the aircraft at the time were too old. They had P2Vs and C-124s, I think, were the two major aircraft down there then.

**DOB:** It seems to me that when you're in a hostile environment thousands of miles from sources of supply that improvisation is going to be important. Was it? Can you think of some examples of wonderful improvisation? Perhaps the water supply would be one of them.

**PN:** It was for a while. I'm trying to think. Really, we were so well supplied and equipped, I don't think improvisation came into play that much. I don't know if the scientists in their work had any . . . it seemed like every discipline was well thought out before we went down there as to what they would need. And the weathermen, they had their daily tasks to do, send up weather balloons and so forth. And all the scientific study, ionosphere, geologists, all of that stuff. I don't think improvisation came into play that much. It was billed as a scientific effort, and it was well thought out before we went down.
DOB: In terms of daily living, what was your biggest adjustment? What was the most difficult or different from home?

PN: Well, different from home is just having the freedom to go anywhere you wanted to go. The daily living wasn't—for a sailor, anyone who had spent any time aboard ship, it wasn't that much different. I didn't think so. I mean you had the galley there, you had your chow hall, we had movies occasionally over in the rec room, which was not unlike you'd see aboard ship. Of course you never got into any ports or saw any girls for a year.

Now for the married guys, it was probably a lot different. I was young and single. It didn't bother me being away that much.

DOB: How did you keep in touch with anyone back home?

PN: They didn't have the satellites or anything. We had what they called single sideband ham radio operators, and our radiomen—of which we had two, there was always one of them on duty—at certain times if the weather conditions, mainly the ionosphere I guess, was right, they would be able to get hold of a ham radio operator in the states, and the ham radio operator would call another ham radio operator.

Like if you wanted to contact someone in Rhode Island, if they could get hold of a ham radio operator in the states, he would call a ham radio operator in Rhode Island, and you'd set up a time for a relative or someone to be at that radio operator's site, and you'd say, "Okay, I'll try again the day after tomorrow" or something like that. That was the only way we had it, and it wasn't too reliable, really.

DOB: How often did you make contact? You personally.

PN: Very infrequently I did. I wasn't married, I didn't have kids or anything like that. The married guys used it more than I would.

DOB: Like weekly or monthly?

PN: Oh no. Well, I shouldn't say—I don't know. Probably I'd say every couple of weeks or so. The conditions were such that we would get communications blackouts down there where the Navy radio equipment, which was basically I believe what they had aboard ships, too, in those days—if the ionosphere wasn't right, we had communications blackouts sometime would last a week or ten days where we couldn't contact even another base right down there.

DOB: Was the ham radio equipment separate from the Navy's official radio gear?

PN: Yes.

DOB: And operated entirely in a—
PN: It was operated by the Navy radiomen, but I guess it operates on different frequencies. I guess these days it would be considered pretty primitive. And probably because we had no aircraft, too, we probably didn't have as sophisticated communications at that base.

DOB: Did you feel this as just sort of more keenly as part of your isolation or were you young and carefree and didn't worry about that?

PN: I didn't worry about it. When I went down there, I figured I'm going to be here for a year and so be it, and that's what I volunteered for.

DOB: You didn't have problems with morale?

PN: No. Not at all.

DOB: What about food?

PN: Food was good. Our cook was good, and we ate well. They used to feed you like four meals a day because you'd burn up the calories so much, and you're working eighteen hours a day.

But from what I understand, when the ships came in to pick us up to bring us home the following year, the cook got in a little trouble because he was using up a two years' supply of all the good stuff in one year [laughs], which he didn't realize, I guess. But they had sent down enough stuff to sustain you for two years in case the ships couldn't get in the following year was the reasoning behind it. So we ate pretty good there, really.

DOB: You've alluded to leadership and the importance of good leaders at Wilkes, and I'm just going to name a few of these people again, and if there's anything else you'd like to tell me about these people, or others, starting with Carl Eklund—what you thought of him and why.

PN: Carl was a great individual. He was definitely a leader. There were times when I could grasp that Carl was taking control of the situation. But he was very level headed and generally easy going and a lot of fun, really. He had a great sense of humor. Of course he was very intelligent. I don't know what else to say.

DOB: Was he universally respected?

PN: I would say yes, by everyone. I don't know of anybody that didn't like Carl.

DOB: How about Donald Burnett, the Officer in Charge?

PN: I'd say pretty much the same way. He was very quiet and kept to himself, which I'm not sure if that's his manner or just because of the position he was in he didn't want to get too
close to the military people in case he had to discipline them or if he had problems. But he was very likable.

**DOB:** How did the two of them get along with each other?

**PN:** As far as I could tell wonderfully.

**DOB:** It has the potential for being a difficult situation.

**PN:** Yes, yes. I understand some stations had a problem with that. But see, now—

**DOB:** They lived separately.

**PN:** Yes, in a separate barracks. So their every day conversations and all that they had, we really didn't hear that much about it or if they discussed—if there were any problems with us, the other guys, we weren't privy to it, of course. But I don't think there were. We didn't have any trouble except that one incident between the cook and Fred Charlton.

**DOB:** How about Sheldon Grinnell, the medical officer?

**PN:** He was a nice enough guy, pretty jovial and all. He struck you a little bit of being someone that was raised with a silver spoon. Like when he went down there, each person was allowed to take so much personal stuff, a small amount, but he didn't worry about that. He just took everything he wanted. He had huge stereo systems and all this kind of stuff. He struck you as being a little bit spoiled. But other than that he was fine.

**DOB:** He apparently wasn't terribly busy being a doctor.

**PN:** No, he wasn't.

**DOB:** What did he do?

**PN:** I don't know, frankly. He was over in his clinic or little room that was set up in the other building where he lived, where the scientists lived. It was set up over there, so I don't know what he did, frankly.

**DOB:** Did you have a chaplain?

**PN:** No.

**DOB:** How was religion dealt with?

**PN:** It wasn't, really.

**DOB:** Nobody had informal services or—
PN: No.

DOB: That wasn't a problem?

PN: Not for me. I didn't hear anybody else consider it a problem.

DOB: Was there someone that you met on the ice at Wilkes that you were particularly glad to have there either in terms of friendship or someone that you particularly admired . . . or more than one?

PN: Well, yes, there were quite a few. Probably the guy I was closest with was McIntyre, the mechanic.

DOB: And what was his first name?

PN: I don't even know. He was always called Mac, to be quite honest.

DOB: Why was he special?

PN: I don't know. We just struck it off as being good friends. Truthfully, maybe there was a physical aspect of it. We were both short. [Laughs] But we just struck it off as great friends, and when I had time I would help him in the garage, work on the equipment and so forth. I liked to do that, and I occasionally had time to do that. Being the photographer, I wasn't on a set regimen like all the weathermen were or the radiomen were on the military end of it.

[End Side B, Tape 1]

[Begin Side A, Tape 2]

DOB: Were you ever truly scared for your life?

PN: Not down there, no. I have been in other instances. No, I think probably like that time I fell in the ditch at night with the Weasel behind me gave me a little pause because I thought the thing was coming in on top of me. No, I don't believe so. On my trip on Deep Freeze III there were a couple of incidents when I was flying in helicopters that were a little hairy.

DOB: Tell me about them.

PN: On Deep Freeze III, I rode the Edisto down, the icebreaker from Boston. I volunteered to ride that ship. Since I wintered over, the staff gave me a choice and said, "Well, you can fly to New Zealand or you can ride a ship, whatever you want to do."
I opted for that ship because it had a great itinerary. It was supposed to go through the Panama Canal, down the western coast of South America, stopping in several ports—Santiago and so forth—then rendezvous down at Tierra del Fuego with the Argentinean icebreaker. Then the two breakers would go together to Ellsworth, and the station would be transferred in a ceremony to Argentina.

Well, the Edisto had all kinds of engine problems. It was late getting out of Boston by about a month-and-a-half, I believe it was. The night it left the harbor at Boston—they had repaired two engines or something like that, I guess it was—the engines broke down again. The admiral said to proceed to Norfolk.

We pulled into Norfolk, they worked all weekend, they cut a hole in the deck, and hauled the engines out. These were gas turbine engines, I think they're called, and they hauled the turbines out and took them off on a railroad car somewhere. There was a heck of a blizzard in Norfolk that weekend. They put them back in Sunday night or Monday.

We left Norfolk and the engines crapped out again. The admiral sent a message to the ship, "Proceed directly to Antarctica." So we sailed at eight knots directly to Ellsworth Station. We never saw land again. We were at Ellsworth for eighteen hours. The morning of the ninetieth day we pulled into Montevideo, Uruguay, so we were at sea for three months on this icebreaker at eight knots. So that wonderful trip that I thought was going to happen did not.

But then during the trip, we went into Ellsworth and did the ceremony, transferred the base over, and then we got a message from—there was a British base down there, that their ships couldn't get in to replenish them, and they had no fuel for the coming year. So they wanted to evacuate the people from the base.

So we went over to help out with that, and the commodore wanted to fly from our icebreaker over to this British ship that was trying to get in there. Well, we were getting ready to fly over there, and I was going to go with them. We got up on deck, got in the helicopter, and as the helicopter was warming up, a blizzard came in. It was just really coming down. And the pilots really didn't want to go, but the commodore said, "Go ahead."

So we took off, and all around us—this was up near the Palmer Peninsula—there were some pretty big icebergs all around us which were like big hills and things to run into. We started out, and then the visibility just got so bad the pilot landed down on an ice floe, and we just sat there for a long time till the snow let up there. I wasn't too worried about that there. But we finally got over there.

And then on the way back to the states on that same trip, we were directed to go into Montevideo, Uruguay, to help—they were having floods in the country, tremendous floods, and they only had one dam, one hydroelectric plant to supply power for the whole country.
So we went in there, and we had two helicopters, and the helicopters were pretty tired by this time. They'd been through the whole Antarctic operation. But we went in to help rescue people who were trapped in the flood. And in some of those flights there were some harrowing things.

It was raining heavily sometimes, and in taking off we almost hit some high-tension wires, and we'd land in little places. And we were hauling dynamite to blow holes in this levee around the dam area to try to save the dam. So they sacrificed whole towns and villages just to save this dam because they figured if they lost the dam, with no electricity it would take them years and years and years to rebuild.

So there were some harrowing things in that trip. But at Wilkes, it was pretty calm.

DOB: The military had a lot to do with all of the Antarctic ventures at that time, and the military is a very hierarchical society, as you know, and I'm interested in how formal lines of authority and discipline play out in an environment so far from anyone else.

PN: Well, I think that the size of Wilkes, being so small and only fifteen military people, there was definitely the Officer in Charge, Lieutenant Burnett. As I say, he was quiet, unassuming, kept to himself a lot. I think that was done on purpose.

But other than that, I imagine some of the bigger bases like McMurdo where you have three hundred people and a lot more of a military structure—you have aviation squadrons and so forth—was totally different than where we were. We had one cook, we had two radiomen, we had four weathermen, they all had their jobs to do, one photographer—

DOB: You didn't worry about rank too much?

PN: No. I mean, the two radiomen, one was on twelve hours and the other guy was on twelve hours, there was just the individual. The largest group was the four weathermen, just four people. So I don't think that really came into play at Wilkes because of size more than anything else.

DOB: Did the Navy people and the scientists get along with each other?

PN: Oh yes, quite well.

DOB: There were no problems with differences in culture and that sort of thing?

PN: No, no. There were a few gripes at times from—well probably the fellow that had one of the toughest and dirtiest jobs was the Seabee plumber. He was a loud, boisterous fellow, and he said things, but nothing serious. He might shout his mouth off occasionally, but that was just his way. He was a loud, boisterous guy whether he was making a joke or whatever. It was just his mannerism. It wasn't anything.
DOB: The military is being phased out completely now in Antarctic support. What difference do you think that will make?

PN: It'll probably cost more. [Laughs] I would think the main reason probably is budgetary. The funds aren't coming out of DoD, they're coming out of somewhere else. I don't know. I think many years ago, when the cold war was on and all the military may have felt that, because of the cold war and all, they had to have a position of strength there. Now with satellites and everything, that's just another spot on the globe. I don't think it matters that much anymore.

DOB: On that subject, how much were you aware when you were on the ice of world affairs and what was happening out there? What were the major issues of the day?

PN: Well, the only thing I remember that we were very well aware of was when Sputnik went up. I mean that set—the scientists went bananas. [Laughs]

DOB: How so?

PN: Well, just everyone just . . . we knew that we and the Russians were vying for space and missile programs and so forth, and this just meant that they had made a great leap forward. I don't think it—it didn't really bother us. We certainly didn't feel threatened or anything, but the scientists, they were jumping up and down, trying to get information on what has happened, what is this thing doing and all, trying to find out what track it was on, could they see it, and this kind of stuff.

DOB: Did you see it?

PN: I didn't. No, I don't think so.

DOB: Well, a lot of things are different today than they were in the '50s, and one of them has to do with attitudes about things like pollution and littering and so on. Did you worry about leaving mess around? What did you do with your garbage and human waste and all of that stuff?

PN: It was set out to sea.

DOB: How did you do that?

PN: Well, it was just hauled down by the edge of the ice shelf somewhere, and when the thaw came it just went.

DOB: Out of sight out of mind?

PN: I guess. I don't know what we could've done with it there. That's what amazed me when I went to this reunion in '95, I guess, up in Rhode Island, to see what they were doing with recycling and all now. There was no talk of recycling when we were down there. The
ships didn't have space for it. If a ship was coming in to pick us up, it was coming down with all the supplies for the coming year. I guess it would've had room going back empty, but that wasn't a major concern back then.

DOB: It is now.

PN: Oh yes.

DOB: What concerns were there in the '50s about Antarctica's living resources like the penguins and the seals? Was there any concern about preserving them? I know, for example, that people brought back penguins.

PN: Yes. That happened at our base. I guess the animal rights people hadn't really spoken up much back in the '50s. I think today it would be a lot different. Been a lot different maybe in the '70s, but back in the '50s . . . .

DOB: Okay. After Deep Freeze II, you were assigned to the staff of Task Force 43 for Deep Freeze III. How did you get that assignment?

PN: I volunteered for it. They asked me if I'd be interested when—the staff photo officer came into my lab at Wilkes when the ships came down to pick me up, looked everything over, my work and so forth, and asked me if I'd be interested in coming back with the staff. And I said, "Well, let me think about it a little bit." And I said I would if I could go back to Davisville for the summer because I'd lived up in the Boston area and I wasn't keen on going to Washington at that time.

DOB: And what did you do there?

PN: At Davisville?

DOB: As part of the task force.

PN: In the summer I did what I had done for the previous operation was to get the supplies and so forth ready for the coming year for mainly the ships, and the bases—a whole lot of that stuff had to be resupplied. And that's mainly what we did in the summer. And then I went aboard the Edisto and rode the Edisto to the Antarctic.

DOB: So that was a year after you had been there?

PN: Yes, it was the following year. I'm trying to remember . . . . when the ships came in to pick us up and I left Wilkes, I and several other guys who were single opted to ride the ship back rather than fly—we were offered to fly back.

The Arneb was completing a—well, it was circumnavigating the globe because it had some kind of equipment on it that they were tracking something, and it was going to make this
trip around to—it was going to Sydney, Australia, and then Perth, I think, somewhere else 
in Australia, then to South Africa, then to South America, and then back to Norfolk.

Well, I had never been to Australia or South Africa and some places in South America, so 
I opted to ride the ship back, and that took like four months or so.

**DOB:** Was that also on the *Arneb*?

**PN:** Yes. I rode the *Arneb* down and back.

**DOB:** And that would've been in 1957-58?

**PN:** Let's see, we were . . . ’56-57 was this year, ’57-58 was Deep Freeze III, so the end 
of . . . I guess they picked us up like February of ’57? So I would've gotten back in the 
states in the summer of ’57 and went back down in the fall of ’58, I believe.

**DOB:** You were eager to go back?

**PN:** Well, it seemed like a good assignment. I wasn't eager to winter over again. I'd done 
that.

**DOB:** How long were you there the second time?

**PN:** Oh, not long in the Antarctic. I was on the ship a long time because it took us forever to 
get there. But we were only in the Antarctic—we were only in Ellsworth for like eighteen 
hours. We had the ceremony and got out of there because we were so late getting in. 
Again, they were worried—and if it wasn't for trying to help out that British base—

[Interruption]

**PN:** We only stayed at Ellsworth for about eighteen hours, as I recall, for the ceremony. And 
then we left there—

**DOB:** Did you have trouble with the ice approaching Ellsworth? Because the previous year they 
had a terrible, terrible time.

**PN:** I don't recall us having too much—see, the Argentinian icebreaker was already in there, so 
she had broken ice. I don't recall us having a whole lot of trouble getting in there. But 
we did have trouble when we went to evacuate that British base. We had trouble getting 
in there, getting close enough. And there were a lot of snowstorms, blowing snow and 
stuff like that. The weather was pretty lousy.

**DOB:** Well now, there is growing tourism in Antarctica. What do you think of that?
PN: Well, I think it's great that people can see it. It's really something to see. I don't know. Quite honestly, I wouldn't mind making a trip down there as a tourist on a nice comfortable ship. [Laughs]

DOB: Have you been back again?

PN: No.

DOB: Would you go back?

PN: Yes, I think so.

DOB: How actively do you keep up with what's going on down there?

PN: Not very at all, really. I was a pretty young sailor when this happened. This was one of the early adventures in my life, and I've had others since that have—I won't say they've overshadowed this. I've always looked at the wintering over in the Antarctic as probably one of the highlights of my young life.

Being in photography, and I like my work is one of the reasons I stayed in the Navy, I've been fortunate in units I've been assigned to, and I've covered things like the first astronaut training and the chimps being fired up and their recoveries at sea and the first—Alan Shepard's flight and John Glenn's flight. And then, of course, along the way Vietnam was there for a year, then I ended my career at the White House. I was there under Johnson—the end of Johnson's administration and the beginning of Nixon's. So I've had a lot of other highs, I guess, in my twenty years.

DOB: How long were you in the Navy?

PN: Twenty years.

DOB: What did you do after that?

PN: Well, I stayed in motion picture work. I worked for a company—maybe you've heard of them—called Airlie Foundation? Have you heard of Airlie House out in Warrenton?

DOB: Yes. I've been there.

PN: Okay. Have you heard of Dr. Head who was the guy that started all that up . . . and went to jail because he was—he had a bunch of government contracts. Most of the work was for AID, overseas and stuff like that, doing medical films.

DOB: So you think your Antarctic experience had some effect on where you went later in your life?
PN: Yes, I think so. It definitely had an effect on impressing—

[Interruption]

DOB: What's your favorite story from your time on the ice when somebody stops you at a cocktail party and says, "You were there? What did you do?"

PN: I don't know if I have a favorite story.

DOB: Or your worst moment or funniest experience or . . . ?

PN: I don't know. There weren't that many highs and lows. For the first six months, like I say, we worked eighteen hours a day, seven days a week to get the base up and operating. And then once the scientific endeavor started, it was kind of a routine operation for most people, and my routine was documenting everything.

DOB: Rudi Honkala spoke about photomicrographing snow crystals. Did you have anything to do with that?

PN: No, I didn't.

DOB: It sounds pretty neat.

PN: Yes. I don't remember Rudi doing that. He did it there at Wilkes?

DOB: That's what it said.

Well, I ask people if they were an artist and could paint one picture of Antarctica to capture the essence of it, what would it be, and maybe you did that with your photography. If you had one photograph that just says it all, describe it for me.

PN: Well, one that I took at Wilkes that really impressed me, strictly from a photographic point of view, was looking out at Vincennes Bay, and there was an island out there, a small island that had a distinctive peak to it that sat there. And then of course as the year went on, the bay froze and that island still stuck up out of the ice, and one morning . . . or late afternoon, I can't remember, but the sun was still about and I went out and the ice just looked like it was on fire, it was so red. And I got a picture of that. Photographically that stands out in my mind.

Some of the most impressive sites of the Antarctic, though, were not when I wintered over but when we were coming back from Ellsworth going up through the Palmer Peninsula with these high cliffs up above these narrow fjords. It was just awesome.

DOB: What color is the ice?
PN: A light blue if you have the sun.

DOB: Red if the sun is setting on it?

PN: Yes. Well, that was on the snow really.

DOB: Paul Siple, who was in Antarctica several times and at the Pole, wrote that “The Antarctic generally yields a profound effect on personality and character, and few men are the same after a stay there.” Do you think you were changed by your experience on the ice and if so, how?

PN: I don't think I was. Well, I imagine men that lived in tents and all down there closely in those kind of surroundings would have been changed. I don't know. To me it was very much like living on ship. We had warm heated barracks, we had bunks, we had a shower, we had good food. We were spoiled.

[Laughter]

PN: It was the modern Navy.

DOB: Well, what haven't I asked you that you really would like to tell about for this history project?

PN: Nothing really comes to mind. If I look through the books, something might trigger something.

DOB: Let me know if it does, and in the meantime—

PN: I'll send you a tape.

DOB: Thank you, and thank you for talking with me today. It's really been a pleasure. I've learned a lot and appreciated knowing you.

PN: Thank you. It's been helpful.

DOB: Thank you.

[End of interview]