

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
VOICES ORAL HISTORY ARCHIVES  
IN PARTNERSHIP WITH NOAA HERITAGE AND THE NATIONAL WEATHER SERVICE

AN INTERVIEW WITH MAUREEN KENNY  
FOR THE  
NOAA 50th ORAL HISTORY PROJECT

INTERVIEW CONDUCTED BY  
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Molly Graham: This begins an oral history interview with Maureen Kenny for the NOAA 50<sup>th</sup> Oral History Project. The interview is taking place on December 6, 2019, in Silver Spring, Maryland. The interviewer is Molly Graham. We'll start at the beginning. Could you tell me when and where you were born?

Maureen Kenny: That is the beginning. [laughter] I was born in Richmond, California, in 1953.

MG: Could you trace a little of your family history, starting on your mother's side?

MK: I'm sorry. I'm a little slow in the beginning because I didn't expect to start that far back. Yes. My mother grew up in California her whole life and fell in love with my father when she was just out of high school, and he was just starting pharmacy school. He ended up going into World War II, almost immediately after graduation from pharmacy school. She followed him as far as she could, which was to Key West. Then he spent time in the English Channel on a subchaser and doing mine recovery. Then he moved to the Pacific Ocean and was there for Iwo Jima on a ship, luckily. Otherwise, probably wouldn't still have him. It was a patrol escort rescue ship, where he would pick up men that got in the water when their ships were exploded and shot down kamikaze planes. So we're lucky that he made it through that alive. When I was eight, my mother died of breast cancer. My father remarried. He married a woman that he met in the Naval Reserves. She made it all the way through to retirement, and he left early because his job wouldn't allow it to happen. That was lucky because he was able to live off of her pension when he got older and had no pension from his jobs because that wasn't standard practice back then. He's still on her pension today. When I came into the NOAA Corps [National Oceanic and Atmospheric Administration Commissioned Officer Corps], I wore their insignia – traded off between the different ranks as I went up in the ranks. It was very nice to be able to wear their insignia that they had when they were in the Navy.

MG: I bet. Did your father ever talk about his service?

MK: He has quite a few stories of what it was like out there. It was not all good. They picked up quite a few men. They had a hundred berths on their boat and one doctor. They were so filled at times that the men that were injured were on the deck. It was continuous work out there in the Pacific.

MG: When the war ended, did he come back to California?

MK: Yes, he did. He bought a pharmacy and became a pharmacist for that store. Then he started to work for a large pharmaceutical corporation. That moved him around the country a little bit. He continued, and then he worked for a drugstore company. We moved every four years or so. Everybody always asks, "Were your parents in the service?" I went, "No, he was just in pharmacy management."

MG: Tell me about some of the different places where you lived.

MK: Okay. Well, I was born in California, and we almost immediately moved to just outside of New York City. Then we moved to Illinois, and then we moved back to that location. Being in

New York probably made the direction my life was going to be because we were a couple of blocks off of Long Island Sound. We had a sailboat. When we were little, we could go down swimming by ourselves. We spent all the summers on the water. We had a couple of other little baby sailboats that I could take out on my own. It really gave me a love of the water when I was young. Then I ended up graduating from high school, outside of Chicago, and went to Michigan State.

MG: How old were you when your father remarried?

MK: I was nine. Also, [laughter] he just got married nine years ago at age eighty-seven. I won't even calculate how old I was at that point.

MG: That must have been a big transition for you. How did you feel about your new step-mother?

MK: It took a while. It was hard for her, too, because we have four kids. I was the youngest, and it went up to fifteen or sixteen. So she came into a family that she had to learn what she could expect of us, which, at that point, wasn't all that much. [laughter] She had to be very patient, and she ended up – I called her “Mom.” She was my mother until she passed away of Alzheimer's at age ninety-one.

MG: She lived for a long time.

MK: Yes, she did.

MG: Tell me about some early memories from growing up with all of your siblings and in all of the different places that you lived.

MK: Well, like I said, we used to enjoy the sailing and the water all the time. It's funny. I don't have a whole lot of memories prior to my mother passing away. It's mostly memories after that time. Then my oldest brother was in college, but luckily, I got to visit him periodically. My sister and I were pretty close. She was just two years apart. We had so much fun in high school. We were on the tennis team and were partners. Sports were a big part of our lives also.

MG: What were some of your favorite subjects in high school?

MK: Math. Math. I loved math. It came easily to me. I was one of the lucky ones. And, of course, gym class; I liked that. I couldn't stand any of the English classes. And chorus – we were a very musical family. All of us played instruments. My oldest brother played trombone. My next brother played a tuba. Then my sister played bass viol. I used to have to help them carry them home from school – they're massive instruments. So I took up clarinet because I didn't want to have to carry that big instrument home, [laughter] and did singing. My oldest brother ended up being a professional musician. That's all due to my father and mother. My mother was a singer. My father was a singer and played piano. Music is still a big part of my life. I used to play for the retirement center, where my father lives, on a monthly basis for the singalongs. I played piano, not clarinet. [laughter]

MG: You mentioned you loved sailing, and your family had a sailboat. Can you describe the sailboat?

MK: It was just a small one. It was nineteen feet long, an O'Day Sailer. It was enough for us to get into trouble. I still remember my father was not very good at reading charts. We did have a chart, [laughter] but he didn't know the rules of the road too well. When I thought back to it, we're probably lucky that we lived. Of course, on our table, our placemats were charts of Long Island Sound. So we used to play games, where we would try and find places and find buoys, and all those sorts of things. So I grew up already familiar with the charts that NOAA's predecessor made.

MG: When you were getting ready to graduate from high school, what were you hoping to do afterward?

MK: I wasn't really sure at that point. My grandfather, who was very smart, he said, "Computer science is the future. You should go into computer science." So I went into school as a computer science major and found that for some reason – I was on the young side – I didn't have the logic for it. [laughter] We had to write a program to run Crazy Eights, the card game. Do you remember that card game?

MG: Yes.

MK: My stack of cards was like five inches tall because we worked in cards back then that ran into the IBM machines. Everybody else's stack was two inches tall, and mine never did work. Finally, I decided to just switch to math, which I did. That was easy from then on.

MG: How did you choose to go to Michigan State?

MK: We were living in Chicago at the time. My father took me around, and I visited quite a few schools. He wanted me to go to a smaller school. He thought that would be better for me. I wanted to go to a big school. [laughter] I saw Michigan State had the most beautiful grounds ever, and it had a music and an engineering program that were in the same school, which was a bit strange. That was good. I fell in love with the football stadium. So I said, "Michigan State is for me."

MG: Are you still a Michigan fan?

MK: Michigan State fan, not a [University of] Michigan. There's a big difference. Yes, I am. [laughter]

MG: Tell me a bit about the courses you were taking and your college classes there.

MK: I was lucky. I think they had recently started the advanced placement program in the late '60s, so I was able to take my math classes – three of my math classes ahead of time while I was still in high school. So I skipped all the calculus classes immediately and went into more of the

advanced math classes. I was on the Michigan State women's tennis team. It had newly been formed. That was really neat, to be a part of that, to play on the Big Ten [Conference]. We won the Big Ten one of our years. I'm proud of that.

MG: Did you play singles or doubles?

MK: Both. Pretty much all my classes were in the sciences. When I got to my end of my junior and I wasn't sure what I was going to do with that math degree – I know I didn't want to work for the IRS [Internal Revenue Service] or mortuary [risk insurance], or some of the standard things that you go into when you're in math. I said I better pick up a teaching certificate just in case. So I took a few classes. There weren't very many that were required. I took the few classes, and I student taught in the fall of my senior year. When I was there – and I was not a good teacher. [laughter] I had never been in an inner-city school before, so that was a whole new experience for me. I'd grown up in suburbia. I had taught remedial math classes and advanced math classes. It was amazing to see how many kids had been passed along with passing grades, who still couldn't even add. I'm not exaggerating. There was one I could not get her to understand how to add thirty plus one. So it was very sad to see that. Then when I actually gave a D to one of the students, they overturned it, so that he could continue moving on. I was a bit disappointed in what I saw, and I also was not – I knew I wasn't a very good teacher at that point. [laughter] I like to think that I've matured more since then, and I might do a much better job. But when I was there student teaching, there was a catalog of who was coming to visit Michigan State for interviews. NOAA was listed, who I'd never heard of before. It said, "Get on a research ship and go to sea." I went, "Ooh, that sounds good." So I signed up for an interview. I went in. I still remember. I went in on a Wednesday. I was in the sailing club in college, and I went in after sailing, so I was in an old dirty t-shirt with paint on it and torn jeans, and my interview was for Friday. So I went in on Wednesday to research what in the world NOAA is. I went up to the front desk, and I said, "Where can I find information on NOAA?" She said, "Well, they've just canceled all of their Friday interviews, and he's leaving in about twenty minutes. You might be able to get an interview now." It's amazing when you think how a slight change in something that you've done in your life could change the entire course of your life. If I had not gone in to see what in the world NOAA was, I never would have had that interview, and I probably never would have worked for NOAA. I had that interview, took that interview, and I interviewed also for the Peace Corps. Those were my only two that I interviewed for. Luckily, I was accepted into NOAA.

MG: Were you joining the NOAA Corps at this point?

MK: Yes. I'm sorry. When I speak of NOAA, it's the NOAA Corps.

MG: That's alright.

MK: They wanted me earlier. I graduated a quarter early so I could come in by April, into the Corps. They said, "We have a slot open. We can't guarantee you'll have a slot later for that."

MG: Where was the NOAA Corps based at that time?

MK: I'm not quite sure how to answer that. We're integrated throughout NOAA with civilians, but they did all their training of the new officers that come in at Kings Point Maritime Academy outside of New York City. That was where I went to get trained for twelve weeks with, actually, twelve other new ensigns. What an experience. All of a sudden, you're thrown in the middle of – they have a boat there for you to drive, about a hundred-and-twenty-footer I think it was, and all the navigation classes that you have to take, and what it means to be an officer. Since you're at the Maritime Academy, all of the other students that are there studying to be maritime employees, you're thrown right into the middle of it.

MG: What did you learn about the NOAA Corps as you were preparing to join?

MK: Well, I knew that it was a scientific group. You had to have a degree, a bachelor of science degree to get in, at that point. They were really looking for engineers, mathematicians. They did have biology, fisheries, that sort of thing also, but a heavy emphasis was on the sciences for sure. I knew that I would be spending part of my time at sea. To show how immature I was, I was saying, "Maybe I don't want to do that; I don't like fish. I might have to eat fish every day that I'm out there. I don't want to eat fish." I went, "Oh, I can get over that." [laughter] I was quite young. I interviewed before I was twenty-one. You weren't allowed in until you were twenty-one. I had just turned twenty-one three months prior. I was always the baby of the Corps for two or three years before they brought in somebody younger than me. So there was a big learning curve. [laughter]

MG: What are the different assignments for the NOAA Corps?

MK: They gauge when you're in the training class what your degree is and where you seem to excel. They then ask you where you might like to go. You know that you're going to sea first. The ships that were available were the open-sea research-type ships, environmental, and then there's the fisheries ships, and then the hydrographic surveying, where they support nautical charting; they get the depths of water – those ships. I really didn't know which one – I thought actually – I was pushing for a larger ship than I got. I knew there had been women on there. I was the twelfth or the fourteenth woman to come into the Corps. There hadn't been very many prior to me. We couldn't go to all the ships at that point. It was sort of like Noah's Arc; they required us to go in pairs to a ship. The largest ships, the Class I's, the research open ocean ships, they could have two, four women on at the same time. But the smaller ships, the two-hundred and thirty-foot ships, they had – so, the first woman came in – I'm sorry – in '73. NOAA was the last service to allow women in, and they waited a little long, in my opinion. So one woman came in, in '73, and she went to one of the larger ships. She was a perfect choice to come in – Pam Chelgren. I'll say her name because it's worthy to be known. She swore like a sailor. She could put them under the table. She was referred to as a bitch at times because she was assertive and professional, and they didn't expect that. I'm being a bit general here, but they didn't expect that of a woman in the beginning. She, I think, was the only one who could have done that job because she held her own against all these men who did not want women in, driving ships and running things and managing and telling them what to do. So she had a very hard job. Some of the women that came in a bit later, after that, a year later or two years later, three of them were on, again, one of the larger ships, and they were forced to stand watch on the bow of the ship, up in Alaska, in their skirts and nylons because the captain did not want women

on board his ship. That got resolved. So when I came in, there was a woman who had come in the prior year to me, who really wanted to be on one of the smaller ships, what's referred to as the Class III ships. The *Davidson* was available because they had two-man rooms, so you could – well, that's the wrong term to use, [laughter] but two-person rooms. So they were looking for a roommate for her, and I seemed to fit the bill. I was chosen along with her to be the first women on that size ship.

MG: Did you get to meet Pam Chelgren?

MK: Pam? Yes, I got to know her over the years. The nice thing about the NOAA Corps is we're like a gigantic family. You may hear that from any other officers. Years later, you're still in touch with people that you've been on ships with because you get close to your shipmates, or that you've had assignments on land with. You usually know that pretty much anyplace you go where there's a NOAA presence, you have a place you can go say hi and get some dinner with somebody. It's a very close-knit family.

MG: You mentioned the land assignments. How many assignments were maritime-related, and how many were land-based?

MK: Back when I came in, it was usually one sea assignment, two land assignments, one sea assignment, two land assignments, and so on. More recently – I'm not really sure what happened or what caused the change – they've had to go to sea more than I had to go. I only had a little over seven years at sea during my career. I know many of the officers now have much more than that. They seem to be short on people that could go to sea. The officers got called up more often. I actually had more time on the shore than a lot of people did actually.

MG: How long had the Corps been in existence when you joined?

MK: Wow. I'm probably going to get this wrong, and somebody's going to be mad at me. The NOAA Corps was established in – I thought 1817 because NOAA was established in 1807, was it? [Editor's Note: NOAA's predecessor, the United States Coast and Geodetic Survey was formed in 1807. The Coast and Geodetic Survey Corps formed in 1917 and became the NOAA Corps in 1970 when NOAA was formally established.] I may be wrong. It's been a while since I've had to think about the dates. The NOAA Corps, I think, was established in 1817, but we were part of the Navy and things like that.

MG: Could you summarize the mission for me?

MK: Of the NOAA Corps?

MG: Yes.

MK: Boy, I wish I studied up on that first because I would like to get it right.

MG: Well, how would you describe or summarize its purpose?

MK: It's for us to further the mission of NOAA itself. The reason for the officers was to handle the ships that NOAA owns and runs, and to move up the line in management, and bring that overall more general knowledge. A lot of people come into NOAA that are civilians. They stay in the same area and the same job for years and years. Whereas NOAA Corps officers should be able to be placed anywhere. That's one of the advantages that we bring, that when we go to a new position, we're bringing the knowledge of a different area to that new position. Sometimes you can get improvements in how things are managed or done. Your best bet would be to also include the actual statement of the what the mission of the NOAA Corps is because I don't think I'm capturing it all the way. [Editor's Note: The NOAA Corps mission is as follows: "Provide officers technically competent to assume positions of leadership and command in the National Oceanic And Atmospheric Administration (NOAA) and Department of Commerce (DOC) programs and in the Armed Forces during times of war or national emergency. Discipline and flexibility are inherent in the NOAA Corps personnel system. Officers are trained for positions of leadership and command in the operation of ships and aircraft; in the conduct of field projects on land, at and under the sea, and in the air; in the management of NOAA observational and support facilities; as members or leaders of research efforts; and in the management of various organizational elements throughout NOAA."]

MG: How many were in your class the year you joined?

MK: Twelve in my class, and there were about two-hundred-and-fifty in the Corps. We're all officers, and there are no enlisted. That's the strange part. Public health is the same way. They're the sixth service. We're the seventh service after all of the other Department of Defense and Coast Guard.

MG: Tell me a little bit more about the training for the Corps. How long did it last?

MK: Twelve weeks back then. I'm not sure if it's still that length anymore. It was a really good opportunity to learn what NOAA was, and what you're getting into. I know that in some cases, they lose people during that training that just realized they don't want that. It wasn't very regimented like the other services are back then. We didn't have to march. We didn't even salute, except when we were around other services. But we did not salute. That has switched over the years. Now in the training, they're up at the Coast Guard in New London, training alongside Coast Guard officers. So they learn to march, and they do all the saluting. It's much more formalized. I didn't even know that I needed to wear my hair up in training class. It wasn't required. I reported to my first day to the admiral when I left the training class with my hair down in uniform, and, oh, did I get chewed out. [laughter] Live and learn.

MG: Were you commissioned there as an officer?

MK: Yes, that was the unusual thing. We were brought in immediately commissioned as ensigns. The other students at the Maritime Academy were not commissioned as officers. So they used to like to try to corner us because they could recognize us, and then walk past us so we would have to salute a hundred times to get past all the students. They thought that was a lot of fun because we were senior to them. [laughter]



MG: When you say they could recognize you, what were they seeing?

MK: We had the insignia of ensigns on our collars. You're trained, when you're there, to look at what insignia are because any time that we go on a base, we have to be able to know who to salute and who's going to salute us.

MG: How did you fare during the training?

MK: I did pretty well, I think. I did well on all the tests, and the radar training and driving the ship. I was pretty good. I had a lot to learn. Twelve weeks is not very long to learn to drive a ship. Once you go to sea for your first assignment, you're a junior officer of the deck, and you're continuing your training at that point.

MG: If you didn't pass the test, you wouldn't have been commissioned.

MK: Correct. Well, you would have lost your commission.

MG: Right.

MK: [laughter] Luckily, all in my class did pass.

MG: Did you have a formal graduation for the training?

MK: Since we were only twelve, it was sort of small. It was held up there. I don't remember anybody inviting their family members in, but some of the more senior NOAA Corps officers came up for the graduation. You find out pretty much near the end of that twelve weeks where your next assignment's going to be, so that's exciting. It was two weeks before the end of it. I found out that I was going to a ship based in Alaska, and was going to be the first woman on it.

MG: Were you the only woman in your group of twelve?

MK: There was one other woman, so we could share a room. All the rest were men. [laughter] They accepted us no problems.

MG: Was the group racially representative?

MK: Well, this was in '75, and we were all white.

MG: Did that begin to change at some point?

MK: I'm trying to remember when the first African American was accepted in. I don't remember. You'd have to get that information from somebody else. Actually, I may be wrong. No, I'm wrong. They had accepted African American men and a woman prior to me coming in. A few. Later on, when I was commander, and I was included in on the selection boards for looking through all the new recruits, it was amazing the amount of women that were applying at

that point. That was in the late '90s when it really started changing. We had a couple of classes that were close to fifty percent women.

MG: Do you know why there was this change, and more women were applying?

MK: I don't know whether or not the recruitment was changing, and maybe with the internet, it was easier for women to find that we even existed. Unfortunately, we still lost – a higher percentage of women didn't stay in. It was difficult to have them make it all the way through as a career. We lost quite a few when they got married or had children. But we've had a couple of women admirals now.

MG: How did you feel when you were assigned to the *Davidson* in Alaska?

MK: I was excited. I met the ship on July 4th, and I'd never been in that area before. We were all waiting up for the fireworks, and it never came until after 11:00 PM because it doesn't get dark enough up there in the summer to have good fireworks. [laughter] So it was an exciting time.

MG: How did you get to Alaska? Did you fly?

MK: I flew there, yes. Well, I went by way of Seattle, and checked in at the – that's when I got in trouble for wearing my hair down. [laughter] But checked in there and then made it up to Alaska, as I said, on the 4th.

MG: Can you describe your uniform?

MK: [laughter] That's rather interesting. It was mostly khakis that you would wear on the ship. However, I had a guy pull my leg. He said, "Well, when we're on the *Davidson*, we're allowed to wear jeans." Actually, I think that was true quite a few years before, but no, we had to be in khakis. To show how immature I was and young at that point, when I had to go out and buy some khakis – and I didn't know about uniform stores that we could go. So I'm in the regular stores looking for khakis. I called up to the head of commissioned personnel, who later turned out to be my captain on my first ship one year in. I asked him whether or not I could wear bell-bottomed khakis. He said yes, I could. [laughter] I'm still embarrassed that I had called up and asked him that question, but he took it in stride. [laughter]

MG: So, did you purchase and wear bell-bottomed khakis?

MK: I never found them. They didn't sell khakis in bellbottoms. So I never found any. Luckily, I found the uniform shop and got some good uniforms. We were in khakis, and we had our dress blues at that point because you get the full outfit of all the uniforms when you're in the training class.

MG: Tell me a bit about what those first few weeks were like. You arrived in Alaska. Then what?

MK: Well, you're only usually in for a weekend, and you're out for two weeks. You're in every other weekend to a port, at least on that size ship. Some of the larger research ocean-going are out sometimes a month at a time. So I got introduced to my new roommate and got shown around the ship. I proceeded to go to the bridge and whistle. I always used to whistle because, like I said, we're a musical family. It turns out that that is one of the most bad luck things you can do on the ship. I immediately had a problem with the quartermaster on my ship. "Don't you whistle on my ship." [laughter] So we took off, and I had a watch as always. One day, I was in my room, and there was a knock. It was in the morning getting ready to go up for watch. Again, the same quartermaster had been searching the ship because they had a new sound that he had never heard before. He was worried some machinery was going wrong. It was my hairdryer. He had never had anybody on board with a hairdryer before. So we were slowly introducing women, and our lifestyle is a little bit different. The training was outstanding. The ship that I was on was about a hundred-and-seventy-six feet, carried two launches on it that we would put over the side to do the more inshore work. So I got trained on doing that also and running the hydrographic survey data acquisition and how to drive a ship. It took me a bit of time to get the driving of the ship down pat, but it was very exciting being up in Alaska and going up into Cook Inlet, up into Anchorage, and Ketchikan, and all those nice little towns.

MG: I bet it was beautiful.

MK: Yes, it was.

MG: Can you describe some of the areas you were in?

MK: Well, Cook Inlet was an amazing place to survey because it has extremely high currents, up to five knots at times or six knots. So the waves that you get there are short periods and really tall. It can be quite challenging in a small launch to stay safe. Then, given that these were pretty old launches, sometimes they barely went above the speed of the current. So you're barely making any headway at all. You have mountains on either side, and there's a volcano in there. So getting to see that was wonderful. Southeast Alaska is just fjords, so you feel like maybe you're in Norway or something – and whales. The thing about Cook Inlet, there used to be – and it was very sad when I went later on another sea assignment to Cook Inlet. We would see – and I'm not exaggerating – probably a thousand beluga white whales at one time coming up into Cook Inlet. As far as you could see were these white whales. They're smaller sized whales. They're a little bit bigger than porpoises. They were beautiful. In later years, when I went up – I guess it was about ten years later – into Cook Inlet, no belugas. Climate change, changes in habitat, and dying off, getting killed – it was very sad to see that they were disappearing. They're unusual to see now.

MG: I wanted to ask how you and the other woman on the ship were treated.

MK: It was interesting. Some of the men were real excited to have women on board, and they bent over too far to try and help you out, carrying things for you and not wanting you to do things that they could do because they were used to treating women in a certain way. Others did not want us there, and they would go out of their way to make it difficult for us. I liked to think that by the end of my two years – actually, it was two and a half years out there – that I felt

things had changed, and they got used to having the two women on board. I don't think we had any women crew members by that point yet. On my next ship there were actually women crew members on board, too. When I asked some of the men later on, they said it was actually a good change because it was more like what society is like on the outside, instead of all these men stuck on this little ship and only in on the weekends when they could see women. They all got in trouble because of it. [laughter] So it was a mix of how we were treated. My roommate left after about six months, wanted to try a fisheries ship because that was her background. So they moved her to another ship. There was no other woman available. I was on my own on there for about three or four months. It went well. They brought on another guy who couldn't have a room to stay in. I said, "I could care less. We're on different watches. He can stay in my room. We have our own bathroom here." They wouldn't go for that. So he had to stay in the lounge on this terrible, uncomfortable bed. They still had him using my bathroom, which was strange because he walked in a couple of times when I'm halfway through dressing. They could have just as well had him sleeping there, but that would have been a big no-no, I guess. My executive officer, at that point, was the second in command, really had good advice for me. He called me into his room one time. Like I said, I was very young when I came in. He said, "Maureen, you need to stop giggling because it's not something we want to hear necessarily even on the bridge. And you need to lower your voice to a lower octave." I thought about that. That way, you could give more of a commanding presence, assertive-looking presence. He said, "Do you know the Horatio Hornblower books?" which was all about sailboats and things like that. I said, "Yes, I'm familiar with them." He said, "You need to be a Henrietta Hornblower." I took all of those words to heart. I tried to stop giggling; that took a while because I enjoy laughing, but I did lower my voice, and I carried that lower voice my whole career. I think it was very good advice, and important advice back then. I don't think necessarily it's needed today. However, I have to admit, some women have really high voices that grate on me, and they should probably lower their voices. I probably shouldn't have said that. [laughter]

MG: He wanted you to be taken more seriously.

MK: Yes, to be viewed as somebody who they'd have faith that could make a good decision. It took a little while for me to get the hang of driving the ship like I mentioned earlier. I'd heard that another officer who had come in after me was possibly going to get officer of the deck, which is what you wanted to move from junior officer to officer of the deck, where you could actually drive the ship without the captain and nobody else; you're fully in command. I had heard that there was a possibility he was going to be selected before me, and I wasn't happy about that at all. So I went down to the executive officer, and I said, "I'm bringing the ship in today. I want you to come up and watch me take it in because I know what I'm doing now." He had taught me to be assertive. So I went down there. I was assertive. He came up and watched me. It was a difficult – into Nikiski, Alaska. It was difficult with a lot of tight turns. I'll say it – I did beautifully. He gave me my officer of the deck [position] right after that. If I hadn't gone down and forced that he give me another chance – because he really hadn't evaluated me for a couple of months, I don't think – I don't know what would have happened.

MG: The giggling comment is interesting because it's often a woman's response to inappropriate behavior, but doesn't discourage that inappropriate behavior. I think it's good advice he gave you.

MK: It is.

MG: Especially being the only woman on a ship with lots of men.

MK: Yes. I did come upstairs one day to the survey office, where we worked. There was a document hanging on the wall. It was a document about women being on board ship. It listed a whole lot of things that they thought were quite funny – we used to carry car batteries up and down the beach. I was wondering, “Can’t we get a wagon or something to carry these car batteries because they were heavy as anything.” Of course, that made the list, and so some of it was funny, and some of it was not so funny. It was two pages long of changes that occurred because of having women on board. I saved that to this day. I should have looked at it before I came in.

MG: Did they not intend for you to see that?

MK: No, they purposely wanted me to see that.

MG: What were some of the not so funny things on there?

MK: I’m trying to remember. The way they described some of the ways I handled myself on the bridge that I didn’t think were true, but they took things to the extreme when they wrote this down. I should have read it first. I’m sorry I didn’t read it.

MG: It was directed at you?

MK: I was the only woman at that point. Yes, it was. They thought it was quite funny. I laughed. I led them to believe that I didn’t take any heartburn with it at all, which was important to do in most cases at that point. But then I made a copy of it. I told them I was making a copy of it because this is something I wanted to save for the long term. [laughter] I said, “I take exception to a few lines here.” It was important to fit in and be seen as one of the guys. You really couldn’t do otherwise.

MG: Why would you be carrying car batteries up and down the beach?

MK: We had electronic equipment on the beach that needed to be powered. So they had to get placed in sometimes very unusual places. It was an exciting time to be with NOAA and surveying because there were big changes occurring, technology changes. I can go into that at some point.

MG: Yes, I’m very curious. I don’t know much about the hydrographic surveying practice or purpose.

MK: [laughter] Well, it’s our job to gather all the information that’s used to make a nautical sailing chart, so they know where the rocks are and where the shoreline is, and what the depth of water is, and what the dangers are, where the aids to navigation are, lighthouses and buoys, lights

on the beach. You have to somehow position all this information to do that. You have to position the boat that you're on. Nowadays, it's simple. They push a button, and they have GPS, the Global Positioning System. That didn't exist back then. So we used to have to set up our own stations on the beach. There had been electronic stations used since the '50s, but they were not as accurate, and they weren't as easy to use. We had to hand plot. So as the boat is going, we had to learn how to – okay, you're getting this information in from two different locations. You have to plot those numbers on these arcs on a sheet of paper and plot where you're located, and then tell the boat whether or not they need to change direction or not. So you have fifteen seconds to plot your position, give some instructions to the coxswain who's driving the boat – “Okay, you need to come left five degrees, or you're off.” We also came up with unique ways for the boat driver, our coxswain, to be able to see whether he's on what's called, “online,” where you're following an arc. So we would tape a toothpick to this dial that twirls around, and he would try and keep that toothpick from moving. That's how he drove the boat. It was very difficult for them, especially in currents of four or five knots, to do that work. So at that time, in '75 to '77, when I was on the ship, we were getting some new equipment on board. I did what are called sextant surveys. In the past, it was used to sight the stars and determine the location of the boat. We used it horizontally instead of vertically. We wouldn't be looking up in the sky; we would look at stations that we set up on the shore with big orange florescent looking panels that we built and put up there. We could shoot the angle between those stations, and if you had two angles, you could position yourself. We were still doing sextant surveys at that point to position the boat using sextants. So you had to have two people on board on top of the launch sighting these things about every thirty seconds to every minute; it depends on the scale of the survey, yelling that information down to a person inside the launch, who then is plotting and putting in those angles into a plastic thing, and twirl it, plot, and then try and correct the direction of the boat to make sure you're covering the area thoroughly. So they were just bringing in some new equipment called Minirangers and Del Norte, which were electronic range systems, where instead of having to take angles with sextants, we could get a reading and actually it could be fed into a computer that would plot it for us. Oh, my oh my. [laughter] That was amazing to actually have it plotted. So when I was out there, we were doing studies between sextant surveys and these Miniranger surveys to see whether or not we could prove the Minirangers was accurate enough to use for our survey work. In most cases, it was much more accurate than the sextant angles were because of the difficulty of doing the angles.

MG: Had these areas been charted previously?

MK: Well, in Alaska, so many of the areas of Alaska were either never surveyed, so when you had a chart, it was blank white, or there were a few scattered soundings that were done when Russia owned it. In fact, I remember an admiral went down to Congress to try and politic for some money, and he was describing how the surveys in Alaska are not very good, and there's a lot of missing data, and that there's some data that's from Russia. One of the aids or senators – I don't know who it was – said, “Well, isn't that wonderful that we have an arrangement with Russia that they are out there surveying with us.” He said, “No, no. That's from when Russia owned Alaska,” which he didn't realize. [laughter] So in Cook Inlet, we were mostly redoing surveys because a lot of it needed to be redone after the big earthquake that occurred in – I think it was '64. We were there in '75 still redoing some of the work because there were upheavals of

ten, twelve feet in some areas. So, yes, we were resurveying in some places, and in some areas, we're still, to this day, surveying areas that have never been surveyed in U.S. waters before.

MG: Were you doing this in service to a certain NOAA branch?

MK: It was called the Coast and Geodetic Survey, which has been around forever. It was the major part of NOAA at that point. A lot was underneath it – the National Geodetic Survey was under it. Now it's been split up a little bit. Now the Coast Survey is just an office under the National Ocean Service. But we still all consider ourselves the most important part of NOAA. [laughter]

MG: Of course.

MK: Of course.

MG: Were there ever any mishaps on board? Running around? A man overboard?

MK: Well, luckily, when I was onboard my ships, we never ran aground, but there have been some ships, unfortunately, that – and you never want to wish that on anybody. Some have gone aground. We did have, on the first ship I was on – and it was quite scary – a skiff did not return at the end of the day, and we could not reach them by radio. We sent out a couple of skiffs to look, but it gets dark there and cold. It was amazing to see the ship come together every single person, whether they're on watch or not, was up along the rails, looking to see if we could find the floating skiff someplace. We had searchlights out, and we spent pretty much the whole night looking for the skiff. We finally found the skiff with no people in it in a gyre because there's a lot of currents up there in Southeast Alaska. We recovered the skiff, but we still didn't have the people. We went back to search further, and it was a hidden island back where they – turns out they had been working on putting a tide gauge in to measure the water levels. What turned out to happen is that a new boat driver had forgotten to tie the boat up when they all got off, and the boat floated off. They were on the backside of this island, so no way the radio could reach the ship. They were able to make a fire. In fact, the coxswain, he jumped in the water to try and catch the boat when he saw it floating away, which you don't want to do in Alaska because it's very cold water. Then he realized he didn't know how to swim either. So one of the officers had to jump in and get him back to shore. Luckily, they were able to build a fire because otherwise, it could have been quite bad in terms of being too cold. I forget what's that called.

MG: Hypothermia?

MK: Yes, thank you. Hypothermia. We ended up sending a boat behind that island to see if we could find them there, and we did find them there. But it was amazing. I saw this ship that – up until that point, I thought we were separate groups and all that. We all came together. Everybody was so concerned. I've never seen such a concerned captain in my life, which really taught me the level that a captain has to – the authority, the responsibility that he has to these people's lives.

MG: Who was your first captain?

MK: Mike Fleming. He was a commander, and he was great. He was a rabble-rouser. If he wasn't happy about something, he'd let the marine center in Seattle know about it. He was really unhappy when we came in at the end of the year, so he hung a toilet brush from the – sometimes, they would hang a broom on one of the yardarms for a “clean sweep” for the season. So he was so mad he hung a toilet brush up there. Boy, did he get in trouble for that. [laughter] So Mike Fleming was my first C.O. [commanding officer] for about a year. Then Chris Andreasen came out, who was the person I called about the bellbottoms. He came out, and he was a great captain, too. I learned a lot from him, also. He ended up being an admiral later on. He's still, even now, working in the international arena. He was head of the International Hydrographic Organization out in Monaco for the world. So really an outstanding individual.

MG: What was Mike Fleming so mad about?

MK: I think it had something to do with our schedule. I think they didn't allow us to come back when we were supposed to. They kept us out there longer than we should have. Come November in Alaska, it gets really cold. We'd be out there in the snow. We had snowmen built on the bow of the ship and the launches. The skiff work got really cold if you're in an open boat with the snow coming down and driving through the wind. So I think he was upset about that. I also think he didn't necessarily get all the people. He needed some additional engineers, and he didn't get those.

MG: What was your course of travel? Where did you start, and where did you end up?

MK: In my career? Or on the ship?

MG: On this ship.

MK: On the ship? Usually, the summers were spent in Alaska. The falls, a lot of times, were spent in Southeast Alaska. But the springs, we would go to – we spent one of our springs in San Francisco Bay, which was fabulous because my grandmother was living there. So I got to visit her. But, what a beautiful area to survey. Again, I was saying, the exciting time about the way we were still surveying back then as we put in all the tide gauges, we did all the – what's called – horizontal control work, where you're locating the stations on shore that you could put signals on. So I learned to use surveying instruments and turn angles. Nowadays, they don't have that anymore. Everything, when it comes to positioning, is much simpler. We were experimenting with new depth sounders to give us the depth of the water. We used to have just a single ping, and then we got dual-frequency that gave us one ping directly below, and one that had a wider ping, so you could see if there were rocks to the side. Then the multi-beam systems were just starting to be developed in the mid-'70s, and later on, side-scan sonar. It's been a real exciting time to be in the Corps, or be in NOAA.

MG: You mentioned that you would be out to sea for two weeks, and then come in for weekends. Where would you come into, and how would you spend that time?



MK: We came into whatever town we were close enough to. In Alaska, it usually was Juneau, Ketchikan, Sitka, Skagway sometimes. Every once in a while, some really small towns. But it was fun because – well, for me and some of the others – we always took it as an opportunity to go hike a mountain because there’s always a mountain there. Every time we went in, we’d find a different one to go hike up a new trail. The bars were very popular there. I didn’t drink much. I never liked the taste of booze, but I tried tequila. So the bars were a popular hangout for a lot of the crew. But mostly, they were all outdoorsy type people, and we all enjoyed hiking.

MG: Were you able to develop close friendships with any of the men?

MK: I have had more friendships with men than I ever have with women because, throughout my career, there’s always been more men around than women. So I got used to that. But I do have one story. Admiral Chris Andreasen, who was our C.O. at that point, was a commander. In Ketchikan, there were a lot of houses of ill-repute as we refer to them. [laughter] One time, when we were getting ready to leave, a truck came, an open-bed truck. In the back were all the local women that had come down to wave goodbye to the ship and the crewmembers that they had gotten to know. I remember the captain looked a little bit sheepish that that was happening because it was on a Coast Guard base. So it was pretty funny. That was just a side story.

MG: Well, that’s interesting

MK: Yes, yes.

MG: When you sign up for the NOAA Corps, what kind of commitment are you making?

MK: When I signed up, you didn’t have to sign up for any length of time at all. You could leave. I think they could hold you up to six months or something like that, but you could leave any time you wanted. Later on, I think it was in the early ’90s maybe, they started having a two-year sign-up commitment. I’m not sure if that still exists or not. I’m not sure whether that’s best for NOAA Corps anyway. Because if somebody doesn’t want to be there, they’re not going to do a good job, and they may not be safe. I’m not sure if that still exists or not, but there was no sign-up. I always said to myself, “The minute I stop enjoying myself, I’ll leave, because there’s other things out there I can do.” But I never stopped enjoying myself. I really enjoyed it. It was nice the fact that you knew you could have a new assignment in two years to three years. It was always changing. I don’t know what I would have done if I were in the same job at that point for a long time. It was a lot of fun to see what’s my next assignment going to be, where is it going to be.

MG: When and how would you get your next assignment?

MK: They had your dream sheet that you could hand in.

MG: Did they call it that?

MK: Yes. Well, we referred to it – I don’t think it was labeled “dream sheet,” but we referred to it as your dream sheet where you could put down your top three choices of where you’d like to

go. You also would fill in what have you done for that year and any training that you've done. Every year, you had to hand in something. You'd talk to other officers that were on board and the more senior officers. When you were in port, you got to hear about things. You could put in for what you would like to do. I was interested in the tsunami program. Plus, I thought it'd be fun to go to Hawaii, but that didn't come through. I ended up – my first land assignment was in charge of a computer processing group in Norfolk, Virginia, which was our other marine center, which I thought was funny because I didn't make it as a computer science major in college, but luckily, with the maturity that I had and my logic got more organized at that point, I was able to handle that. That was also exciting because we were just getting into automated plotting, and had our first flatbed plotter delivered, which, all of a sudden, we could plot much faster a survey sheet of a survey area, which was so important. That, again, was an exciting time to be there.

MG: How did you wrap up the work you were doing on the *Davidson*?

MK: That's one of the most important lessons I've learned throughout my career is that there's always somebody to come in behind you. Within two weeks, you're forgotten. You may be thought of every once in a while – "Oh, that was fun to have that person around." But within two weeks, they've adjusted to having somebody new there doing the job. You are not invaluable. You are not essential. I think some people need to learn that lesson. I think all NOAA Corps officers learn that because we're forever moving and replacing somebody else, and then moving to your next assignment and having to learn something, in many cases, totally brand new.

MG: Then you spent some time in Seattle when your assignment on the *Davidson* came to an end.

MK: Right after I got off the ship, I spent a few months in Seattle at the processing group there because they knew I was taking over the processing group in Norfolk, and they wanted to show me the equipment they had there, which was great. I learned a lot. Then I went back East and took over that electronic data processing group, EDP, as a supervisor, which I had never really been a supervisor before. That was a learning experience, too.

MG: What was the work you were doing there?

MK: We would take the surveys that came off the ships and process them so that they could then be handed to headquarters, which is here in Silver Spring, and get put on the charts.

MG: You were there from 1977 to 1981.

MK: Yes.

MG: What was life in Norfolk, Virginia like for you? Where were you living?

MK: I moved into an apartment, which was about a mile from the ocean. I spent some time on the Navy base and got to go out with some Navy guys, which was nice and do some sailing. I bought my first house ever there because my father taught me that real estate is a good way to

make money. So I bought my first house there. I didn't really like Virginia Beach very much; I was surprised. I'm not sure even why. But I did get assigned there later on, and I got a house then that was a block off the ocean, and that made all the difference, being near the water. So I did like it my second time there.

MG: Describe what the processing work entailed?

MK: Well, at that point, we were still using paper tape. So you would get these boxes of paper tapes in, and you'd have to run them through a machine to get read. Then we would transfer it to magnetic tape – seven-track, nine-track, whatever. We were on the fly writing programs to process this data because so much of it had been done by hand. It had just been like three years or four years that we had started using computers to process this data. The big thing we did is verify that they found all the peaks and deeps on the sea bottom, and loaded everything in, and did a good chart comparison to the prior work, see where the important dangers to navigation are. Then we had all the aids to navigation to get loaded in correctly. So you're trying to hand a finished product that's been verified, and that was our main job, to verify what was done on the ship. Sometimes we had to send a survey back to get a little bit more data because they missed something that could be important and dangerous. It was interesting. I remember I was reviewing some surveys that were not done too well. I won't name any names. My new boss came in, who was in charge of that group. I had to tell him, "We're sending back your surveys. They're not being accepted." Here he was in charge of the group, and we had to send them back. He wasn't too happy about that. We were at the base where the ships came into. I think this is a rather interesting story. The *Peirce*, which was pretty much the same size as the *Davidson* was – I used to go out and meet with the captains and the field operations officers to talk about their surveys. I went out there, and I looked at the – all of a sudden, I'm having a total blank on where they eat – the wardroom. I'm sorry. [laughter] It's been a while since I've spoken ship. I went to the wardroom on the *Peirce*, and on the walls were four pictures of women in hardly any clothes at all, in various stages of in a bathtub, getting out of a bathtub, getting out of a shower, toweling down. I looked at those, and I said, "I cannot believe these are hanging today in a wardroom." And they had women officers on board there, too, who were probably too scared to say anything. So I told the captain that I thought those pictures were very inappropriate to have onboard this vessel. Lo and behold, he removed them. I still play poker with that man today. [laughter] We still get together for periodic poker games. But he wasn't too happy that he had to take his pictures down because he really liked them, but he did the right thing.

MG: I'm sure he found a place to put them.

MK: [laughter] Probably. I should ask him. That's a good question. "Are they in your house now?"

MG: That's another good lesson in speaking up for yourself.

MK: Yes. However, the first woman to come into the NOAA Corps, she was field operations officer at that point.

MG: Is this Pamela Chelgren?

MK: Pam, yes. The captain that she was on board with, [laughter] he complained. They finally let women onboard ships that have bathroom stalls. They weren't separate bathrooms. It took a long time for them to decide to let women in where you could be sitting next to a man in a stall in the bathroom. They thought that was just horrible. But they finally did that, and she was on that ship. The captain, he'd come out, and he'd say, "I cannot stand it. Every morning when I'm sitting in there, trying to do my business, Pam comes in there, sits down next to me, and starts wanting to talk business, the surveying business. I cannot do a single thing when she's there." I thought that was so funny. [laughter]

MG: [laughter] That is funny.

MK: But he never told her to stop doing it. [laughter]

MG: Tell me about the team you were working with in Virginia.

MK: It was a division at that point. I think we had about twenty-five people in the division, and I had about five or six people under me, or maybe eight people under me. It was interesting. The biggest thing we were working on is doing the software for wire drag, which you may or may not have ever heard of. We used to have ships that worked in pairs on both the West Coast and the East Coast, and then just on the East Coast. The last pair was *Rude* and the *Heck*, the two ships – R-U-D-E, not R-U-D-Y. They would drag a wire between the two ships. They had buoys along the length of the wire that kept it at pretty much a constant depth, so they could drag it through, say, thirty feet, and say, "This area is clear. There are no rocks that come above thirty feet. Because, in the olden days, we weren't able to see between the lines as we were getting our depths. We didn't know what was happening twenty feet or thirty feet or forty feet over from us. You couldn't run survey lines that close; you'd never get done, and you wouldn't get anything else done. So they used the wire drag to clear an area to a specific depth. That's actually how we charted in there. We would show a clear depth to thirty feet, and vessels knew that they were safe going through there. But to computerize that, to automate that, so that you could plot and then come up with areas was an amazingly difficult software job. We had some good people that worked on it. We finally did get it done. Then they stopped wire dragging. [laughter] So that was a little disappointing.

MG: How come you were there for four years?

MK: That's longer than normal because most officers get transferred in two to three years, but it just happened that there was – you have you to find a replacement, and that sometimes can be challenging to have all the officers fall in place. Because when one moves, another moves, another moves, and it just continues on. It's a game of chess to get everybody located. Luckily, they asked me if I wanted to go to the Naval Postgraduate School and get my master's, which was unusual because many times, they wanted people to have their second sea assignment underneath them before you went to the Naval Postgraduate School, but I guess they had an opening. They asked me if I wanted to go. I said, "Oh, yes."

MG: Why were you so excited to attend?

MK: For one thing, getting a master's was an important step. If you wanted to have a good career with NOAA, they very much encouraged everybody to get their master's. Then, I love Monterey out in California; it's just a beautiful area to live. And the chance to go to the Naval Postgraduate School rather than just a regular university was exciting. You're there with all officers from all over the world.

MG: Did you get to choose your course of study?

MK: Well, they knew I was going in hydrography/oceanography because that's where I had been in so far. I enjoyed that work. There were a few people that went in the financial end of things, officers that went in the financial – and some in meteorology, but most all went in hydrography/oceanography because we only had usually about three officers there at any time.

MG: Were there a number of other NOAA Corps members there?

MK: Just three of us. So we came in that year as three. There were three officers who had come in the prior year, so we overlapped. There's usually about six, and then we had one NOAA Corps officer who was there to help as an instructor, a professor.

MG: Who makes up the rest of the student body?

MK: Navy, Army, all the different services – Marines. They didn't have anybody wear a uniform when you're there because I think they didn't want people to know what the ranks are. They wanted people to be there as students. Once a month, you would wear your uniform and go to a lecture, which was sometimes interesting and sometimes just painful. [laughter] Then you got to see what service everybody was in, and what their rank was. Normally, they just wanted us to be students. They had foreign [students]. We had [people from] Korea and Japan. I think it was mostly Korean. I don't remember any Chinese being there – and some Europeans. So it was nice for us to have a chance – and Defense Mapping Agency, which is now NGA, National Geospatial-Intelligence Agency. They're there, too.

MG: How was it decided that NOAA Corps would be affiliated with other branches of the military?

MK: NOAA Corps comes under the Navy pay system. We get all the same benefits that the services do. In time of war, the NOAA Corps gets transferred to the Navy. We're a uniform service, but we're very tightly aligned with the armed services. I come under all the medical care that the Navy gets. I go over to Bethesda, Walter Reed [National Military Medical Center]. It makes for a great retirement. We also can retire at twenty years and get full pension at that point. NOAA Corps is really a good deal. [laughter]

MG: Yes. Travel the world, retire after twenty years – I think you're right.

MK: Yes.

MG: And do good work.

MK: And if you want to, you stay to thirty. I think now you may be able to stay – usually, they encourage people to leave at thirty, but I think some people have had had thirty-two years if the assignment was such. It's a wonderful deal, and I come under TRICARE, which is the military health insurance.

MG: Good. Well, tell me a little bit more about the classes you were taking and your experience at the Naval Postgraduate School.

MK: It was interesting. They had us go eight weeks before the actual term started so that we could take refresher courses because we'd been out of college for a while. So we had a physics class and a math class. I think those were the two classes that we took. I learned more in that eight-week physics classes than I did in my three courses that I took at college in physics that I never understood. My friends thought I was nuts. I would come from the class and say, "Guess what I learned today. I learned that if you're going up in an elevator and a screw comes loose, I can calculate how long it takes for it to get from the ceiling to the floor and at what velocity." They're looking at me like I'm nuts. [laughter] It was so exciting to learn these new things.

MG: Was that what was different about the course? It was more applicable.

MK: Yes. All of a sudden, you had real-world – very smart, yes. Also, it was real world. The math class was a really good refresher, too. Then we took oceanography classes. There was dedicated hydrography classes, where you'd learn all about the best ways to survey, all the equipment, the positioning aspects of it, the charting aspects of it. You had to take tests just like a normal school and study. But, I have to say, the advantage to going to the Naval Postgraduate School, my sister was, at the same time, going to get her masters in something having to do with nursing and social work. She had to go to work full-time during the day, take her classes at night. This was my job, going to school. I was on full salary, getting paid, and going to school. It was a wonderful time. [laughter] I learned a lot. I learned a lot.

MG: That sounds like my dream job, to get paid to go to school.

MK: Yes. [laughter] And you had to do a thesis. It was exciting because I choose side-scan sonar to focus on in my work, and I had a partner from the Defense Mapping Agency who did it with me. This was new equipment to be able to – in a way, it gives you a shot at what the bottom looks like over a large area by showing shadows that fall behind – if a rock rises off the bottom, the sound doesn't get past that rock, and it makes a shadow behind it, so you can see a black smudge. This was a new way to be able to see what's going on between the lines of the survey work that we're doing. This was important work. Later on, I helped write the manual for how to use side-scan sonars, and they're still being used today.

MG: That shadow thing you just described, is that what backscatter is?

MK: Backscatter. Yes, very good. [laughter] Backscatter, that's what you get when you cook.

MG: [laughter]

MK: Yes. So my thesis was on what different bottom types affect the bounce-back that you get from the side-scan because in mud, not much of it comes back, but hard rock, a lot of it comes back. So there's certain areas where it's more useful than others.

MG: Were you doing fieldwork as part of this research?

MK: Yes, we actually got ahold of two different side-scans, and we got some small boats from the school. We went out, and we went into the lab and built targets to put on the bottom. There was a lot involved in that. It was a lot of fun.

MG: Who was the person you were working with on this?

MK: He was [with the] Defense Mapping Agency. He was a civilian. He went from there to work in New London, Connecticut, where the submarine development is, to try and develop a sub that would not be able to be picked up by sonar.

MG: Did that happen?

MK: I think we have some subs that are pretty well-hidden. I don't know for sure, but I would like to think that yes, we have gone a long way on that. Of course, they've already found other ways around it probably – engine noise, all that stuff.

MG: Hairdryers.

MK: [laughter] Right.

MG: What else stands out to you about your graduate school experience?

MK: Well, I got very close to the other people that were there with me and the other students that were in my class. Every once in awhile, I'm still in contact with some of them. It really was an appreciation of the other services because I hadn't done much work with other officers from different services. Boy, there are a lot of talented people out there, and really dedicated to what they do.

MG: How did you find out what was next for you after graduate school?

MK: I knew that I would have to go sea soon. They sent me back to the processing group in Seattle this time, to be the pre-processing person. Every survey that came off the ships, it was my job to review them to see how well they did, which would really train me well to be the field operations officer on the next ship that I went on. So I was there for a while before I then went to sea. I think I went to sea in '85.

MG: I'm sorry. What year did you graduate from the Naval Postgraduate School?

MK: In '83.

MG: How else did you spend those two years in Seattle?

MK: That was the main function, and that was a full-time job because there would be fifty to sixty surveys coming off the ships every year. So that kept me busy. I enjoyed the Seattle area. That was fun. It was good that I had an opportunity to live there because I turned out to be one of the few people that don't love Seattle. It rains all the time there in the winter, every day but five days one winter. It was terrible. So I much prefer areas where you can swim in the water because the water's freezing out there, too. But it is beautiful. It is beautiful.

MG: What was the next assignment? Was that the *Fairweather*?

MK: Yes. Well, again, I was politicking to be a field operations officer on one of the ships out there since I was already out there. It's nice to stay in the same place for a little bit. So I got the *Fairweather*. I overlapped with the previous field operations officer, I think, for about a month, and then I took over as the number three person on the ship.

MG: Did you have a different rank? You were a junior officer on the *Davidson*.

MK: I was ensign. I made lieutenant JG [junior grade] in Norfolk, and then lieutenant in Norfolk. You have certain time periods that it usually follows. I think I was a lieutenant. I don't think I made lieutenant commander yet, but I was close to making lieutenant commander.

MG: Was that an honor for you, being promoted in rank?

MK: It was very exciting to make your way up in the different ranks. You get to change your insignia. If you're lucky, somebody will give you their old insignia, which is a nice thing to do. Another NOAA Corps officer does that. And I've done that for some people, where I hand over my shoulder boards and the collar devices. It's a feeling that you're part of a group, you're making a career, and you're moving ahead.

MG: What kind of ship was the *Fairweather*?

MK: That was 236 feet long, a hydrographic survey vessel. We carried four launches on it and four skiffs. We could get a lot of work done. We were pretty much spending most of our time up in Alaska.

MG: Were you doing something different this time?

MK: Still trying to build a chart. But we were more out along the Southern Alaska peninsula, which goes way out, and where there was just plain white. We didn't know what to expect out there. So you had to be really careful when you went in with the ship the first time. I know this happened just prior to me getting onboard, on the *Rainer* actually. They had gone into an area they thought had been well-surveyed, but all of a sudden, there was a person who was on one of the launches, standing on a rock where the ship had gone very close to, that you wouldn't have



known because it was like – do you know what a fathom is? Six feet per fathom. Yes. It would have been like thirty fathoms deep, and a pinnacle rock comes flying within six feet of the surface, and you wouldn't know it was there. You could miss it if your line spacing just happened to be right on either side of it. So you had to be very careful. A lot of times, we'd take the ship in. We'd have launches go in advance of the ship. We'd very carefully plot where we went, say, "Okay, this area is safe. We can anchor here. Then we can send the launches out and move to a better anchorage as you get more of the area surveyed."

MG: Was the social atmosphere different on board the *Fairweather*?

MK: Well, there were actually women crewmembers on board. It was commonplace. There was nothing unexpected about it. The field operations officer was a woman. So it was not unusual. I think we had two women on board besides myself as officers and four crewmembers.

MG: So it didn't feel as novel.

MK: No, and I didn't feel any issues about it either. We were fully integrated into it.

MG: Were you assigned to the *Fairweather* for two years?

MK: A little over. Two and a half years.

MG: Tell me how that assignment came to an end.

MK: We worked mostly in Alaska and Southeast Alaska. A rather interesting thing happened then. In '87, the tanker *Glacier Bay* went aground in Cook Inlet. We were surveying in Cook Inlet at the time. So we were immediately assigned to find what she hit because it closed the entire fisheries down in Cook Inlet, and it spilled a massive amount of oil up there, too, which impacted the salmon and everything. So everybody wants to sue everybody else at that point. So we were assigned to go in and try and find the rock. So we had to do – luckily, we had side-scans, which are very difficult to use in, again, the high currents of five knots. We could only really side-scan during slack water, which was only twice a day normally. It was difficult to do that survey. We had to make sure that what we found we couldn't just send over the normal radio. So I would get taken in by boat to a phone booth and contact headquarters and tell them what we had found. Then we could send some stuff off to them. But it had to be real careful because all the newspapers wanted to know what was going on. The tanker people wanted to know what was going on. We were very careful in what we did. But it turned out that we did find a rock that rose thirty feet off the bottom there, but it was in an area that the chart said, "Numerous uncharted rocks exist in this area. Some may come up to thirty feet off the bottom. Large vessels should not go in there in low water." That was in the Coast Pilot. Plus, notes on the chart. And they had gone in there to anchor because they were waiting for the water to be correct to get up to Anchorage. So it turns out that that area had been surveyed in 1975 on the *Davidson* when I was out there. [laughter] So I had this tie to it that I had done one of the surveys, and there were surveys done there previous to that, too. I had done that survey. Now I'm doing the '87 survey to try and find the rock. We found the rock, and so that involved my life for the next ten years on this lawsuit.

MG: In what way?

MK: When I left the ship, I moved to become Chief of Operations of the Hydrographic Surveys Division, which was in Silver Spring. Any time there were issues where ships went aground or something, our group would research what the prior data looked like. And we had to supply all of the records to the lawyers that were needed if any lawsuit came up. So we would supply thousands of sheets of paper of all the old charting stuff – how did the note get in the Coast Pilot about uncharted rocks? How did the notes get on the chart about uncharted rocks? They needed to know all that stuff. They needed to know where every depth came from. Then the lawyers from the other side come in, and they want to depose people. As chief of the operations section at that point, it fell to me to get all the paperwork together to hand it to the Department of Justice lawyers, Department of Commerce lawyers, and the NOAA lawyers. Then they would pass that onto the other side. Then, of course, they want depositions. It took ten years to finally get all the way to court. I did twenty-nine hours of depositions, including in the trials in court.

MG: All for the *Glacier Bay* oil spill?

MK: It was one of the largest ones at that point. It was a fifty-million dollar lawsuit, which we won.

MG: Did you get any pressure from either side on how you were presenting and providing materials?

MK: No, no. Everybody's above board. It was a good learning experience, which I tried to pass on to other officers and NOAA employees. I wrote in an article for a little in-house publication that we had that it was so amazing that something I did in 1975, I had to fight that we did a good job in '87. Then, in '97, when it finally went to court, they were still going back – "Is this your handwriting?" Somebody had written next to a scour, which sometimes can indicate a peak in the echosounder trace that you get of what the bottom looks like, "Is this a rock? Only the shadow knows." The other side really zoomed in. The tanker side really zoomed in on that statement. They said, "So does everybody –?" I said, "That's not my handwriting. I didn't write that." But they wanted to know, "Does everybody think this is a big joke? Are you not serious about your job? Was that a rock?" It may turn out to be the rock. I passed on to everybody that you could be deposed and asked. We went back and deposed everybody that was involved with that survey from '75. We went and talked to them from '89 to '96, or something like that. People who hadn't been with NOAA forever, they're getting deposed. They're having to tell their story. So important.

MG: A lesson in doing good, accurate work.

MK: Yes, yes.

MG: You might need to refer to it ten years later.

MK: And staying professional about it.

MG: Yes. During those ten years, were you doing research or involved in any other oil spill investigations?

MK: When I got reassigned in '91, luckily, the next jobs that I went to, they allowed me to still work with the lawyers because the lawyers knew I had the strongest background in this grounding and all the supporting data. So they asked. Periodically, I'd go with them to hear other people's depositions or to give my testimony to the other lawyers in San Francisco periodically. Then finally, to go to trial.

MG: When you won that trial, what happened next? Who gets the money?

MK: Well, it just goes to the government because the government had to put a lot of – well, they sued us for fifty million dollars, so we didn't have to pay them any money. I can't remember whether or not we got money from them or not. You have to get money to get reimbursed for any clean-up that is done by the government. So I'm sure some money exchanged hands. I don't get to see it. [laughter] I got nothing.

MG: When was the *Exxon Valdez oil* spill?

MK: I'm trying to remember if it was before or after that. I can't remember. I'm sorry.

MG: I feel like I remember seeing it on the news, and I was born in '84. So maybe it was in the '90s. [Editor's Note: The *Exxon Valdez* oil spill occurred in 1989.]

MK: It must have been after. That ended up being bigger than the *Glacier Bay* grounding, but the *Glacier Bay* had been the largest to date.

MG: I'm sorry?

MK: The amount of money that we were being sued for.

MG: Did you do any work around the *Exxon Valdez* oil spill?

MK: No, I wasn't involved in that one, luckily. My successors, who came into the operations sections, yeah, they had to do work on it. [laughter]

MG: You mentioned your new assignment in 1991. What was that position?

MK: I went to Boulder, Colorado, in the middle of the country to the National Geophysical Data Center is what it was referred to back then. It's now the National Climatic – what is it? NCEI [National Centers for Environmental Information]. I can't remember what it stands for. That's terrible. I always liked NGDC, National Geophysical Data Center – as the person that kept an eye on all of the NOAA data that was coming into the bathymetric data center. The world bathymetric data center, one of them is situated in Boulder, Colorado. So it was a great job for an opportunity to interact with all the other countries that do hydrography because my job was to

try and get them to part with their hydrography to put in the main database. I got to take some good trips and talk to some good people. Of course, our Navy wanted whatever data they could get from around the world so that their ships and submarines could travel more safely. So we interfaced with them quite a bit, and they supplied us funding to try and work with the other countries to get their data in various ways.

MG: What other countries?

MK: We worked with Russia and Israel, Japan, China. Those were the main ones. Of course, France and England, the European countries.

MG: Why was the center located in Boulder?

MK: Since we had our main data center – well, the Climatic Data Center is located in Asheville, North Carolina. Don't ask me how it got started there, but all the other data repositories that NOAA has are in Boulder. You got the University of Colorado there, so it was a good place to situate it. The [National] Solar Observatory is there. So there were other NOAA facilities. It just fit to put it there. Was it strange that it's not near the water? I guess it doesn't matter because we're all computerized there.

MG: You were there for four years?

MK: Three and a half, yes.

MG: Did you like Boulder, Colorado?

MK: I enjoyed it. I was always amazed when I flew back here to Silver Spring for a meeting. I'd get off, and all I could smell was the green, the trees. I don't smell those now most of the time when I'm here, but when you're not near it – you don't have it in Boulder. It's almost like a desert. You get it a little bit up in the hills, but there's no humidity. You don't get the smells with no humidity. It's so dry. I got sick of brown and clear skies. I wanted clouds. I wanted green. [laughter] So it was very nice to live there for a while. I wouldn't want to permanently live there.

MG: Were you getting to a point in your life or your career where moving so much was disruptive, or did you like making all the changes?

MK: I still enjoyed that. I still enjoyed it. I knew that it would be part of my life until I retired. Again, it was always a challenge to have a new job. You never knew what was going to come next. I really did enjoy the time in Boulder. It was a good group of people out there. Then the next job I got was to go to sea.

MG: Was that on the *Whiting*?

MK: Yes. I went out as executive officer for – I guess it was six months, nine months. Then I fled to captain. That was nice. At first, you don't necessarily want to do that because

executive officer is the one that is the disciplinarian onboard a ship. So you would get to be known in a certain way, and then to fleet up to captain, you don't necessarily want to display yourself in that way. It's a different way that you want to be when you're a captain. So it can hurt you to fleet up from executive to C.O, but I was very lucky. I had an outstanding commanding officer on there, who everybody absolutely loved him and would bend over backward for him. So when I flected up, I did a little bit of discipline, but I didn't have to do a lot of it. So I was able to be myself, and I hadn't become an ogre or anything like that as executive officer. So it worked well. It worked very well. I was lucky.

MG: What was the purpose of this assignment?

MK: Again, this was surveying the East Coast, the major ports for shipping to make sure it was safe for them to get in.

MG: Were there changes in technology and methodology since your last sea assignment?

MK: A lot of changes had already occurred at that point. We were just starting to use Global Positioning System more. But we still relied on some of the old ways, too, which was good because when thunderstorms came through, you'd lose the Global Positioning System. We didn't use it for surveying yet. We still set up stations pretty much. But there were changes that occurred. We didn't have multi-beam on our ship, but we did use side-scan.

MG: How else was the nature of your work changing now that you were in charge of crew, and probably less connected to the hands-on fieldwork?

MK: It's a whole different mindset. Well, it's the highlight of your career, I think, to be captain of your own ship, but the responsibility is very high. You're responsible for these thirty-six people that are onboard the vessel with you, and you have to make the right decisions, and you're in the middle of hurricanes. [laughter] It was interesting the types of people that you get and the things that you face, and I wouldn't trade it for anything.

MG: Were you also in charge of budgets and other administrative duties?

MK: I did that – well, pretty much throughout your career, you're doing budgets for any group that you're with. An executive officer, you do that a lot more than when you're the captain because you can rely on them to do that work for you when you're captain. Being a woman came back when I was captain. We were working in Southern ports – Charleston and Cape Fear River up by Wilmington. There were times that I would get on the radio to try and contact another vessel because we wanted to arrange passing, do safe passing, and he would refuse to respond to me. I remember that happening when I was executive. Then we'd put the C.O. on, and he'd call, and immediately you'd get a response. They were not as accepting, even in the '90s, of women being out there on a ship. That was a bit maddening. That's not right. [laughter] Plus, our captain had a Southern accent, so he fit in much better. I kept saying, "Alright, I got to talk with a Southern accent here."

MG: That sounds not just annoying but dangerous.

MK: Yes. Yes, that they would do that. There's a lot of seat-of-the-pants going on down there in navigation.

MG: Were there a number of NOAA Corps members onboard this ship?

MK: Well, the NOAA Corps is a very small amount of the crew on NOAA ships. On the Class II's and Class III's there's about six to eight officers, and all the rest are wage mariners. They're civilians. So on the ship I was captain on, we had between four and six officers. NOAA Corps was going through a tough time at that time, so we didn't have as many officers as we should have. The rest of the thirty-six crew was all civilian.

MG: Why was the NOAA Corps going through a tough time?

MK: There was talk of eliminating the NOAA Corps in the '90s. It got quite serious. There were quite a few officers that were quitting for other jobs. Others didn't want to leave their spots where they were because they didn't know – if you get sent out to sea and you don't have a spot on shore, who knows what spot you'll have when the Corps disappears. So we were down to, at one point, just having four officers – the C.O., X.O. [second-in-command], and two officers, which was very difficult because you have watches to stand, and you have three watches a day that you have to man. Plus, you have the launches you got to send out. So the captain and the executive, we were both standing watches also, which normally the captain doesn't have to do because you get called up in the middle of the night at any time that something's going on. It was a little bit tough out there. It just happened to be when I was out there as C.O. Then my X.O. had to leave for a while when his baby was born prematurely. So I didn't get a replacement for him either. It was a little tough.

MG: How did the NOAA Corps recover?

MK: We showed the importance of the Corps, and we got the right senators and congressmen behind us. Now they're actually allowing us to increase the number of officers that we have. I'm not sure what the number is, but we were up at three hundred, and they're looking into allowing us to have more.

MG: Recently, I was in touch with Lieutenant Matthew Forrest. He's doing an oral history project on the NOAA Corps and a research ship that went to the Persian Gulf at the end of the war.

MK: We had a ship over there.

MG: Yes, I'm forgetting the name.

MK: I think it was the *Mount Mitchell*.

MG: That's right.

MK: That was a unique time. They needed to find all that oil and gas that was being set on fire and dumped everywhere. So they wanted to get some studies done of the water over there. The *Mitchell* was a good ship to send over at that point.

MG: Tell me a little more about your assignment on the *Whiting* and how it came to an end.

MK: Well, it was time to get off, and my replacement comes out as normal. Of course, it's very sad when you have to leave a ship, but it's time to move on. Two years at sea – it was actually a little bit longer than two years at sea – is a good length of time to be out there. Then I moved in – my C.O. that I was X.O. for, he had a couple of jobs at the same time up here in Silver Spring. He had recommended me to come in and replace him. We'd been following each other in our careers along the way. So I came up, and I got the deputy of the Coast Survey Development Lab, which is a research arm for hydrographic surveying and charting, where we're looking for ways to improve what it is that we're doing out on the ships. We help with software writing, and it was a great job to be in. It's a perfect spot. I always enjoyed looking at the technology and things like that. This was more of a management position, but I got to keep my fingers in it.

MG: Tell me a little more about the position, and what stands out to you from that time?

MK: I had it from '97 until 2000 or 2001, somewhere in there, and enjoyed every minute of it as an officer. Then I was asked if I would like to go to be the deputy director of the CO-OPS, Center for – help me out here.

MG: Center for Operational Oceanographic Products and Services.

MK: Yes, thank you. I get the two O's mixed up as to where they are. That was a step-up, to be a much higher level, directly under – I would have been under the National Ocean Service deputy, in a program office under that. I was called by the head of National Ocean Service at about five o'clock that night. She said, "Well, we'd like to move you over to that spot. What do you think?" I said, "Well, that'd be a good opportunity. I'd like to discuss it with my present boss to see what the impact is for me to be leaving." She said, "Well, you got to tell me now. I need your answer now. Do you want to go or not?" So I gave it about two minutes' thought, and said, "Well, I'll take it." So I don't know why she needed an answer so quickly. That was the way that she operated – Margaret Davidson, a pretty amazing woman. She was just acting in that position. At that point, they did a total switch around of most all the deputies of the different groups – National Geodetic Survey, Coast Survey, CO-OPS, and two other groups. They just switched everybody around. They wanted new thoughts and new ways of doing things. So I got thrown in with that mix. It was an interesting opportunity over there. I didn't enjoy myself as much. It was a difficult time over there. I won't get into the details. It was also very stressful with what types of changes they wanted to have occur in this group. So I did my best, but I never really got a full handle on it because I had so much coming down for me on top that you needed to do this, this, this, and this. It was continuously responding to that. I really couldn't do what I wanted to, which was to find out what the people in my group needed and how I could help them. It was a frustrating time. So they never replaced my other job, and I applied. They decided to replace it with a civilian because they couldn't get an officer in there. So I applied as an officer, and luckily, I got the job. I was asked when I was interviewed for it, "Why are you

taking this job? It's a step down for you." I said, "Because I learned a very important lesson in that other job. You have to do what you enjoy. I did not enjoy that level. I didn't get to get into the nitty-gritty everyday things, and what's going on, and how to do the work. Instead, I was just an administrator responding to everything, and I don't like that." I don't need to keep moving ahead to be happy.

MG: It was the deputy director position that you did not enjoy.

MK: Correct.

MG: And what was the new position?

MK: I was back at the old job I had been in, which was the deputy chief of a division that would have fallen, say, under that deputy director job. So it was another level down. I still got to do things that were fun and interact with more people. [laughter] I enjoyed it much more.

MG: Did you work with Stephen Gill at CO-OPS?

MK: Oh, yes. Oh, yes. Wonderful person. Wonderful person. I learned a lot from him. I've known Steve Gill since the '70s, I think, or the '80s because, being on ships, you interact with – what do we need to do for tides. So he and I have always worked closely together.

MG: It was nice that your old position was still available.

MK: Yes, I was lucky. They could have not chosen me.

MG: Is that where you stayed for fourteen years until you retired?

MK: Yes, yes. I never imagined that I would like staying in the same job for that length of time because I had, my whole rest of my career, moved every two to three or four years. But the difference here is that my chiefs kept changing. So it was like a new job every time – well, the first chief I had, I had been with a long time, but he kept getting pulled to do other jobs like the technical science officer for National Ocean Service. So I had to move in and be the chief for that length of time. So I spent about four years of that whole career as acting chief. So that was different. Then he retired, and I got an officer that came in, and I got another officer that came in. So every time you get a new chief, there's training involved so they could learn at least how we're operating until they want to change things. It kept the job new that whole time.

MG: That was between 2002 and 2016.

MK: Yes.

MG: What else stands out to you about that time? It's a big chunk of time.

MK: It was a big chunk of time. Jeez. I'm trying to think of anything to point out. No, just usual. We kept having fantastic people coming through. I was lucky because the lab was very



stable, and I hardly had to do any hiring or firing, at least the first ten years. Then we started having to do more of that, and the job got a little bit difficult. They actually ended up replacing me with two people. [laughter] That's fine. I said, "Please do that."

MG: It was a big job with lots to do.

MK: Well, we ended up taking into the lab the IT [information technology] group for all of Coast Survey, which was quite a large group. All of a sudden, it was not just research and development and programming and modeling, because we also had the oceanographic modeling group in our group. All of a sudden, it was running the IT infrastructure. I went from having two or three procurements a year, to having forty procurements. I had no one to do those procurements for me. So I was having to do all those procurements, plus be deputy. That's why, right before I left, we were able to hire a fantastic person, who came in and took over all of that part and part of the budget, too, which made a big difference for the new person coming in. They wouldn't be putting in as long hours as I was.

MG: What went into your decision to retire?

MK: Well, I was age sixty-three at that point. It felt right. I had hired in that new person, and I wouldn't leave until I had them trained up with everything. They did so fantastic that the time was perfect. It was just right.

MG: You've been doing some part-time work as a consultant for NOAA since retiring?

MK: Yes, I didn't expect that. When I retired, I just retired. Then, about six months later, I got called to come work for the Hydrographic Surveys Division doing for them – they also didn't have somebody to do all the procurements and the hiring packages and the personnel type stuff. So I came in and have been helping them with that off and on. It's nice. You get to keep in touch with everyone and still have my partial retirement, which is wonderful, by the way. [laughter] I highly recommend it.

MG: Tell me a little bit about your life outside of NOAA.

MK: I was surprised. During the first furlough that we had a few years ago, where we were off for about two and a half weeks, the first week and a half, I was miserable. I thought, "How in the world am I going to retire?" Then, all of a sudden, I adjusted to it. I said, "This is fun. This is nice. I don't have to worry about it." Then I wasn't scared. Because at first, I was thinking, "Oh, jeez. I better have all these things set up and ready to go when I retire." But I found I don't have to. So when I retired, the time filled itself. I started taking art classes and glass-fusing classes and painting classes. Then I started working a little bit more over at the retirement center where my father lives, and playing piano for groups over there, and visiting more often, and traveling a little bit. But the time really filled itself up. But then when they asked me to come back a couple of times a week, like two to three times a week, that was a nice addition to it. I was actually ready to still do that. Now, my time has been quite busy with my father, who's ninety-seven. So I haven't really had a chance to get back into enjoying retirement, but I know I will have no problems fully enjoying retirement when I leave the consultant job and move on.

MG: Is your father nearby?

MK: He's in Annapolis. They moved here in '97, which surprised me. I didn't expect that. I moved here in August of '97, and in September, he and my stepmother said, "Well, we're coming to Annapolis." I went, "Oh, that's a bit close," to myself. [laughter] But it turned out to be very nice to have them close by.

MG: Good. Well, is there anything else that stands out to you when you look back on your career and all the things you've done and places you've been?

MK: I didn't end up getting married. I had a couple of offers, but I didn't end up getting married, and I didn't have kids. So that's one of the things that I traded. I don't know if "trade" is the right term. I chose this direction, and it was perfect for me. I loved every minute of it, and I wouldn't have traded it at all. I know there are some women now that have found ways to still have children and stay in the Corps because, luckily, their husband or parents are available to take care of the children when they have to go to sea because as a woman officer, you still have to do all the normal things that you have to. So it's nice to see there's more women now that are staying in. Not as many as we would like it – more women now that are staying in and able to raise children and stay happily married than they did otherwise.

MG: Did you feel like you couldn't do both?

MK: I didn't have an interest. I didn't meet the right person, for one thing, and I wasn't going to settle. [laughter] But I found out that I didn't need it. I had my NOAA Corps family, which was enough for me, and my own family – my brothers and sisters and parents. But no, I don't regret at all not having children.

MG: Well, anything else about your career with NOAA?

MK: I can't think of any, but the directions NOAA is taking, it's going to be interesting to see where it goes in the future.

MG: What are you referring to?

MK: Well, it's a little scary with the – I feel strongly that the Weather Service is extremely important and needs to stay as it presently is, that I don't want it to be privatized. I know there's some discussion of that occurring. So that, of course, concerns me. But I'm not sure if we should get into this on this recording or not. It's very important that people not have to pay for this service.

MG: Well, I've gotten to the end of my questions, but I hate that the interview is over because this has been a treat and so much fun to talk to you.

MK: I appreciate you listening to me for this length of time. You're probably ready to go to bed now.

MG: No, no. I'm excited to learn more about all you've talked about. I will be back down this way. If there is something we forgot to get on the record, I can always meet up with you again.

MK: Okay. Thank you.

MG: I want to thank you for all the time you spent with me today.

MK: Thank you.

-----END OF INTERVIEW-----

Reviewed by Molly Graham 1/29/2020

Reviewed by Maureen Kenny 3/25/2020

Reviewed by Molly Graham 4/1/2020