Molly Graham: [00:00] This begins an oral history interview with Max Mayfield for the NOAA Heritage Oral History Project on May 12, 2023. The interviewer is Molly Graham. It's a remote interview with Mr. Mayfield in Miami, Florida, and I'm in Scarborough, Maine. Mr. Mayfield, I would like to start at the beginning; if you could just tell me when and where you were born.

Max Mayfield [00:25] I was born in Oklahoma City, Oklahoma, on September 19, 1948.

MG: [00:30] And I'm curious about your family history and how they came to this area. Can you trace your family history on your father's side as far back as you're aware?

MM: [00:40] That's an interesting story. My father was born in Texas. In fact, he was born in 1900. So, when he talked about the World War, he was talking about World War I. He was in the military briefly. His parents, his mother and father, were born in the – well, my granddad on my father's side was born in Georgia, moved to the Alabama-Georgia line in the 1800s, and married his wife in, I believe, Alabama. They moved in 1882 from Alabama to Texas in a covered wagon. So I can only imagine how hardy they used to be. I can't imagine doing that. You watch these *Yellowstone* movies, and they must have gone through some of the same things.

MG: [02:11] And what precipitated the move to Texas?

MM: [02:14] I don't know that. That was all the 1800s. I wasn't smart enough to ask some of those things when I had a chance.

MG: [02:27] And how did their life unfold in Texas? Did you get to know these grandparents?

MM: [02:32] Well, I did. My grandmother died, and he eventually remarried. He had eight children. They had 160 acres of land in West Texas, a farm out near Merkel, Texas. That's west of Abilene, and there's still not too much there, even today. But I remember going to the house, and the thing I remember most is they didn't have any running water in the house; they had a cistern. Well, they had a well out back, and then they had a cistern. The water came in through a pipe into the kitchen, and they had a big bowl in the kitchen to collect the water. But with no plumbing, they had an outhouse. I thought that was pretty cool. But I guess on cold and rainy days, that was maybe not very convenient. I don't remember them having electricity in that house. I think that's why we never spent the night there. We had a couple of uncles that lived in Abilene, and we'd go into Abilene and spend the night with one of them when we visited there. I remember one time my Granddad Mayfield gave me a hammer and a bag of nails to get me out of the house, I think, and told me to go outside and have fun. I remember my parents retelling the story, but evidently, I hammered every one of those nails – it was a big bag of nails – into the front porch of this old wooden house, and I'm not sure that's what he had in mind. But they had a pretty rough life. They were hard-working farmers, and my dad told me the way he learned to

swim was my granddad took him out in the boat – they had a little pond in the back – and tossed him out of the boat. It wasn't sufficient for him, and he never learned to swim. He would take me to swimming pools while I was growing up, and he never got in the water again that I'm aware of. [laughter]

MG: [05:03] What other stories did your father share about growing up in this area?

MM: [05:08] Well, I can think of a few. It was a hard life, and they didn't have a lot of money. They were cotton farmers, mostly, and wheat; they also grew wheat. One Christmas, he loaded up the kids. I don't know what timeframe this was. My dad was young; he remembers it. They rode this horse-pulled wagon into Merkel, the closest town, and my granddad got them a Christmas present, got them a bag of oranges. That was a good memory for him anyway. But I don't remember my granddad ever smiling. He was a hard-working farmer. He worked the fields all through the day, came in, ate, went to bed, got up, and kept working the land. They didn't have it easy, but I never heard him complain, either.

MG: [06:30] Did any of your father's siblings serve in World War I?

MM: [06:36] I should know the answer to that. I don't. My dad was in the Army, but he was so young at the time. I don't know if he got drafted or volunteered. I don't know that. He went to training, but the war ended before he was sent overseas. So, technically, he was in the military. But at least he didn't have to fight. I don't know about the other family members. But I'm sure they had some stories to tell.

MG: [07:22] It seems like your father lived through so many moments in history that we'll just get to read about. What did he tell you about the World War I era and the decades that followed?

MM: [07:35] Well, I remember asking – I had to ask about his time in the Army, and he really didn't talk much about that other than he did serve in the military. But one story I remember is he went back to school and got a degree from Abilene Christian College there in Texas, became a school teacher, and somehow he ended up selling real estate. In 1929, he moved to Oklahoma. I had an uncle that took him out to the edge of town. He had a car, took him out to the edge of town, and my dad hitchhiked from Abilene, Texas, to Oklahoma. He ended up going to – I don't know how, but he got a scholarship to Oklahoma State University and got a master's degree. He became a principal in a small school in Fox. It was a two-room schoolhouse. He hired this teacher. I guess she taught half the students, and he taught the other half. The school had a rule that the principal couldn't date one of the teachers. Well, he evidently broke that rule and ended up marrying that teacher, my mother, Madeline May Mayfield. Anyway, that was a good story.

MG: [09:41] Was his degree in education?

MM: [09:45] Actually, his degree was in business. My mother also went back to school and got a degree in education, and she became an elementary school teacher in Oklahoma.

MG: [10:02] I want to ask you more about your mother and her family history, but I'm curious about those years between World War I and meeting your mother. I think he was in his mid-thirties when he married your mother, who was quite a bit younger.

MM: [10:15] Right. He was thirteen years older, I think. My mother was born in 1913. So, yes. He met her in Oklahoma years later.

MG: [10:40] So how and where did he spend those years after the war? Was there anything else outside of getting an education and doing real estate?

MM: [10:48] My dad taught school for an unknown period of time in Texas, got into real estate, and then, when he went to Oklahoma, he was a – I don't know when he started teaching again. He may have started teaching and then got a scholarship to go back to Oklahoma State to grad school there. After he got his master's degree, he went back to teaching, is my understanding, and became a principal. But again, it's a little tiny two-room schoolhouse – not much there. My mother remembers when she was growing up. I mean, she rode a horse to school. Of course, the way she told it, she had to go up a hill in the snow to school and up the hill in the snow back from school. She'd tie the horse up outside the school room, go into school, and then ride the horse home.

MG: [11:51] Well, tell me now about your mother's family history.

MM: [11:54] Okay, that is a little more documented. My mother's father, his name was Grover Cleveland "Cleve" Peters. He was named after Grover Cleveland, who was, I think, running for President when he was born. He was born in 1884 in Kentucky. At the age of twelve, he and his pioneering family moved to Oklahoma. Then he married my grandmother, Mary Alice Peters, [who] was already in Oklahoma in 1907. The marriage license actually says they were married in Indian Territory before Oklahoma became a state. I think it was the same year, about three weeks before Oklahoma actually became a state. They were farmers, too. I remember their home, and they lived near a little town called Dibble, a few miles north of Lindsay, Oklahoma. One good story that was printed in the *Purcell Register* newspaper on my grandmother's 94th birthday celebration was about when my granddad was courting my grandmother. To see her, he had to cross a river between Lexington and Purcell, Oklahoma. "Even the river's heavy rain storm could not interfere with the courtship because Cleve's horse could swim across the river like a champion." I think they initially built this little one-room house, and they didn't have electricity, and they added on room by room. They built a kitchen and a bedroom. I'll never

forget; you walked in the house, and they had this big old black pot-bellied stove in there because they didn't have electricity. We'd stand around that fire and get warm in the wintertime. To get to the kitchen, you had to actually walk through a bedroom and the dining room to get into the kitchen. They had this old black cast iron stove in the kitchen that my grandmother cooked on. I remember the fantastic meals, the homemade bread, and I remember eating a lot of chicken. She would go out in the yard and catch a chicken and wring its neck or chop its head off, pluck the feathers, wash it with well water she had drawn from the well, cut it up, toss it in flour, and then fry it in lard she had rendered on hog-killing day. Anyway, the meals were great, but it was an interesting time. They finally got electricity and plumbing, too, at one point. I remember family members complaining the meals were never as good. They'd buy store-bought bread, and it was never like the homemade bread that she used to bake. But they were hardy people and worked unbelievably hard. My maternal grandparents were married for nearly fifty-nine years. My granddad Peters – there's one story that – and I want to get this right. This is a story – I had one cousin that actually did a little ancestry search years ago, and talking about – anyway, my granddad Peters' mother – well, a few interesting stories; one of them I'll share. She did have a sense of humor. She actually slept with a hatchet under her pillow. I'm going to just read my cousin's email here. "She had an interesting sense of humor. Dad said her (my granddad's mother's) boys paid her girls to take care of her in the later years. She said she slept with a small hatchet under her pillow. She said that once she came into the kitchen with the hatchet raised, and the girls ran out screaming. She began laughing." She (my granddad's mother) was just messing with them, I guess. The email says, "We actually still have that hatchet." There must have been a good reason for her to sleep with that hatchet under the pillow. I can only imagine how difficult times were back then.

MG: [16:46] I also meant to ask – it sounds like both sides of your family have deep roots in the United States. But do you know which generation and from where your ancestors hailed from?

MM: [16:59] Well, the Mayfield side came from England, but I don't know – or it's sketchy enough that I don't know. The well-to-do people's ancestry is pretty well documented, but the people of lesser means, a lot of times, it's not very well documented. On my mother's side, people have really tried to do that, and they've gotten back to – I guess I will share this one story, but I'll share that it needs verification. My mother's mother, my grandmother Peters, supposedly had some Indian blood, Cherokee blood, in her. They really didn't talk about that much back then, for whatever reason. Some of my cousins in Oklahoma have shared that they had asked her about that, and she just didn't really want to talk about that. But since one cousin did some research, she did find a line that went back to a person – some relative of hers was supposedly Cherokee, and the year – I don't have that right in front of me here. This is the family of Lavender Nichols who was born in 1839 – although there's some question about that, too – in Alabama, and there's some history here. Supposedly, they were transported from – this Lavender Nichols evidently went from, I guess it was, Alabama there to Tennessee, eventually to

Oklahoma, and the info given in family correspondence indicates the removal was during the Trail of Tears. Anyway, that needs more research. It's getting kind of late to figure some of these things out, but it does seem like she had some Indian blood in her. I'd be very proud of that if that is true.

MG: [19:54] Yeah. I also meant to ask if both sides of the family, being farming families, were impacted by the Dust Bowl in the 1930s.

MM: [20:02] Well, absolutely. I know at least the story with my dad. He left Texas in 1929, but he had maybe five dollars to his name and a toothbrush and whatever he had in a little bag when he hitchhiked from outside of Abilene, Texas, to Oklahoma. I think that was a little before the official start of the Dust Bowl in 1930. I guess he couldn't find a job, likely due to the poor economy. Anyway, he left real estate and got into teaching. That definitely had an impact, but he didn't really talk about it. My dad and my mother didn't really talk about the tough times. They sheltered me for whatever reason.

MG: [20:55] What brought your mother to Oklahoma? Did she attend college there?

MM [21:00] Well, she was actually born in Oklahoma. Her parents married there in 1907. She would have been born in this very small house on the farm in Oklahoma. She did talk a little bit about the hard times, but she loved to tell that story about riding a horse to school.

MG: [21:29] Did your parents continue to run this one-room schoolhouse and teach together?

MM: [21:37] They did. I don't know for how long. At some point after, my dad – well, my dad ended up getting a job with the Oklahoma State Employment Security Commission (apparently in 1940 or 1944). It's a state job that helped people get jobs, and they had programs like "Hire the Handicapped" and things like that. He became the assistant director of that in Oklahoma. I remember he had a really cool office out by the Oklahoma State Capitol in Oklahoma City. I loved going to his office. I thought that was really a neat place. One other story, if I can. I have a picture of him right after he shook hands with President John Kennedy in the Rose Garden. It was some type of employment meeting there with the President. That was taken about two weeks before President Kennedy was assassinated. He knew a lot of the politicians in Oklahoma just because of the job, and he was active, working with the NAACP group. I remember, too, they forced him to retire at the age of seventy. At the age of seventy, he went back to school at Oklahoma City University – we only lived a few blocks away from the university – and ended up getting a real estate license – a broker's license – and he sold real estate until he passed away from a stroke in 1981. Anyway, he worked hard. We had a small two-bedroom house in Oklahoma City. Very small lot and house. He was forty-eight years old when I was born, so a lot of people thought he was my granddad. We'd go to baseball games. I played Little League

baseball, and Mom and Dad always came to the games and always supported me and encouraged me in everything that I ever did.

MG: [24:32] Do you have siblings?

MM: [24:34] No, I'm an only child.

MG: [24:36] That's interesting that you came along so late in his life.

MM: [24:41] It is. In fact, my mother was told that she couldn't have children. Anyway, I'm glad that they did.

MG: [24:51] Me too. Well, tell me a little bit about your early memories growing up.

MM: [24:57] Well, I had great memories of – I had a dog named Bullet. I had friends in the neighborhood that I went to elementary school with. I also grew up in a church there. My parents were both active in the church, and those were good times as well. I remember one elementary school teacher in particular that was really encouraging. We'd have to do math and simple math exams. Then you'd check your work and take it up to the teacher. I was usually the first one to finish, and she called me "Speedy." Anyway, she really encouraged me, and that's probably one reason why I got a major in math at the University of Oklahoma. I remember one other teacher, a second or third-grade teacher; her name was Mrs. Schmelzenbach. She made everybody in class learn how to spell her name and say it out loud in class. To this day, I still remember – S-C-H-M-E-L-Z-E-N-B-A-C-H, Schmelzenbach. We had to do that over and over. Anyway, I had some really good teachers. It was a small school, but we were close with a lot of people. I ended up going to the University of Oklahoma, and I majored in math. I didn't have any brothers or sisters, but I had a cousin that I really worshiped. He was an Air Force pilot and actually got shot down and eventually rescued in Vietnam. But he was almost like a brother. I mean, he gave me my first guitar, my first set of golf clubs. I really wanted to be like him. I got into the Air Force ROTC, Reserve Officers' Training Corps, program. That turned out to be a really good experience, but my eyesight was too bad to fly an airplane; I don't think they would let me wash an airplane. So, I had to find something to do in the Air Force. My dad would take me to the Oklahoma football games. When I was five years old, I think he probably first took me to an OU football game. When I was in the Boy Scouts, I would usher at the University of Oklahoma stadium just to get in free and see Oklahoma play football, and they had a really good team back in those days, in the '50s and '60s. I loved watching Oklahoma play football on a black-and-white TV back in those days. So, I was at OU, had a major in math, and couldn't fly an airplane in the Air Force – I had to find something. They had something called a meteorology program, where the Air Force would send officers back to grad school for a year to learn meteorology. I'm not sure that I even knew how to spell meteorology at the time, but everybody

in Oklahoma is interested in the weather somehow – the tornadoes and severe thunderstorms. I remember hail events. One time, our front yard looked like snow, but it was actually covered in hail. So, I signed up for this meteorology program. Fortunately, they sent me back to OU for one year of grad school in meteorology. Then I spent time in Fort Rucker, Alabama. Actually, I got in the Air Force to stay out of the Army, and they sent me to an Army post in Fort Rucker, Alabama, in Southeastern Alabama. But it was a great year or so that I spent there as a forecaster. This was during the Vietnam era. In fact, I remember volunteering for Vietnam pretty soon after I got to Fort Rucker, and I finally got orders a year or so later. The same month, I had the option to take an early out. This is 1972. We were already coming back out of Vietnam. I got out of the Air Force and then had to look for a job, and ended up in the National Weather Service.

MG: [30:20] I want to just go back a little bit, and then I'll ask you some follow-up questions about your time in college and the ROTC. My first question was, after you were born, did your mother continue to work as a teacher?

MM: [30:37] I'm trying to think here. She was a teacher all the years that I was growing up. I can't remember when she retired. I can't remember if she worked – I'm pretty sure she worked up until the time I went to college. I'm not sure about after that. She may have retired about that time. But it wasn't as expensive to go to a state college back in those days. They supported me. I had some interesting summer jobs when I was going to school at OU. Even when I was at OU, I worked a little bit on the side there, too, to help out.

MG: [31:33] You said growing up in Oklahoma, you had to be interested in weather because you had tornadoes and hail. Are there other weather events that stand out to you looking back?

MM: [31:44] Well, a couple of weather events. I remember one time we had a hailstorm, and the front yard looked like snow almost, and it was springtime. We had so much hail on the ground that it was just amazing. That was interesting. Also, I remember they had sirens in Oklahoma, even way back then. I remember the tornado sirens going off, and we would get in the bedroom closet occasionally and wait until the warning was lifted. I remember the black and white TV. The weather reporting is so much improved now compared to what it was then. But you couldn't help but be interested in weather growing up in Oklahoma with the severe weather they had.

MG: [32:46] I was curious if both sets of grandparents also had a keen interest in weather being farmers. Was it something that they were tuned into the same way fishermen are because it impacts their livelihood so directly?

MM: [32:56] The Oklahoma side, the Peters side of the family – my grandmother and grandfather – I think most of the farmers probably built an underground storm shelter before

their house or near the same time. I thought this was a really cool thing, too. They used this little cellar they built – dug a hole in the ground, and they'd use it to store their – they have these mason jars full of vegetables and things that they put in there – a root cellar. Is that what you call those things? Actually, we had a friend – it reminds me of one more story if I can. They had some good friends that were dairy farmers, and the father eventually passed away, and the wife was left, and she would go out religiously when there was a warning and get in this cellar when there was a tornado warning. One time she went in there, and there was this huge rattlesnake in there. Well, she was a tough lady who had grown up on the farm. She went back inside the house, got her shotgun, went back out there with a flashlight, shot the rattlesnake, and stayed in there until it was safe to come out. So, the Oklahoma side was definitely interested. My Texas grandparents, I don't remember talking to them about the weather, but I know that they told stories about how they needed rain at the right time of the year, and the weather really impacted the crops. Even the Oklahoma grandparents grew mainly broom corn, corn they used to make brooms. I don't think they got much money for that. They were really dependent on the weather.

MG: [35:12] What made you want to stay close to home when you attended college? Were you considering attending anywhere else?

MM: [35:18] Not really. Oklahoma didn't have a lot of sports teams. Now they've got a minor league baseball team and hockey team. But I worshiped Oklahoma football, and I've got really good memories of watching some of those football games. To be frank, that was the main reason I went to Oklahoma. Well, it was close by. It was only fifteen, twenty miles away from our home in Oklahoma City. That was the motivating reason. I hate to admit that, but that was the main reason. So, I always thank the United States Air Force and the University of Oklahoma football team for getting me into meteorology.

MG: [36:15] Did you live on campus, or did you commute from home?

MM: [36:19] I lived on campus. I started the summer after I graduated from high school in the dorms there, and then I ended up getting into a fraternity, Lambda Chi Alpha fraternity. I've still got a few friends there that I keep in touch with from the fraternity days, and I've still got a lot of good memories there from college.

MG: [36:54] You attended college during some tumultuous years, where particularly on college campuses, there were lots of protests and movements taking place. What did that look like, though, at the University of Oklahoma?

MM: [37:06] That's a very good question, Molly. I remember, in Air Force ROTC, we would be marching, and we'd have to wear our uniform certain days of the week when we had ROTC

class. I remember the protests of the Vietnam War. I remember one time the protesters came out, and they'd lie down on the ground where we were marching, and we marched right over them. The protesters were there, but they were peaceful protests, at least the ones that I remember.

MG: [37:50] I'm just curious about the kinds of conversations you were having with classmates and professors and even at home with your parents during this time. It sounds like they were fairly civically minded.

MM: [38:06] About the war?

MG: [38:07] About the movements of the time – the Vietnam War, the Civil Rights Movement.

MM: [38:10] Well, at least, the folks that I hung around with – a lot of fraternity brothers there – many of them were in the ROTC program, also, either Army or Air Force. At least the people that I hung around with – they were not war protesters. I'm sure we had some people that didn't agree with it, but they were not very verbal about that. I had two fraternity brothers – actually, you have a big brother in a fraternity, and his big brother was a really gung-ho Army guy; he had little Army men, these little figures, in his room, even when he was in college. He lived and breathed the Army ROTC. He was sent to Vietnam, and he had gotten married right before he left, and he stepped on mine over there and was blown up and died. I had actually anotherf fraternity brother as well, who was also in the Army ROTC program, and he went over and was shot and killed. I don't even – well, not that I agreed with the war, but the reason I volunteered to go to Vietnam [was] I just felt like I had a lot of friends over there that were fighting. I just kind of wanted to help them. But then, I never did get to see combat. When I was at Fort Rucker, Alabama, there in southeastern Alabama, as a forecaster, we trained these helicopter pilots. A lot of those guys didn't make it back, either. But they'd come in for a weather briefing. The forecasters always worked shifts, so we worked a midnight shift, and we had also a shift from 8:00 PM to 4:00 AM. Even when I got to the National Hurricane Center, the Weather Service still works rotating shifts, either a week of days, or week of evenings, or a week of midnights. That's not a very healthy thing to do to keep changing like that, but the reason they do that is if you're married and your spouse worked, and you have children in school, and if you're stuck on an evening shift, like 4:00 PM to midnight, you would never see your family. Anyway, that's one of the reasons why they work a rotating shift.

MG: [41:21] Tell me a little bit more about your time at college. What were the classes you were taking? What did you hope to do with your math degree?

MM: [41:30] Oh, I thought I'd be a statistician or accountant or something like that. I think I could have done that. I am still a numbers guy. I actually like doing my income tax; it's fun.

But I'm so thankful I got into meteorology. I've had so much – it's fun. Even if you don't do it as a vocation, it's a great hobby. And now, there's so much free information. I mean, the observations, the aircraft observations, the surface observing systems, the buoy data, the computer models, radar imagery, satellite imagery – you can get all on your cell phone, for goodness sake now, and it's for free. It's a wonderful hobby. I still look at the models and satellite and radar imagery every day, but not as much as I used to, obviously. It's just a wonderful hobby to have. These computer models they're just solving mathematical equations; you basically throw in the pressure, temperature, humidity, and wind, and the models can give you a forecast. They're never going to be perfect; the atmosphere is way too complex, but they're certainly getting much better than they used to be.

MG: [43:00] Did you have any professors in college that supported you or that stood out to you?

MM: [43:07] I don't remember the professors encouraging me that much. But I do remember the students studying together for math exams or staying up all night. I had a good friend – Steve Newell was his name – that helped me get through some of the math courses. I remember a couple of all-nighters with him. He saved me a few times there. I appreciated that very much. I remember another friend John Kenny used to study in his room with music going on. I couldn't do that. I couldn't have any distractions. I'd go to the library and get in a corner cubicle and just try to have complete silence and focus, but I think he had it right. He played music, and that cut out – it's like white noise; it cuts out all the other distractions. I wish I were able to do it like he did. Actually, both of those gentlemen ended up getting engineering degrees, and John Kenny actually also became a lawyer. They were both good multitaskers.

MG: [44:34] Being in ROTC, did that mean you were commissioned as an officer going into the service?

MM: [44:39] Right. You came out and got commissioned as a second lieutenant, and then after a year, I guess it was, you get promoted to First Lieutenant. I would have been a captain if I stayed in another year or so, I guess. But as Vietnam was shutting down, we had forecasters bouncing off the walls. They were already coming back, and so it made sense to me to get out. When I got out, I remember driving back from Alabama to Oklahoma. I got up the next morning and actually drove from Oklahoma City down to Fort Worth, Texas, because that's where the regional office was for the National Weather Service for the southern region. I applied for a job in the weather service. I'd been in this small town near – well, Ozark, Alabama is the name of it. I really wanted to go to a bigger city by then. I loved that year in Alabama because if you'd like to hunt and fish, it was a great place to be, it was beautiful, and the people were so nice, but I wanted a little bigger city. I really wanted to go to either Miami or New Orleans when I applied for a job there in the National Weather Service. They were very kind to me [and] said, "Have a seat. We'll be with you in a few years." Everybody wanted to go to Miami or New Orleans back

in the early ’70s. In fact, they had hundreds of applicants for every vacancy. I didn't know what I was going to do, so I started grad school again at the University of Oklahoma. My friend Steve Newell, who I mentioned, was already going back. We got an apartment, and I moved in with him the night before school started. The first day of class, I was in class. They called me out. I had a call from the National Weather Service regional office in Texas, and they said they had an opening at the National Hurricane Center in Miami for an intern. Was I interested? And I said, “I'll be there tomorrow if you need me.” I moved out the day after I moved into this apartment with Steve. It was funny because I saw a few friends there in that short time, and they would call my parents even months after I left for Miami and ask them whatever happened to Max. They probably saw me – anyway, that worked out really well for me to come in as an intern at the National Hurricane Center. That was September of 1972.

MG: [47:46] I thought you were first in Corpus Christi.

MM: [47:49] No. Well, I applied for the job at the regional office in Fort Worth, Texas. And then, they offered me the job as an intern at the National Hurricane Center in Miami, Florida. That's when I came to the National Hurricane Center in 1972 and stayed there for nearly thirty-five years.

MG: [48:13] Oh, I didn't realize that you came to Miami right away.

MM: [48:17] I did. I spent a couple of weeks, I guess, or maybe less at home in Oklahoma City. Actually, I think it was less time I spent in – yeah, I think I got home in August of ’72, late August of ’72, and by September, I was in grad school in Oklahoma for part of one day. Then I got a job. I then immediately drove to – with all my worldly possessions in my 1969 Oldsmobile Cutlass – brought whatever I had to Miami, and I'm still here.

MG: [49:04] Can you talk about that decision? Why was it such a no-brainer for you to go right to work for the National Hurricane Center? What degree were you going to pursue if you had stayed?

MM: [49:17] Well, I'm going to get a – the Air Force had sent me back in 1970 for a year to study meteorology, and it was considered grad school, although we had to take some undergraduate courses. When I went back, I was going to complete the master's. They didn't send you back so you can get a degree; they sent you back so that you could learn meteorology. So, after the Airforce, I returned to OU, hoping to get a master's in meteorology. I had a choice to make there – either stay in school and get that master’s at Oklahoma, which would have worked out fine. I could have seen Oklahoma play football another year or two. But I really wanted to be an operational forecaster. From the time of the Air Force, I knew that's what I

wanted to do. I took the job as intern. Then, after I'd been at the Hurricane Center for a while, they sent me back to grad school at Florida State, where I finally got a master's degree.

MG: [50:29] Do you want to pause here? We've been talking for an hour. But I'm curious to hear about your first days on the job in Miami and what it was like there then.

MM: [50:40] Well, it was an amazing office. The Hurricane Center was located, at the time, on the University of Miami campus. That's a great place to be. I spent the first week in a hotel in Coral Gables and then found an apartment to move into not too far away in a place called Westchester, Florida, part of Miami. There were some amazing people there at the Hurricane Center. Dr. Robert Simpson was the director – just an amazing gentleman. His deputy director was Dr. Neil Frank, who I still talk with. Neil is ninety-one years old now. He's just as sharp as ever. I remember the first thing – we drew all the maps by hand. You analyzed all the map – surface and upper-level maps – by hand. We've come so far – the technology has improved so much. I'll never forget the way the forecasters would get the forecast out. The Hurricane Center – this is 1972, and they're still using surplus World War II teletype machines. So, the forecaster would get these really poor-quality facsimile charts, and they'd study those and take a few notes by hand. Then they'd type up the forecast. They would actually type it up. Most of them used two fingers on an old-fashioned typewriter – not even electric typewriters, but these old-fashioned typewriters, and then they'd give that type-written forecast to a communicator who would take the forecast, run into the communications room, and retype it on a teletype machine. They had these long yellow tapes that they would feed back into the machine. Then when the magic time, the transmission time, came, they hit the button, and they would feed it through there. These yellow tapes would be hanging out – a long forecast would have a long tape. If you ever went into the communications room and accidentally tripped over one of those and broke the tape, they'd have to type it all up again. So, you didn't do that more than once. But anyway, that was pretty archaic. It was a cumbersome process to put out a forecast back then. The first computer – Bob Simpson, one of his missions when he came to the Hurricane Center was to modernize it. He brought in these CRT machines, little boxes that could be used to type on but only displayed text. You'd type up the forecast. I'll never forget that, as an intern, they had me analyzing surface maps that went from Africa all the way out to Hawaii and covered the whole United States and Central America, South America, and portions of Canada. I had never analyzed anything more than a little area map in the Air Force or in college even. That was a pretty good challenge. The tropical weather was new to me, and I had a lot to learn there, but it was really fun. When we had the – especially in hurricane season – I got there during hurricane season. There are some interesting stories there. Simpson really did automate things with the help, of course, of the whole National Weather Service. But these CRTs, where we eventually started typing up the forecast – I had to do a high seas forecast. You analyzed the surface map, and then you looked at that, you looked at the very poor quality computer model forecast on facsimile paper, [and] you'd make the forecast. So, when we started typing that onto the CRT

– I'll never forget – the enter key – you hit the enter key or hit send key – was right next to the delete key. You accidentally hit the wrong key a couple of times, and you finally learn to do that a little slower. I can type really fast, so I did it too fast. Anyway, we gradually improved. I remember the first animation of satellite imagery that I ever saw. I thought that the higher-quality satellite imagery was just amazing. We had facsimile copies in the Air Force, but they were not very good.

MG: [56:17] How long did you stay an intern for?

MM: [56:22] Well, I believe it was a two or three-year program. I got promoted every year there for a while. There were a lot of new things. It's always good to learn new things. That was fun. Also, talking about the people, there is one other gentleman that I really need to mention. Vaughn Carmichael was his name. He was one of the lead forecasters that made forecasts for the whole state of Florida back then. The way I tell this story – he had five daughters, and he was really good about inviting the single guys over for dinner. He'd line all five of them up and introduce them. It didn't quite happen like that, but that's where I met Linda, who I married, and we've been married – coming up on forty-six years this October. I'm very thankful for that. But her dad – we would go fishing together and play tennis together. He taught me a lot about forecasting, including hurricanes, because he had experienced some hurricanes. So, good memories, even from the get-go, there at the hurricane center.

MG: [58:03] And what was the year that you met Linda?

MM: [58:07] Oh, my. It would have probably been about 19 – well, in the mid-'70s somewhere. My memory is a little fuzzy there. We got married in '77. It may have even been within a year after I got to the Hurricane Center. I'm not sure. But I remember the first time I saw her. I mean, she was just beautiful. I was blown away. But she also had a boyfriend. So nothing else happened there. But I kept going fishing and playing tennis with her dad. I remember one of the fishing trips – it was really embarrassing because she caught more fish than I did. In fact, one time, she was getting more fish than me, so her dad asked us to change places. I took her place, and she took mine on the other side of the boat, and she still kept getting more fish. So, anyway, very embarrassing. But she loved the outdoors, liked to camp and fish like I did. That worked out pretty well.

MG: [59:25] Oh, good. You said you came during the 1972 hurricane season. What stands out to you about that season?

MM: [59:33] Well, there was a June hurricane – Agnes, I believe. I was still in the Air Force. It hit near Panama City in the Florida Panhandle. I remember driving down there. When you get in the military, you have your dream sheet. My number one location to go to on my dream sheet

was Tyndall Air Force Base in Panama City. Well, I didn't get that, but the Air Force got me close. They got me into Fort Rucker, which is about sixty miles north of Panama City. So on my days off, I would drive down to Panama City to the beaches, and I loved that. In fact, sometimes, I would get off a midnight shift and drive down in the morning, hang out on the beach, and then sleep on the beach at night. I would take a sleeping bag and sleep on the beach. I remember one time, about the middle of the night, a policeman came up with a flashlight and said, "You can't sleep on the beach here." I guess I didn't have much money to get a hotel room. But I probably went back to my car or moved down the beach. I don't remember. Anyway, I did like that in Panama City. Go back to that original question, if you don't mind.

MG: [1:01:15] I had asked you about the 1972 hurricane season.

MM: [1:01:18] I'm sorry. Okay, back to the 1972 hurricane season. I remember this hurricane that hit near Panama City. I drove down there, and there were pine trees that were snapped. But one thing I remember is that – and then I got out right after that, out of the Air Force, and ended up getting that job at the Hurricane Center by September. I remember Neil Frank needing to respond to a lawsuit over Hurricane Agnes because the businesses shut down, the restaurants and hotels lost money, and he spent a few years, I think, trying to resolve that lawsuit. Of course, people didn't understand the uncertainty as well as they do today. I remember thinking, "Gee." It took a lot of his time away from the office. I don't think that should have happened. I remember that. And then I remember Bob Simpson had coined the term "neutercane." We have pure tropical systems like hurricanes and typhoons – and we have pure extratropical systems, such as the wintertime storms, but there's some hybrid systems in the middle there. So, Bob Simpson was a real innovator, and he was ahead of his time. He started calling these hybrid systems "neutercanes" in the official NHC advisories. Well, I was from Oklahoma, and I didn't know what that was. I went to the dictionary, and they didn't have that word in there. But they had "neuter" in there, and it says, "Meaning having no sex." So I wasn't sure what he meant by the word neutercane, but he meant a hybrid system. What I remember is the head of NOAA – actually, I believe he came to Miami and chastised Dr. Simpson for doing this on his own and not going through proper channels, which would have taken a few years to get approved. He just did it. He used the hurricane advisories to send out these hybrid systems that he called neutercanes. But anyway, the head of NOAA put a stop to that. But eventually, they agreed on the term "subtropical," and it did take years before they finally came up with the term subtropical storm. They're still using that today. In fact, when I was the director, we started naming the subtropical systems, too, because if you get hurricane-force winds and the storm surge, it doesn't really matter if it's purely tropical, extratropical, or a hybrid. When you name a hurricane, we're told, it gets more attention, especially more media focus, and people find out more about it. So, Simpson had the right idea. That term subtropical is still in use today, and they're being named.

MG: [1:04:39] For how long were hurricanes being named?

MM: [1:04:43] Well, they started advisories – they used to refer to them by latitude and longitude, and that's very cumbersome if you had two or even three hurricanes out there. Most people don't know the latitude and longitude of where they live, much less where a hurricane is, if it's threatening them or not. If you had one in the Gulf, one in the Atlantic, and one hurricane and one tropical depression, it was easy to get confused. They actually started in 1950 using the phonetic alphabet, and then I think, in 1953, they started using female names. Then, eventually, they switched to using both male and female names.

MG: [1:05:36] And you mentioned the NOAA administrator coming down at the time. Would that have been Bob White in 1972?

MM: [1:05:42] That's correct.

MG: [1:05:45] Did you get to meet him or interact with him?

MM: [1:05:48] No, I was probably off or on a midnight shift. But I remember the stories. Bob Simpson was actually the deputy director of the National Weather Service in Washington. He took a demotion to come to the National Hurricane Center in 1967. He had a very good reason for that because when he was a young child, I think six years old – I'm not sure the age, but a young boy. He lived in Corpus Christi, and a hurricane devastated his house in 1919. A lot of people have heard this story. His dad put him on his shoulders. When the storm surge came into the Corpus Christi area and into their house, they were eating Sunday dinner after church. His dad carried him to higher ground, which, fortunately, there is some in Corpus in some places and close to their home. He survived. That's an event nobody forgets. I'm sure he had an interest and a love, to some extent, of hurricanes. He willingly took this. He wanted to take it. I'm sure he didn't want a demotion, but he took a demotion to become the director of the National Hurricane Center.

MG: [1:07:10] And when would that have been?

MM: [1:07:15] I'm not sure of the date when he actually came. He was the director when I came in '72, so it must have been in the late '60s. He left not too long after I got there, and Neil Frank became the director. They both did wonderful things for the hurricane program. Neil is still going strong today. He's an interesting guy, had a flat top. They still have a King Mango Strut parade in Miami. It's kind of a spoof on the old Orange Bowl Parade. The people have these funny – some outrageous – floats. I'll never forget it. When I came, they had a guy pushing a lawnmower in the parade. That was it. That was the whole float. I mean, he was just pushing this lawnmower. He had a big sign that read "Neil Frank's Barber" because he had this flattop. He still has that flattop today. He still plays golf today. At ninety-one, that's pretty amazing.

MG: [1:08:36] NOAA was a fairly new agency at the time. It had gone from the Weather Bureau to NOAA in 1970. Were there a number of Weather Bureau folks working there when you arrived?

MM: [1:08:48] Oh, yes. Most of them worked for the Weather Bureau before it transitioned to the Weather Service. That also reminds me – you talked a little bit about the technology. I didn't really meet this gentleman, but they told me stories about him. When he was in the Weather Bureau, his first job was to fly a kite. He flew kites to take up-air observations. By the time he retired, we had geostationary satellites. So, in one career of around thirty-five years, we went from kites to satellites. So, the young folks that are getting into meteorology today, I just can't imagine what we'll have thirty-five years from today. You're in for a wild ride because the technology is advancing so fast, and so many wonderful things are happening there that it's going to be fun.

MG: [1:09:54] Well, maybe this is a good place to take a break for today, and we can trace some of those changes in more detail the next time we talk, and you can walk me through your career steps a bit more.

MM: [1:10:05] Okay, that sounds good. I'm going to lose my voice here, too. Thanks, Molly. I'm probably forgetting some things, but you're helping me along very well here.

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

Reviewed by Molly Graham 6/17/2023
Reviewed by Max Mayfield 7/16/2023
Reviewed by Molly Graham 10/27/2023