Transcription: Grand Canyon Historical Society

Interviewees:	Nancy Muleady-Mecham (NMM)
Interviewer:	Tom Martin (TM)
Subject:	My varied career as a Protection Ranger
Date of Interview:	03/24/2021
Method of Interview:	By telephone
Transcriber:	Stacy Birk
Date of Transcription:	January 2022
Transcription Reviewers:	Susan Seibel, Richard Phaneuf

Keys: Grand Canyon Recreation Center fire, pub, library, Kent Mecham, structural vs wildland fire, wildland-urban interface, Level-Two firefighter, engineer-operator firefighter, Mogollon Rim and Mogollon Lodge, Tusayan, gallons per minute (for firefighting), mutual-aid firefighting, 1991, Coconino County, Barb Bruckvan, Karen Shinko, Julie Andrea Watt, Chuck Waller, Hal Glazer, National Park Service fire stations, Fire and Safety company, Dispatch, Maintenance, Safety, Protection Division, Pinon Park fire, Tusayan fire, Firefighter Ecija, IMAX building, Daniel Troby, BLEVE, SCBA, Mike Meyers, Craig, flashover, Rowe Well Road, Maswick area, former Maswick Lodge, Kent Keller, skunk, feral dogs, Sandy Pearl (formerly Sandy Hand), domestic bunnies, P Street mobile home fire, protection ranger.

TM: Today is Wednesday, March 24, 2021. This is going to be a Part 7 of a Grand Canyon Oral History interview with Nancy Eileen Muleady-Mecham. My name is Tom Martin. Good afternoon, Nancy. How are you today?

NMM: I'm well, thank you, Tom.

TM: Great. Nancy, may we have your permission to record this oral history over the telephone?

NMM: Yes.

TM: Thank you. Nancy, last time we chatted, you were just about ready to talk about the fire that happened at a building in Grand Canyon National Park that served a number of different purposes—a library and there was a pub in there. Can you pick that up?

NMM: Yeah. The overall name of the building was the Rec Center, short for Recreation Center. And, yes, one part of it had a pub, which had pool tables and pool sticks and other such entertainment things. Darts. Adjacent to that, attached via a common wall, was the library. And this was off of Center Street and across from Ranger Operations Building and to the—I want to say west, but I may have my directions wrong—across from it was the U.S. Judge Magistrates building on that same area, but it wasn't attached to it. But that was—

TM: And Nancy? Can you expand more on the pub? Was alcohol sold? Who operated it? And also on the library; where did it get its books? And who operated that?

NMM: Boy, you know, I think somebody else would have to give you the details. The library, of course, was later moved to an old historic building up near the housing area after the fire. But I do know that the name of the person who ran it is not in my brain right now, and I couldn't tell you if it was Concession or National Park Service or a third entity that ran it. The pub, I only know was a place for people to go. They did drink alcohol. I don't know that it was sold there. I don't know the circumstances behind it. I didn't work summer night shift. I worked summer day shift, usually, in Protection.

But I do know that there were some very hardcore, police-like Park Rangers who, rather than assist people, would wait outside the pub for people to get into their cars and start to drive home and then arrest them for drunk driving, which was unfortunate that there were people with that mind set. The occasion, when it happened to me, I would intercept people that I thought might have—and I wasn't sitting outside—might have had too much to drink and encourage them to get a friend to take them home. Or on a rare occasion, I might take them home. It really depended upon the circumstances, but just keep them off the road.

TM: Nice!

NMM: To give an example of people who were trying to do the right thing and not drink and drive, but I did one time have to pick up somebody who was walking home, knowing they couldn't drive. But they were walking home in the middle of the road, using the dividing line to help them guide their way home. So they were in danger of getting hit by car. So, that— People did get very intoxicated there because for some people, there wasn't a lot for them to do.

So the Rec Center was also not just a pub but it had music. It had, as I said, pool tables, because that's important in the story I'm about to tell. And I'd never spent any time in there other than to respond to things—things like medical or whatever. And the library, I only went in a couple of times but never for library books. As I recall, because I had tons of books of my own, usually.

But I remember there was a woman who ran it. I can see her now; I can see her blonde hair. And she had several volunteers who worked for her as well, and I believe one was a paid employee. And that paid employee, at one time, was fired, and I don't remember the circumstances, which is important in this story because the call came in in the morning. The morning, I guess it was, or late morning. I remember it was a day off for Kent and I.

Ken Mecham was the structural fire chief for Grand Canyon. And I designate the difference between structural fire and wildland fire. There were over 1500 buildings in all of the Grand Canyon, from Phantom Ranch to Desert View to North Rim to South Rim, Hermit Rest. And so he was responsible for the protection of all of them, plus the housing areas and things like that, as opposed to wildland fire, which were the people who were in the forest and the wildlands. But we also were very astute to the wildland-urban interface that because we lived in an area where natural fires occurred in the pinyon juniper forest and on the North Rim in the pine forest in the—ah, what did we have? Doug fir forest—those fires occurred quite naturally by

lightning strikes and other happenstances. The largest Ponderosa pine forest in the United States went from the Grand Canyon South Rim to Flagstaff, Arizona, along the Mogollon Rim, and that's a fire-adapted ecosystem. We were building buildings in the middle of this fire-adapted ecosystem, so the wildland-urban interface was an important concept.

I'm gonna divert a minute before we get to the Rec Center fire. As a result, we worked with them a lot, we knew how to use shelters if— I was a wildland firefighter and was well trained. But if you weren't, and you were on the structural fire brigade, you went to training on how to use the emergency shelters. And if there was a wildland fire, we were trained on backing the engine into the driveway of a particular home and not hooking up to a hydrant. And that way if the home got to the point where we could not save it—and we're talking about a wildland fire coming in, affecting many homes—then we were facing out so we could leave quickly. We weren't tied to a hydrant. We had 500 gallons on board and foam that we could do our best to protect the home. And if that wasn't the case, then we said, sorry, and then we could take off to something we could save.

But we had a lot of training in the wildland-urban interface. And I started off as a Level Two firefighter, which is the kind that can wear the self-contained breathing apparatus, or SCBA; as opposed to a Firefighter One, which was trained in holding hose, and knowing lays, catching hydrants, things like that. And then I was also trained as a officer, so I became a captain. And then I was trained as an engineer-operator. The reason it's a two-name is the engineer-operator is the person that not only drives the fire engine but runs the pump. And so you have to take the 5-inch, you have to grab a hydrant, if it's there. If there's no hydrant— For instance, when we would go to fight fires in Tusayan on mutual aid, we would bring a tanker truck, and the tanker truck would provide the water. What most people don't understand is there's a very limited amount of water on fire engines, and it's basically a mobile pump.

So we need a source of water to come in to the engine and then pump it out. So sometimes an engine would come in, hook to the hydrant, and take, you know, a couple of lines to start. And then a second engine would come in, maybe a more powerful one, and then it was the first engine's job to connect to the second engine to give them water to pump so they didn't have to hook up to a hydrant. So it could be very complex at times what you were doing.

When I was a pump operator on many of these fires, I often never looked up because you're looking at dials and you're going out, you've got two intakes, you've got six outtakes. And you don't want to mess things up. And what people don't understand—and one of the things you learned in engineer school—is fires have a heat that comes at you in British Thermal Units, or BTU. And it's not so much that you need enough water to keep people from getting hurt or the fire to put it out, but you need to knock down what we call the BTU. And in the old days, they used to make a joke about, okay, there's a firefighter at the end of the hose. Give 'em enough water to—the pressure lifts them up off the ground, and then lower it back down so their feet touch the ground. And that was sort of the joke of how they did it. But it became much more refined—a lot of mathematics—about how many gallons per minute you needed to give somebody with a particular hose, with a particular nozzle, to fight a particular fire. So it was

very complex to do that. Kent, who did a lot of the training, used to say it was like a one-legged man in an ass-kicking contest. It was just very complex.

TM: Oh, my gosh. Yeah, ‘cause you gotta keep the pressure up at the nozzle where the front-line people are trying to get the liquid onto the fire without—

NMM: And as a good example, we had propane fires. And when [water] comes out of the nozzle, whether it's a 100-gallons per minute, or a 150-gpm, it looks the same at the nozzle. But a 100-gpm is not going to protect that firefighter from the propane fire coming through the water.

TM: Interesting.

NMM: But a 150-gpms will. And so—

TM: But can the firefighter hang on to that hose at a 150?

NMM: Yeah, yeah. You have two people on it. You have one on the nozzle, one on the backup, and, yes, that's why you have to be physically fit to do this. And if you're just doing— And just to pull a hose— You know how much a gallon of water weighs. Eight pounds, right? So pulling an empty hose is no big deal. But let's say you have to go from Point A to Point B, and you only have to move 30 feet. You're moving eight gallons of water—in the length of that hose, we're talking about maybe 800 pounds now, if it's a 100-foot hose. From Point A to Point B, 30 feet, you take four or five people to do that.

So it's physically taxing, and it's a lot more than people realize, which is why sometimes you see people sitting on the ground in some of those pictures, pointing it up, and pulling it up, because it's exhausting to try to hold it. So you sit it on the ground and just point it up with your legs while you're sitting on it or bring it under your armpit to do something. So you learn all of these tricks and all of these different things.

TM: Nancy? You mentioned Tusayan on mutual aid.

NMM: Oh, right.

TM: Can you explain a little bit the relationship? We're gonna head off on a tangent here. The relationship between Grand Canyon National Park and its, basically, fire department—you know, structural fire department—and the gateway community seven miles down the road and out the main gate. I mean South Rim Entrance.

NMM: Yeah. Tusayan, yeah.

TM: Yeah. Did not have a fire station at the time but had -- what? There was Moqui Lodge, and there was Red Feather Lodge, and there was the Domes—

NMM: The Quality Inn.

TM: —and the Quality Inn.

NMM: We were in the steakhouse, that caught on fire, and the IMAX theater, and the—

TM: Right. A whole bunch of buildings. McDonalds, and all kinds of stuff. But no fire station. How did that work out?

NMM: They didn't. Well, when we first got there in '91, there was nothing like that. There was, however, a small cadre of firefighters at the airport, which was at the south end of the little town of Tusayan. And so they had a small cadre, and we trained with them. And because it was just, maybe, two or three people on at a time, whenever there was a plane crash, or a fire, or a motor vehicle accident, or a medical, or something that required assistance, there was a mutual aid agreement, a formal agreement, written by the unincorporated area of Tusayan. And unincorporated means that they relied upon the county to provide the services as opposed to a specific city. So the Coconino County Sheriff provided services as opposed to a local police department. So we had a written agreement with the unincorporated town of Tusayan, through the superintendent of the Park, that if they needed us, they called us, and we went out. And oftentimes, it didn't take the “Do you need any help?” asking; it was already automatic. So somebody in Tusayan who dialed 9-1-1, it wouldn't go to Coconino County. It would go to the Dispatch Center at the Grand Canyon.

And so, they would there—and Barb Bruckvan was supervisor at the time, and people like Karen Shinko and Julie Andrea Watt were dispatchers at the time. And then if it was a not-big-deal, they would get on and say, "5-2-3. There's a report of a person with an ankle sprain, and there's no one available.” And we'd work that out. But for anything beyond the most minor of things, an alert tone was sent out. And depending upon whether it was law enforcement, fire, or medical, the alert tone from Dispatch was different. If they knew it was a big deal, like a big fire or a huge motor vehicle accident, they didn't bother to ask anybody. They knew immediately to do a general alarm.

What most people don't realize, there were the equivalent of tsunami sirens in the housing area of Grand Canyon. So they'd set off these "Aaaaaahhh" [imitates siren] big, long sirens, that you've heard. And pagers would go off. They didn't have pagers initially, but Kent brought them in because many of the people on the fire department were not in the Protection Division. They were Chuck Waller in Interpretation, and Hal Glazer in IT, and other people in Maintenance. So they would hit their pagers, the general alarm, and people knew to go to the firehouse. And assignments would be given out at that time by whoever was the officer or depending upon what the situation was: plane crash, car accident, difficulty breathing, things like that. You wouldn't have the general alarm for difficulty breathing, but something like that. And then we would use the Incident Command System so that we could all communicate.

So anyway, the town of Tusayan didn't have any of that, and so we would go out and take care of their structural fires. We also would go out and take care of their medicals. We also responded to the airport. Within about six or seven—maybe later years, they did develop a tax-base where they were able to build a fire department there. They trained with us, and we still did mutual aid because two people are not going to do anything.

What most people don't remember, or recall, is that in Grand Canyon, there wasn't just the National Park Service fire station, but there's also Fire Station 2 in the housing area. And that was the one run by Fire and Safety, which was the concessionaires' protection, and it helped them with their insurance. And Fire and Safety provided security, and I believe they changed their name after a while, but that's the name I call them. But they had security officers so if they had a disturbance at Victor Hall, which was the male dormitory, their people—unarmed, with some training—would go over and say, "Okay, you guys, break it up. Go to your rooms." Da-da-da-da. And if that worked, that was great. If it didn't work, then they would call the National Park Service protection rangers and step it up a level.

So they had people. The safety officers would do that. They also co-trained with us as a structural fire brigade. They also had officers that Kent and whoever else trained them, and they would often show up at the engine in a general alarm. And so there was Engine 2, and Fire Station 2, and Engine 1. Later on, we had Engine 3. And so, if it was a general alarm, they would report. Wherever they were, they would go—whether they were Fire and Safety, or National Park Service—they would go to the closest engine and man it. So we often had many different people from many different departments and outside in the National Park Service on those engines.

TM: Okay. So quite a large group of people to pull from.

NMM: Thirty to 60 at any one time.

TM: Great! That's really helpful when it's all volunteer, kind of thing.

NMM: Yeah, almost all volunteer. When Kent started, he was the paid person, and he had a paid officer. I can't remember the young man who was the first paid officer, but I can see his face. He's married to a friend of mine. But when he left, they decided there wasn't money in the budget. And except for the fire chief, there were no paid positions. So, we all had collateral duties.

When I became a captain-engineer, part of my collateral duties was to go to different houses and do inspections 'cause it's not just fighting fires but preventing fires. So we had to go to all the residences that were National Park Service and make sure that the smoke detectors worked, that the fire extinguishers were up-to-date, and do building inspections and things like that. Kent could not do 1,500 buildings, so it was delegated to others. And then Fire and Safety, they did their own inspections, or they paid for a company to come from Flagstaff or Phoenix to do it for them. So you would often see a van in the village—you know, "Fire" or "Phoenix Fire"

or something. They were doing the inspections, like, in the El Tovar or some other places.

TM: Okay. Alright. So it's just very helpful to learn something about the background of this. You mentioned eventually that there was an Engine 3. So I would assume that Station 1 was the—

NMM: Had two engines to man the fire.

TM: Oh, had two engines. Got it.

NMM: And then Fire and Safety had one engine. And I don't remember who was who. I knew we were 1 and they were 2 at one time. And then maybe we were 1 and 2, and then they became 3. Kent designed fire engines, and he actually went back to Pennsylvania to pick them up and drive them back across the United States. I believe he did that for Death Valley; he did it for the Grand Canyon. When I was a firefighter first training at Death Valley, when you would go to a fire, like in the old days, people would stand on the running board of the back. You'd have a clip around your waist. And if you did things right, you were clipped into the back transom so if you fell, you just were hanging by your armpits, kind of thing. That was thought to be too dangerous, so that practice stopped after some time in the 80s, I think. And then the engine— When we came to the Grand Canyon, the engine that we had—that was the Engine 1 at the time—was open. It had some— The captain and the operator, the driver, was enclosed, but the jump seats were outside, exposed.

TM: Which is fine in the summer, but in the winter—

NMM: In the winter we would get snowed on and rained on and all that kind of stuff.

TM: And in the summer, in monsoon, it would be a wet ride.

NMM: Yeah. I think we actually ended up giving that engine to Fire and Safety eventually.

TM: [Laughs] Okay!

NMM: I mean, because they had something from the 1940s or '50s, or whatever it is.

TM: Right! Somebody's got pass-me-down stuff.

NMM: So it was actually better than what they had. You know, they had, literally, an old, red fire engine that was totally open. And then so Kent said, "Now this is ridiculous." And he designed it so that there was the ability to seat five firefighters in the back and then a captain and then an engineer-operator who's driving it in the front. We all had communications. And when you jumped into the fire engine, there was a separation in the back of the seat, and between that separation was your tank, or your SCBA. So you would get out of your vehicle. In my case, I would lock my service weapon in the trunk of the car, go in, change my clothes, put on my bunkers or turn-outs, which is the term for the protective clothing you put on—Nomex

or PBI. And then, depending upon your job, if I was going to be a firefighter, I would go into one of the jump seats, and I would turn on my air, strap everything on. And on our way to the fire, we would continue doing, put our Nomex hood on and our helmet, and all that kind of stuff.

And then when you get to the scene, we all had our hearing protection, as well as our inner-ship communication, ISC. We would be able to talk to each other and hear what Dispatch is saying and saying, you know, "You have a fully involved fire. It's just a dumpster fire" or whatever it is. And so the captain would then give the assignment: "Okay, I want Glazer and Muleady. You take the 50-foot and pipe pole and take care of that" or "We're gonna stop here. And Waller, you're gonna catch the hydrant." So all the assignments were given out before you got on-scene, based upon what we had.

TM: Okay.

NMM: And then when we get off, we always buddy-checked each other, made sure everything was on right, everything was tucked in, and then we would go to our duty. And we used to train to be able to do this in under a minute.

TM: Would Kent, as the fire chief, would he have his own vehicle to get out and do some assessment ahead of you guys who were coming behind?

NMM: Yes. He had a pickup truck so he would often— In the early days, he often had to go to the engine because he didn't have a lot of trained engineer-operators. He brought that to Grand Canyon. So he brought in— In the past, it was just Protection and Fire and Safety. He brought in Maintenance. He brought in IT. He brought in anybody who wanted to be on the fire department, so it blossomed. We ended up with five or six engineer-operators and captains, and stuff. Within three or four years, he often got to go ahead a time, and then he would make the assignment. Like the huge fire in Tusayan beyond the IMAX theater that impinged upon the market, that was taking out the trailer. I don't know if you want me to go into fire details.

TM: Eventually I do, but I wasn't aware of that one. Yeah, yeah. Which one is that? Let's go there.

NMM: Okay. So this was a— Kent and I got called by Dispatch at home, saying there's a dumpster fire in Pinon Park. And so it wasn't a big deal. It was just myself—I'm trying to remember the Fire and Safety guy who joined us. He was on duty, so the three of us went. Kent was the operator, and I'm trying to remember his name. His last name was Ecija, but I can't remember his first name. But anyway, he and I got out the 50-foot, we connected it, and we opened up the lid, and we put out the dumpster fire. And just as we were starting to clean up, we hear a "dee-do-dee-do" because we have a halogen light erected on the engine, and it said fully involved structure fire, Tusayan Fire Department.

This is before Kent had set up protocols. And Kent said, “Hit the general alarm. We're going in Engine 1” because we were there. So Ecija, myself, and Kent— Ecija was in the back; Kent was

driving. We took—I remember specifically—we took the 50-foot of hose that was already connected to the engine, disconnected it, and threw it in the woods to get later on because it's full of water, and we're not gonna re-pack it. Grab the hose, put down the halogen light. And I remember coming out of the entrance of Grand Canyon, and we came down to where the Moqui Lodge used to be—it's not there anymore—and I saw a flame higher than the IMAX building.

TM: Whoa!

NMM: And there was the IMAX, and it was making the whole sky— I mean, you could see the flame, and the whole sky was gold. And I remember personally because I was in the captain's chair at the time—I wasn't a captain at the time. I was a firefighter. It was early on—and going, "Oh!" I could just feel my whole body change, going, "This is not a dumpster fire. This is real." And I remember my whole being just changing. This is real.

Oh, I was an operator at the time. I was. And Kent said, "I'm gonna go up and make an assessment. You wait here until I call for you." And so I got out of the captain's chair, went around, got into the driver's chair as I see Kent running into the darkness toward the fire, because he didn't want the engine too close until he could figure out what was going on.

So he called up, told me where to position. It was a cold night; I remember the ice. And it was early on because Daniel Troby was on one of the engines and other people that you don't expect that wouldn't respond to fires later on. But we pulled up, caught the hydrant, and put out a hose. And what it was is a propane tank next to the market was on fire, and it caught a full-length housing trailer adjacent to it on fire. And then it was also flaming into the market. So we had a propane tank on fire, two impingements. And what you want to do is you want to cool the propane tank out, so it doesn't BLEVE, and BLEVE means explode, basically. Each one of those initials: Boiling, Liquid, Evaporative, Vapor, Explosion. Oh, I remember what it meant.

So that's what BLEVE means. And if it does, then a tank that weighs 5,000 pounds can be blown a mile away, and the concussive forces can kill people. But you also have an occupied, we think, occupied trailer that's fully involved. And now it's going into the market. So we needed everybody we could. So I am running the pump until Kent comes back. Then Ecija and I, we pull a line, and then the airport people come up. We have Fire and Safety engine coming up. So we ended up with, like, three engines on there, and we're putting a cooling line on the tank 'cause we just want to keep it at a specific temperature. We're not trying to put out the fire.

We just want to keep the tank from boiling and exploding. And then we have another line going to the backside of the trailer because you always want to attack a fire from where the fire is not. If you attack the fire directly, the chances of you blowing it into an uninvolved part of a building increase.

TM: Oh, interesting. Yeah.

NMM: You want to go to the uninvolved part of the building, and then blow it out the back or wherever the fire is. You don't want to ever attack the fire directly, if you can help it, or you'll just blow it into more building. And you want to be careful not putting steam on other people. So we went underneath the trailer, and we were hitting it from the floor up. I remember laying on the ground, hitting it from the floor up. And then your tank alarm goes off. You know, you only have so much time left in your SCBA. So people would come and go. And having been a scuba diver for now 50 years, I have very good breathing control, so I lasted a long time on my tank. You know, up to an hour, and where some people maybe only 30 minutes. So people would trade in and out, and then I would get another assignment.

And then, I remember Paul, whose name is just— He was with Fire and Safety; nice guy—and so we now were going to be putting fire [sic] on the side of the market, because it was starting to catch on fire, to keep it from going into the market. Just right now, the facade of the market was getting hit. And so I was on the nozzle, and I was going forward. This is a heavy hose, and you've got a lot of people different places. So Paul turned his back to me to reach back and just to man-handle [and] pull the hose forward, pull it forward. You can probably get a mental picture of him pulling it forward with his back to me so I could walk forward.

TM: Right. Right.

NMM: Well, I walked forward—and there was a puddle of water—and I stepped on the puddle of water. But what I didn't know at the time is this was a six-foot deep hole stairwell.

TM: Wow. Full of water.

NMM: And so, I took a step into oblivion. Full of water. And I totally disappeared.

TM: And you're hanging on to a fire hose.

NMM: Well, I'm on the nozzle, and I can't get out because Paul is continuing to pull hose on top of me. And so Kent said he saw this happening, so he did the firefighter down alert, or whatever it is. And I'm down there, but I'm fine because I have an SCBA on that's like a scuba tank. It's like a scuba mask, and so I'm breathing air. I'm trying to get up, and every time I try to get up, more length of hose comes on me. Finally, Paul— Somebody alerts Paul. The next thing I know, I have four hands grabbing me by my shoulders and my strap and just pulled me up out of the ground from six feet, and I landed on the ground.

TM: Oh, my gosh.

NMM: So two other people took that. And it was so cold because I remember going over to— ‘Cause we had a rehab area where firefighters go to get water or to go to just rest for a few minutes. I went over and took my SCBA off, and I'm soaked. So I did a handstand up against one of the engines and all this water came pouring out of my bunker pants. And so when that happened then I was okay. But in the middle of all of this, a drunk walked into the market. And

there's a hose that's going into the entrance of the market to that far wall. There's no water they're putting on it but just in case the fire breaks through, they're ready to hit it with the hose. And in the middle of this, a drunk comes in, trips over the hose. So they call Mike Meyers, who comes and arrests the guy for entering a closed area.

TM: Oh, gosh.

NMM: He wanted his booze, though, let me tell you. But there were icicles. You know, it was so cold that icicles were forming were the fire hose was hitting. But eventually we put out the fire. We saved— Well, we didn't save the trailer. The trailer was fully involved. But we saved the market, put out the fire, and that was one of the very first big, big fires that I've ever fought. Yeah. But now, back to the Rec Center—

TM: Yeah. So it's late morning—

NMM: Yeah, it's somewhere mid- to late-morning because I remember getting the call from Dispatch, and the call was for smoke at the library. I don't think a general alarm was hit at first because it was just smoke. We didn't know what it was. So Kent went; I went and got the engine. Kent went ahead in his truck and, you know, a bunch of people came. And we have pagers, so we don't have to do a general alarm. He says, you know, "Page out the A-Team" or whatever the response crew is. So we responded, and when he saw the smoke coming out from underneath the eaves, he thought we had enough time. So he said, “Let's go ahead and make a general alarm because if there's enough smoke to come underneath the eaves, we'll do that.”

So I was a captain—and there's a picture of me with my crew—and we're opening the door to the pub, and we've got a hose coming in. And there's smoke in there, but we can't see the fire. So we don't know what's going on. I went in with Craig—and I forget who else?—but there were three of us who were the entry team. So we went inside, and we're looking around. We see the pool tables, we see the bar area, and, you know, other such things. And we think, well, it must be upstairs. The door to the upstairs is locked, but it's a simple hasp lock. So I take a pool cue, and I put it underneath there, and I break the pool cue to break the hasp lock. And I though, “Ooh, I'm going to get in trouble for breaking a pool cue.” Of course, knowing the whole building went down later on, it didn't really matter. So we went up the stairs. Upstairs! And it was just like they taught you in class. There's rolling smoke across the ceiling the length of the attic.

And it's like a flash of light here, a flash of light there. It's about ready to do what we call a flashover. It's getting to the temperature where all the gases in there—we're not talking about the wood or the curtains, but the gases are about to catch fire. And the thing that they teach you is you open up your hose, then you spray the ceiling, and you close your hose. Just like that: open and close, open and close. What you're doing there is you're dropping the temperature so it doesn't flashover. ‘Cause when it flashes over, then everything catches on fire instantaneously, and you're enveloped in flames from floor to ceiling and you're a crispy critter. And the reason you don't want to do a constant thing on there [is] because it's so hot at the

ceiling, it super heats the water up there, turns it into steam, and it drops down on you as a burning water.

TM: So I'm confused here, not being conversant in any of this. What was actually on fire?

NMM: What most people don't realize is you put a log on the fireplace, or you put kindling, whatever you're in, the heat makes the molecules go faster. And the molecules rise above the actual wood. The wood begins to vaporize, the carbon and the oxygen and the hydrogen. So that flame is not, quote, the wood burning, but the gas that the wood once was now burning. And if you take a tree—a tree is half carbon and hydrogen, and half of it is water, as a generalization, any tree. So when you put a log on the fire, at least half of it is carbon and hydrogen, and depending upon how dry the wood, 50 to 10 percent of the wood is moisture. And so when you light that off, you have steam coming off of it. And what do you call dirty steam, you call smoke. So a lot of what's coming out is also water. But you also have flammable gases that are coming off everything in the room, everything in the room.

TM: So basically, the attic was on fire?

NMM: The attic was on fire, but it hadn't caught fire yet. The actual structure wasn't burning yet, but the gases they were giving off were burning.

TM: It hadn't gotten enough oxygen yet.

NMM: Right. And because we opened a door to go up into the attic, now it was just starting to get enough oxygen.

TM: Got it. Okay.

NMM: And so the attic was starting to flashover, so we knew we needed to get out of there. There's nothing we can do but save ourselves. At the same time, we hear the emergency evacuation alarm coming from the engine. That is a continuous blast of BOMP BOMP BOMP BOMP. Anybody in the building, get out. And so we are getting out, and we have— You always take two hoses with you, and you could not see hardly anything. These flashes were ethereal in this smoky room above us. And so I'm the captain so I'm the last to go out. So we leave one hose there to follow down. We can't even see each other. We're touching each other.

And I remember turning around to go down the stairs and having the nozzle because I'm the last one out, and Craig grabs my ankle by my fire boots and pulls me down the stairs—bump, bump, bump, bump, bump—on my butt. Because—and I talked to him later—he goes, “I couldn't see you. I just wanted to make sure you came down.”

[Laughter]

So we get to the bottom, and we exit the building, and when we turn around and look in the

building, it is fully involved. If you didn't know better, you would have thought we had burned up in the attic because the attic is fully involved. By our hitting the flashover, we luckily pushed the fire out of the building, into the eaves, to the roof than let it come down on ourselves. But to everybody inside, it had burned us up. Everybody thought we were dead. But we did exactly what we were trained to do and that's how come we survived.

TM: Hmm! Nice.

NMM: So we came out, pulled out the second hose. And then we went from an offensive fire—meaning going inside and seeing if you can find the source and putting it down—to a defensive fire, meaning God knows where it's starting, but it's fully involved. We're going to keep it from burning anything else, which was important because wildland fire units were there because the trees were catching fire over the building and adjacent to that. We had hoses over on the Magistrates Building to keep it from catching fire. We had hoses on the roof of Ranger Operations because the sparks were going over there and maybe catching it on fire.

TM: And both of those buildings were, I believe, at least the outside design was sort of log cabin-style with giant timbers and the roofs were shake, wooden shake roofs. Is that right?

NMM: Absolutely. They were nothing but flammable, and we were in the middle of a forest. Yep, but we saved them both. We saved them both. And so you went defensive, which means you just do what you can to put out the fire. And here's what we later found out, why we were so wrong thinking we had a little, smoky fire somewhere we could quickly put out. The person who had been fired from the library was so resentful that she went into the library, went down into the basement, and started a fire, and started the fire three hours before anybody saw smoke. By the time we got to the fire, it had fully burned the bottom, gone up the walls up into the attic. And so we were literally seconds away from it becoming fully involved, but not getting the alarm, thinking, well, it just must've started, like, 15 minutes ago, not three hours ago. That's why we did an entry into the building, thinking we could maybe stop—

TM: Gosh, you're lucky you didn't fall through the floor into the burning basement.

NMM: Yes, we were. But we went in through the pub because the smoke was coming out of the eaves above the pub, not above the library. So actually, that probably saved us, as well. So that worked out really well. That person was later convicted of arson and went to jail.

But if you look at— I have video tapes of the fire. I know that Colleen has these video tapes and pictures of the fire. I mean, the superintendent was there, you know. We had a lot— You could see scores of people everywhere. And one of the things people don't realize is that after you put out the fire— People think the glory is working the nozzle, doing the entry, you know, doing all that kind of stuff. But then there's the mop up. And what that is is it's 24- to 48-hours of somebody being on-scene, putting water on the fire, keeping an eye on it, making sure it doesn't re-ignite. You just don't walk away from a fire after the last, quote, ember is out because the last ember is not out. They can come back with a vengeance. You have to go in,

you have to turn things over, you have to hit it with water. And that's hours and hours of exhausting work. And there were some prima donnas, I have to say, who walked away and wouldn't do mop-up, and that they were talked to and asked if they really wanted to stay on the brigade after that one. But as I recall, it was more ignorance than anything else. They thought that because they were fire fighters, they were done, and then the fire fighter 1's would come do the mop-up. But it was an all-hands-on-deck kind of a thing because it was a small department. Anyway, so that was the Rec Center fire.

TM: And so that burned up the library—clearly—the books, and the pub, and the exercise equipment. I mean, the whole deal just burned to the ground.

NMM: It did burn to the ground. And I'm happy to say that the pub was never rebuilt anywhere. But the library was redone in a much smaller building over in the housing area up above— If you went over to the G. O., the General Offices building, and then went up the hill from there, the library was in a white building up in there. I can't remember the address.

TM: Right. And then the Safety Office was in there, too. Part of that building, I think.

NMM: I don't know. I know the Denver Service Center office was in that building. But I'm not sure about Safety [unclear].

TM: And that might've been later. But it seems to me, because it was funny when Rowe Well was closed down—

NMM: I'll have to tell you a story about that; yeah.

TM: When that was closed down, then it's like this pub showed up at the Rec Center, and I'm like, well, what was the story with all that?

NMM: Yeah. No, Rowe Well Road was an alternative entrance to the park. It was mostly dirt roads. And you went past the laundry for the concessions over in the Maswick area to access it. And it went past the kennels where people could kennel their dogs if they wanted to have a day in the Grand Canyon and not keep their dog in the car, or overnight. And there were some really great gals who ran the kennel. And then you went across the railroad, and then you could go right as if you're going up to West Rim Drive to go to Hermit's Circle. But there was a gate to keep people from going either way on it. And then if you went left or south, you went to Supai Camp or Havasupai Village. And then you could continue down and there was a place—we didn't call it the cabana. What did we call it? It had a— It's a Mexican word for a ramada, and if you took the road past the ramada, you went up to the sewage treatment pond. And if you continued on Rowe Well Road, you could exit the Grand Canyon and go the back roads in to the little town of Tusayan. But there were also some dirt roads off to the side that were in Grand Canyon National Park where teenagers liked to go. And we would go up there, and there was a neat cave there and probably a hundred years' worth of fires. And teenagers went out there, as well. And so that would be part of our duty. And I'll never forget, I was on early shift one

morning, and I was out driving around, making sure everything was okay. I often went up to the sewage treatment pond early in the mornings to see the birds up on the tertiary ones to see who was visiting and make sure there was no OB campers, or out-of-bounds campers, and nobody doing evil things. And I remember Kent Keller came on just before eight o'clock, and he said, "What's your 20?" which means what's my location? And I, on the radio, I said, "Wow Well Woad." And there was this pause, and I went, “Oh, my God.” And Kent said, "Say that three times real fast."

[Laughter]

NMM: So I actually, instead of Rowe Well Road, I said Wow Well Woad. Oh, my goodness.

TM: It'd been a long night or an early morning.

NMM: Actually, I'd just started.

TM: An early morning, yeah.

NMM: But it was a tip of the slongue there.

TM: Yes, yes, exactly.

NMM: But Rowe Well Road was also an area where if there was a deceased animal, we would often take them out there. I remember that there was a problem with cats for a while, and I do know that one ranger in charge would capture them and take them out there, and their little bodies would have a .22 in them, a shot in them. And then they would be left under a railroad trestle or something.

I remember I was working night shifts one winter, and I got a call for an injured animal by the Maswick. And I was over by the railroad tracks by Maswick Lodge, and I could see a skunk, pulling itself by just its front leg. It'd gotten hit by a car, and it was paralyzed. And I thought, aww, this is really sad. Well, it's a hundred percent dark outside where I am, even though there's people around, and, you know, the new train station had been built. And so there're people in the area, but nobody could see what I was doing. So I thought how do I get this skunk and keep from getting sprayed? So I thought I was quite clever. I took a great big black garbage bag, which I keep several of in the trunk of my car, my patrol car, and I reached through the garbage bag. With the garbage bag in my hand, grabbed the skunk very quickly by its tail, pulled it into the bag by its tail, but the bag was on the—the skunk ended up on the inside—and tied a knot. And then I rolled down the passenger window of my patrol car, put the knot into the window, and rolled it back up. So the skunk was actually on the outside of the vehicle but with its front legs, it's banging, banging, you know, making the bag swing out and banging back in. But at least I'm not getting skunked, and it's sealed. I knew it was mortally injured, so I took it out to Rowe Well Road, and I drove quite a ways down to an area I was familiar with. Then I took the bag out of the window, and I walked up to the top of the hill. And I told Dispatch,

which we always needed to do, that I would be discharging my weapon. Then I stood back—and I'm really good at shooting—and I kinda had flattened the bag so I could see the outline of the skunk. And I pointed and aimed with my flashlight, and I discharged my weapon—a single shot. And I waited. I thought, boy, I wonder if I got it. And I took two steps toward the bag, and I could smell skunk, and it stopped moving. So I said that's good enough for now.

A couple weeks later, I went, and the bones were gone but the bag was there. So somebody had scavenged the skunk. I went back and picked up my trash later on. But I've had to discharge my weapons. We used to have a pack of really wild, feral dogs in the Grand Canyon, led by a Rottweiler, of all things.

TM: Oh, wow.

NMM: And it was very dangerous. It finally got to the point—we couldn't—they would run away when they would see us. And it finally attacked, this pack of about six or seven dogs, over by the maintenance area, attacked one of the maintenance workers. So I remember I got Sandy— What's her name? She married Fred Pearl. I got five or six rangers. She worked backcountry, and Sandy Pearl became her married name, but I can't remember her maiden name.

TM: Hand?

NMM: Sandy Hand! I think so, yeah. And so five or six of us, and so I was in charge of this, and we knew where the dog was, the leader of the pack. And so I kept everybody in line. I said, "We're walking down this hill." We knew we had nothing but forest ahead of us. And I said, "We're all staying in line with each other." And we got within 30 feet of the dog that was crawled down, just gnarling at us and just growling at us. And the man said he thought it was injured because it limped away from him. So anyway, it was in front of a tree. I took out my weapon. I said, "I'm taking a single shot. I want everybody to be able to see everybody else. With everybody else, I'm taking one step forward, one step forward." I mean, it was very highly coordinated. And then I took a shot. With a single shot, I put the animal down. And then we went up and— I did. I took it with one shot, and we put it in a garbage can. Right after we got rid of that Rottweiler, the rest of them just sort of went away. We never were bothered by that pack of wild dogs again. But they must have been pets from somewhere that people let go.

It's amazing what visitors to the park do. I remember the Navaho reservation up by Tuba City used to have these rodeo things. And one of the rodeo events was they would let the kids into the arena—I don't know what arena this was, but on the reservation—and for a certain amount of money, they could run around and capture bunnies, and they got to keep them. And then they would drive to Grand Canyon, the South Rim, and suddenly they realized, what the hell are we going to do with this bunny? We still have three months or three weeks left on our trip. We don't want it. They would release them in the Grand Canyon.

TM: You mean just like a floppy-eared white rabbit kind of thing?

NMM: Yeah, yeah, yeah, yeah.

TM: Oh, my gosh.

NMM: Or gray and white, brown and white. All these little bunnies!

TM: Oh, my gosh.

NMM: We're talking about not even grown-up bunnies. We had a heck of a—

TM: And these aren't native, you know, jack rabbits and cottontails. These are domesticated bunnies.

NMM: Right, these were domesticated bunnies. And so, I remember there was a period of time where we finally had to get our people, meaning the superintendent and their people, to talk to their people, meaning the elders of the Navaho Nation to tell them to cut it out because they were releasing all these bunnies here. And I spent a lot of time capturing bunnies and having to put them down on Rowe Well Road, you know, because what else you are you gonna do with them? And they were little bunnies, and we were hoping the coyotes would get them or something. But you'd be over in front of the— I remember specifically having the steam engine come in, and I'm on my horse, greeting the people coming in on the steam engine, and two little bunnies are running across. We're not talking cottontails or hares. We're talking about two little floppy-ears, and going, "Aah!" So, yeah, funny things happen at Grand Canyon. So that stopped. It was only about, maybe, 13 or 14 months that we had to deal with that. The trials of Grand Canyon.

TM: Yeah, bunnies. Who knew?

NMM: I know!

TM: I hadn't heard that one before. That's something. Was the Rec Center fire the largest fire you worked on at the park?

NMM: Good question. We had a lot of big fires. We had the Rec Center fire, we had the P Street fire, we had the Tusayan fire—

TM: What was the P Street fire?

NMM: The P Street fire was when a person in— These trailers are not little trailers that are hauled by cars. They are housing units with three bedrooms in them. We called them trailers because that's what they called them for tax purposes, but it's somebody's home. They're double-wide trailers with three bedrooms in them.

TM: Right. They're mobile homes. They're double-wide mobile homes. They're big.

NMM: They're—what do they call them? Prefabs.

TM: Prefabs, okay.

NMM: Prefabs. So these are big homes. And in the area of P Street, over behind the Yavapai, was a housing area. Half of it was housing and the other half was where people with big trailers could pay to have hookups and things like that. There was a laundry room and all kinds of stuff. And so, we got a call for a fire on P Street. We got there, and it's fully involved. And what had happened is a guy in there—and he had a roommate, also, in the back bedroom—he decided to cook some fries or something. And he put the skillet on, and he put the oil in the skillet, and he put the french fries in the skillet or the potatoes, and he was on his third or fourth or fifth beer, I don't know, but he fell asleep.

TM: Oh, my gosh.

NMM: And then he smelled smoke, or the smoke detector went off—I don't remember what—and he saw the pan on fire. And so he grabbed it with his bare hand, opened the door, and went to throw it outside but hit the doorjamb and threw this oil, flaming oil, all over the trailer. So the trailer got it inside, and the guy in the back room was kind of blocked from being able to come out. Of course, there's the ubiquitous propane tank there. And so we get there to a fire fully involved. Luckily, both people came out. But the guy with the burnt hand needs medical attention. We put a line on the propane tank. We get APS to turn off the electricity. And we knew what we were doing, so we went in—'cause there were two doors—we went in one door, and we turned right and were able to put out the fire without blowing it into the rest of the unit. But I remember going through to the— And this is— It took much longer than I'm telling you. I mean, we had lines out and fires out, and we had to protect the trees that were catching on fire above. And I remember going in the back, and the guy in the back had these stacks and stacks of *Playboy* magazines. You know, I'm the only woman firefighter at this time, at this call, and so I said, "Wow, look at all the *Playboys*!" And I thought the whole trailer was going to tilt for everybody running to the back of the trailer to go look at it. And I said, "Get out of here!"

There was water damage, and that's what people don't realize is, yeah, you put out the fire, and there's fire damage, but there's also a lot of water damage.

TM: Right. Right.

NMM: So the thing about P Street, and the thing that made that rather remarkable—also what happens at Pinon Park—is you don't have much of a water source. We had quite a few chimney fires in Pinon Park. People had wood-burning stoves in their double-wides and in their little homes there. And after sitting all summer long, they—unlike the National Park Service, which goes to all the National Park Service housing areas and cleans out the chimneys every quarter, whether you use them or not—these hadn't been cleaned out for I don't know how long. So we

often would get chimney fires for the— When the first cold snap came, we'd get two or three of them, especially in Pinon Park where it'd come up, it would catch fire, the flames would come out of the screen, the pseudo-screen at the top, and then they would land on the roof, and then the roof would catch fire.

The thing that made P Street, but more so Pinon Park, is in order— Remember the fire engine is the pump, and the longer the hose, the more pressure you have to pump. You want to get as close to the fire as you can because you can't pump water 500 feet. It's just by the end, you don't have any pressure. So we would catch the hydrant, and so the hydrant is what the long part would be. And so at Pinon Park, we would catch the hydrant with a five-inch hose. We'd have hundreds of feet of five-inch hydrant coming into the engine. And those hose legs would be very long because we'd often have to catch two or three hydrants to give us enough pressure and water in some areas to pump to put out the fire. I remember in Pinon Park and Yavapai and P Street we had to catch and have long hose lays. That was the case in Tusayan. In Tusayan, the hydrants were painted different colors because we would test them to know how many gallons per minute they would come out.

And so that's why they're different colors. So if we had a big fire, we knew we couldn't use that hydrant. Use this hydrant over there. And Kent put together a book of every hydrant in the park, every hydrant in Tusayan, every structure, what they had there. Did they have smoke alarms? Did they have this? And as we went from place to place, we could pick the book up and look ahead of time of where the nearest hydrant was and where we're going. He also placed those books in Dispatch in case we were too busy. Dispatch could say, “Okay, you're going to P Street 14. Go to M Street, and there's a hydrant three down on the right.” So he did a really good job of putting everything together. And never got enough credit for it, if you ask me. But that's just me.

TM: Nice. Well, yeah, that's the case with the Park Service is people put projects together and rarely get recognized for the work that they do. Yeah.

NMM: Yeah. So I'd have to say perhaps the Rec Center was the most threatening fire to me personally. But then getting nearly drowned in the fire in Tusayan, that was something. And then P Street, that was a lark but still was a fully involved structure. We had quite a few of those. And I remember— I have a very heightened sense of smell, which on one hand is nice, but on most hands, it's not. I have poor vision, so my hearing and my smell must make up for it. I can hear noises that other people can't hear. But there was a report of smoke at the Holiday Inn in Tusayan one time, and we responded to it. I was outside, being the engineer, waiting; and Kent went in with some firefighters, trying to figure out the source of the smoke. And they could not figure out the source of the smoke. And so they called me on the radio and asked me to come in. He said, “Find the source of the smoke” like I'm some bird dog. And so I did. I took my helmet off and everything, and I smelled, and I found it. I could smell where it was, and it was a ballast in one of the lights that was on fire, so they were able to put that out. But, yeah, I had this ability to find, I guess, smoke.

TM: Nice! That's handy, especially when you're working for the fire department. It's good to know those things.

NMM: It *is* handy. And I also can do math in my head, so that was really handy for doing pump calculations at the— So I became an engineer after the Rec Center. After I did the entry team, Kent wanted me to become an engineer. And you know, you can work the monitor, and you can do all that stuff, but I personally think he wanted me to be an engineer so I'd stop going into burning buildings. But I enjoyed it, and I could do math in my head. I enjoyed the challenge of if you have three or four lines out, doing the calculations. This one gets 125 gpms, that one gets 142. You know, being able to figure out, okay, we're gonna use— And if you changed the nozzle, it changed the equations.

If you go uphill, it changes the— If you go downhill, it changes the equation plus or minus ten. That's why you go to engineer school because it's all math, and it's all gpm to fight the BTU.

TM: Cool. Oh, very fun. Well, maybe this is a good time to put a comma on this oral history. We've been going at it for about an hour here.

NMM: Okay.

TM: And is there anything else you want to add to this section?

NMM: Ahh, yeah. I would have to say that training was a lot of fun for a structural fire. We would do a lot of training, and we would fold up the hose. You'd get on the top, and you fold the hose up, and you'd have to do it a specific way. But there was a real camaraderie there. And I remember sometimes, coming back from fires, we would be singing. Several of us, especially old show tunes and "Oklahoma" and things like that. And it was a lot of fun, but there were some of us who enjoyed doing that and others would look askance at us. But it was a good group; it was a good group. And I truly enjoyed being on the structural fire brigade. I loved the challenge, and it was just one more thing that gave me variety in the job of being a protection ranger.

TM: Yeah, which sort of is the theme of this whole interview series is the variety that you brought to your job.

NMM: I loved it. I loved it.

TM: Excellent. Well, with that, this will conclude Part 7 of a Grand Canyon Oral History with Nancy Muleady-Mecham. Today is Wednesday, March 24, 2021. My name is Tom Martin. And Nancy, thank you so very much.

NMM: You're welcome, Tom.