

OH-3004, Robert Eisele, 4-17-2014, Sheridan, WY In Flight

JUNGE: [00:00:00] OK. Is this OK if I use this desk here like that?

EISELE: Sure. Well, yeah, I could clean it off some if it would help you.

JUNGE: No, you don't have to do that. I can use it.

EISELE: My desk and my office always look like I lived in it for many years, which I have. (laughter)

JUNGE: I'll bet. It's a wonder you don't have a cot in here. OK. Today is the 17th of April, 2014. My name is Mark Junge, and I'm in Sheridan, Wyoming, at Bighorn Airways talking to Robert Eisele. Bob is the CEO and manager -- is that it? -- of Bighorn Airways.

EISELE: Well, manager-owner. My son and I own Bighorn Airways.

JUNGE: OK. So you and your son, Chris --

EISELE: Yeah, Chris, my son is Chris, and we own Bighorn Airways, all the stock. It's a stock company, and we own all the outstanding stock.

JUNGE: OK. How old is Chris?

EISELE: Chris is 41. [00:01:00]

JUNGE: OK. What's his official title?

EISELE: He's the vice president, but he handles all the operations.

JUNGE: Meaning?

EISELE: Meaning the operation of the aircraft from the charter to the smokejumping to the -- I handle the spraying still, but he handles everything else.

JUNGE: OK, what about all those other things you listed online, like fueling, maintenance, charter?

EISELE: That's still all his department, but he's got people under him that he delegates responsibility to. We do have a general maintenance or a general manager over there that works directly with Chris.

JUNGE: Who is that?

EISELE: John [Halberson?].

JUNGE: OK. Now there was another fellow named John Mommsen I read about online, or a guy named Mommsen, M-O-M-M-S-E-N? Was he involved with you in any way?

EISELE: I don't think so. [00:02:00] That last name is not familiar to me.

JUNGE: Well, I don't know where I got that. OK. When and where were you born?

EISELE: I was born in Gillette, Wyoming, back in 1938.

JUNGE: What date?

EISELE: May 19th, 1938.

JUNGE: And your parents?

EISELE: Parents come from that area. They were -- their parents homesteaded north of Gillette, both on my mother's side and my father's side. They grew up on ranches out there, and we had family there up to the point of where they all died off.

JUNGE: How long ago did your parents die?

EISELE: Well, my parents lived to be fairly old. My mother died three years ago, my father about seven years ago.

JUNGE: Your mother was pretty old when she died.

EISELE: Yeah, she was 96.

JUNGE: What was her name?

EISELE: Her name was Nila. [00:03:00] So that's sort of the basic history as far as -- moved to Sheridan right after World War II.

JUNGE: They did?

EISELE: Family did.

JUNGE: When they originally came to the Gillette area of Northeast Wyoming, where did they come from?

EISELE: They come from Oklahoma, on my father's side, and Kansas on my mother's side. Families just, in the '20s, come out to Wyoming to homestead and took advantage of the Homestead Act and homesteaded out there north of Gillette back when there was roads there. There was a Model A and

some of those old-timey vehicles just getting started, but there was still a lot of horse and buggies around and wagons, too. A lot of stuff was done with horses.

JUNGE: Were you raised out there?

EISELE: No, I was actually, the first six years, [00:04:00] was in Gillette, in the town of Gillette, lived there with my parents. Then they moved up here, and I went to school here and basically sort of been a Sheridanite ever since. Moved around a little bit, but as far as business, I get to travel a lot.

JUNGE: Why was it that your parents came to Sheridan in the first place?

EISELE: Oh, I think they thought there was more opportunity here than in the Gillette area, but that was before anybody knew anything about coal in Gillette or oil or gas, so there wasn't that much opportunity.

(pause)

EISELE: Sorry about that. That's going to happen unless I tell her to stop.

JUNGE: Do you want to do that? Because it might be a while, and you'll be getting a lot of calls.

EISELE: I think it's the guy that I sort of really want to talk to. I want to call him back within an hour or two.

JUNGE: Go ahead. Go ahead. I got time.

(pause)

[00:06:00]

JUNGE: OK.

EISELE: Well, I'll try that again.

JUNGE: All right. So this was before they discovered oil and coal and all those, gas and all the resources in the Powder River Basin?

EISELE: Right.

JUNGE: And if they had known about it, do you think your dad would have stayed?

EISELE: Oh, that's possible. That's possible. You know, my family has had mineral rights on these ranches out there, so those mineral rights were passed on, and I had some and I passed them on, too. So it wasn't like we didn't participate in the gas exploration, because we did, and we still hold the mineral rights, so eventually I think we'll probably get some coal rights, too.

JUNGE: You still own the mineral rights?

EISELE: Oh, yeah.

JUNGE: How big is the ranch?

EISELE: Oh, that wasn't huge. [00:07:00] I don't remember the size of them, like four or five thousand acres, I think, each one.

JUNGE: OK, because a homestead is normally 160 --

EISELE: Yeah, no. Well, they bought up other property around them as it became available.

JUNGE: So you're like -- your strongest memories are here in Sheridan?

EISELE: Yeah, that's correct, yeah. I grew up in Sheridan basically and went to school in Sheridan.

JUNGE: Where did you go to school?

EISELE: The elementary schools, Woodland Park, and then Sheridan High School. I went to college --

JUNGE: Woodland Park?

EISELE: Woodland Park was out there to the south. We lived out a ways to the south, so I went to Woodland Park and then the high school. While I did go to the Sheridan College I never got a degree or anything, because I didn't -- I'd been out of school for about 12 years before I went back to college, and I went for one reason, just to enjoy things, learning about things that I wanted to. I was not interested in a degree. Still not. (laughter)

JUNGE: Good for you. I respect that.

EISELE: [00:08:00] Yeah.

JUNGE: That's how I feel about it. OK, go ahead.

EISELE: Well, then during high school I got interested in aviation. And at that point -- that was in 1957 -- when I graduated from high school is when I started applying, and

it was right here with Bighorn Airways. The [Yentzer?] brothers, only the one brother was alive at that time, Dick Yentzer, he taught me to fly and brought me along as a spray pilot and flight instructor. I worked for him for years and ended up helping manage Bighorn Airways, and then the company evolved from a spray operation to a little bit of a charter operation, although that was pretty small as far as the charter end of it. It was primarily a spray operation. [00:09:00] And in I'm wanting to say about 1973 Hawkins & Powers bought Bighorn Airways. Hawkins & Powers was a big operation over in Greybull. In fact, Gene Powers grew up right here in Sheridan, so I'd known him for years. They bought Bighorn Airways and asked me to manage it for them, which I did, and that sort of moved on to owning half of it to owning all of it eventually.

JUNGE: When I worked for you -- and I should put this on tape, because I'm real proud of this -- it was a really good job for me. I was teaching at the college. You needed some help, flaggers in particular. You didn't have to have a whole lot of brains to be a flagger, although I don't think I did very well at it. [00:10:00] You hired me in the summer of '69 to be one of your flaggers, and at that time I thought that there was some kind of a

relationship between Big Horn Airways and H&P, Hawkins & Powers.

EISELE: Well, to a certain extent I think there was, because I had known Gene Powers for years, being how he was taught by the Yentzer brothers too, to fly and grew up in Sheridan. I was not necessarily a friend of Gene's, but a business associate, knew about him, and flew some of his equipment before they ever bought Bighorn Airways. I went over there and helped fly their air tanker, and then when they did buy Bighorn Airways, well, I continued to manage Bighorn Airways, but I flew their air tankers, too, in the summer. Slurry bombers. I flew everything they had over there. [00:11:00] And they also -- Dan Hawkins over there taught me how to fly helicopters. This was back in, again, right, again I say '73 or '74, somewhere right in there.

JUNGE: When you learned to fly a helicopter?

EISELE: Yeah. Yeah. The same time that Hawkins & Powers bought Bighorn Airways, shortly thereafter I got the opportunity to fly helicopters, and that's when I started learning.

JUNGE: Let's take a step back. I think we -- boy, you jumped over a lot of years.

EISELE: (laughter) Yeah. Yeah.

JUNGE: Tell me about your first interest in aviation.

EISELE: Well, the first interest was brought about by watching Dick Yentzer spray, aerial application. I watched him do that. We had a wheat farm out north of Leiter, the family did, of which I helped my father with that. I can remember Dick Yentzer out there [00:12:00] spraying for weeds, watching that, and I'm saying, "Well, that's sort of interesting." I kept that interest up for another year or two and finally got the opportunity to learn to fly, had the money to do it. At that time it was real cheap to learn to fly, not like now. (laughter) And anyway, I learned to fly, started, as stated, senior year in high school is when I started and progressed from a private pilot to commercial flight instructor, instrument rating, all probably between '57 and '61, 1961, got all the ratings, all the engine rating, and in '61 I started spraying. I had to wait until I was 21. My parents would not let me spray. They didn't want me flying a spray plane, which was understandable. [00:13:00]

JUNGE: Well, why didn't they want you to?

EISELE: Danger, the danger of it.

JUNGE: You've sprayed for how many years now?

EISELE: Well, '61 to now. What's that? (laughter) I still spray.

JUNGE: Fifty-three years.

EISELE: Yeah.

JUNGE: So their prediction or their fears didn't pan out.

EISELE: Well, there have been a few incidents along the way that have got everybody's attention, but I'm still here. I still love to fly, and I still spray, so...

JUNGE: And I know we talked about this a little before. I don't know whether you want to talk about this, but I'd like to know some of those experiences. Are you willing to talk about them?

EISELE: Well, that I'm not as willing to talk about. Over the years I've managed to damage extensively several aircraft. I always walked away from it, so...

JUNGE: Now I did hear a story about you. Want me to tell it?

EISELE: Well, I'll tell you whether it's true or not after you tell it I guess.

JUNGE: [00:14:00] OK. You know, this is not going to go into the *Sheridan Press* tomorrow. I heard that you were spraying -- and I don't know who told me, whether it was Robbie Duncan or somebody we worked with -- you were spraying, making regular passes, under a power line, and you had either neglected to realize or forgotten to realize that the power line had an S curve in it.

EISELE: Well, that's close to being correct. The power line went and made a right angle turn. I had been going under

both legs of it on this field that I was spraying. And as I went under, a last pass under there as I went under it, well, I banked up a little bit to get lined up, and banked up a little too far and caught the [upwing?] on the power line, and it put the aircraft into the ground pretty hard and pretty fast. It didn't do the aircraft well; it totaled out the aircraft. But I walked away from it.

JUNGE: [00:15:00] How did you do that?

EISELE: How did I do what?

JUNGE: Walk away from something like that?

EISELE: Well, lucky.

JUNGE: I mean, was there special circumstances?

EISELE: In aviation, it pays to be lucky once in a while, too, with aviation.

JUNGE: Well, how do you account for the fact that Robert Eisele is still living after plunging into the earth, nose first I presume?

EISELE: Well, wearing the proper equipment is one thing. I mean, I always had a hard hat, a helmet, on, a shoulder harness, good belt, and all that, all that protected me somewhat, although the airplane did substantial damage. It wasn't even rebuildable, it was so bent up.

JUNGE: How did you come out? I mean, did you have any injuries?

EISELE: Yeah, I had a broken arm. It was all I got out of it.

JUNGE: That's all?

EISELE: Yeah. Yeah.

JUNGE: Have you had anything -- and you don't have to talk about them, but have you had anything more serious than that?

EISELE: No. No.

JUNGE: Any scars?

EISELE: In fact, I got educated with that one, and I hardly [00:16:00] had any incidents since '90, and that was in '62 I think that that occurred.

JUNGE: Not even a helicopter?

EISELE: No. No.

JUNGE: Interesting.

EISELE: I take that back. I did have an incident with a helicopter, but I'm going to attribute that to maybe not being as smart as I should have been, but also to an engine failure. The engine flamed out. I was flying her in a snowstorm, and the engine flamed out. A good auto rotation that didn't turn out right at the bottom, on a rotator going to erode, and it was muddy and it was sliding just fine, but I could feel it starting to lurch, and the right gear broke then, sliding along on a -- they don't have wheels, they're on a gear. A right skid broke, and when it

broke, well, a helicopter rolled over and proceeded to sling pieces all over the place.

JUNGE: Did it explode?

EISELE: [00:17:00] No. No. Wasn't any fire. Again, a little bit lucky. Unlucky that it happened, but lucky that I walked away from that one, too, and that's the last incident that I've had.

JUNGE: Somebody on your crew told me that -- oh, it was -- what was the name of that cowboy kind of guy that flew me out to Dorothy Reno's place in Reno Junction? He had me prop the Piper Cub or whatever, Super Cub, and flew me out there, and he was the guy that drove the car from job to job. Oh, God, I can't --

EISELE: Well, we had numerous people work for us, you know, back in those days, and I don't remember all of them, at all.

JUNGE: OK, but it was either him or somebody in your outfit that told me that he said helicopters just weren't meant to fly.

EISELE: Well, helicopters are more fun to fly than anything I fly, but you need to pay particular attention to the maintenance on them and that all the pieces are [00:18:00] doing as they should do. Because they won't fly very long if a piece comes off of them, and so you need to --

maintenance needs to be good on a helicopter. And if it is good, and the two that I've got it's exceptional maintenance, so I haven't had any problem with them, and I've flown them helicopters a little over 11,000 hours now, in helicopters.

JUNGE: How many hours in a fixed wing?

EISELE: Well, the difference between 32,000 hours and 11,[000], whatever that is. The rest of it's fixed wing.

JUNGE: Twenty-one thousand hours.

EISELE: Yeah.

JUNGE: That's a lot of hours.

EISELE: Yes, it is.

JUNGE: Are you probably the most experienced pilot, by hours, in the state?

EISELE: Got to be close. I don't know. There's probably a few other high-times pilots. I know Mel Christler had a bunch of hours.

JUNGE: Now, tell me something about Mel Christler.

EISELE: I don't know much about Mel Christler. I've met him, [00:19:00] flown with him a time or two in some of Hawkins & Powers tankers. In fact, he checked me out in one, as I recall. But other than that, I know him to see him, know him to talk to him, but I don't know him personally.

JUNGE: Is he still alive?

EISELE: I can't even answer that. I don't know whether he is or isn't. I haven't heard of him dying, so I'll bet he's still alive.

JUNGE: What is he, quite a bit older?

EISELE: He's got to be getting -- he's got to be Gene Powers's age probably, maybe even a little older than Gene Powers.

JUNGE: What about Morris Avery?

EISELE: He's long gone. He died, oh, back in -- well, I shouldn't say a date because I'm not really sure, but was the late '60s probably when he died. That's how Hawkins & Powers came to be an entity, because both Dan and Gene were working over there for [00:20:00] Avery when he died, and then they went to work for the widow and they bought her out shortly thereafter, bought her interests out. That's how they became Hawkins & Powers Aviation.

JUNGE: What's the story -- they don't exist anymore, right?

EISELE: No. They're out of business.

JUNGE: Can you tell me the story of this outfit, what happened? I mean, at one time they were big, huge. When I was working for them they were huge.

EISELE: Well, it's had to do with the tanker industry accidents that occurred, and that shut down Hawkins & Powers, and it shut down the whole tanker industry for a while. Airplanes were flying into the ground too much on

fires, and Hawkins & Powers lost two of them in the one summer, and that pretty much shut down the whole thing for a whole time there. Foresters said, "Well, we're not going to use tankers." Of course, that didn't last forever, but [00:21:00] it lasted long enough to put Hawkins & Powers out of business, because that's what they depended on. So they ceased to exist, sold off what assets they had that they could sell and shut down the whole operation.

JUNGE: Did they shut everybody else in the country down?

EISELE: Yes, they did, for that summer. There wasn't a -- all the tankers were grounded for the rest of that summer.

JUNGE: Was that 2002?

EISELE: I don't remember the date.

JUNGE: I think I read something online about that.

EISELE: I don't remember the date.

JUNGE: Yeah. You had a personality flying for you one time. His name was Robbie Duncan.

EISELE: Yes.

JUNGE: Whatever happened to him?

EISELE: Well, I haven't talked to or seen Robbie Duncan in probably 15 years. The last I heard he was over in Idaho, Burley, Idaho, living there, doing some flying, but he didn't really fly commercially. [00:22:00] He just -- I think he had an airplane he flew around a little bit. He

was pretty much retired from active flying, commercial flying. And I don't know if he's still alive or not, but I haven't heard anything Robbie Duncan in, like I say, 10 or 15 years, and I haven't seen him either, so I don't know. He had family, of course, the Moore family. He was a member of the Moore family, ranchers, big ranching entities all over the state of Wyoming. The Moore family was big. He had a lot of uncles, and his mother was a Moore. So I just don't know whether he's still alive or not.

JUNGE: What kind of a guy was he?

EISELE: Oh, he was likeable, with aircraft unbelievably talented, but also wild. He'd scare you to death.

[00:23:00] Yeah.

JUNGE: (laughter) I remember. They scared me to death.

EISELE: He was an exceptional pilot.

JUNGE: How does a guy like that live if he's sort of wild?

EISELE: Well, he's talented. He lives off knowing what he's doing. Very talented. Knew aviation inside and out, knew how to fly, and while he did a lot of wild things with the aircraft, he was good enough to get away with them, too.

JUNGE: What's wild in aircraft? I have no idea.

EISELE: Well, you know, landing in unusual places, not using an airport, just landing here, there, and everywhere, which we all did all the time, but he was really good at it.

JUNGE: Can I slide that door closed?

EISELE: Yeah.

JUNGE: Well, can I tell you a little story about him?

EISELE: Yeah. I've probably heard them all, [00:24:00] but go ahead.

JUNGE: While I was a flagger a guy by the name of Jay Bridger, who claimed he was a relative of Jim Bridger, was a flagger. (laughter) Jay Bridger and I were flaggers, and it was the last pass of the trip, or it might have been the season. But it was time for Robbie Duncan to go home, and he buzzed us, and I had never been buzzed. I mean, you had flown over pretty low, and, you know, I could see your face and make out your facial details. That's how low you were, but Duncan buzzed, actually buzzed us. And I hit the deck, and my nose went into the sand under a sagebrush, and I thought I was going to get my head clipped off. And he then went over the field or the ridge, whatever it was, and Jay Bridger was over there, and he buzzed him. He buzzed Jay Bridger so [00:25:00] hard and so fast Bridger ripped the rear of his jeans out. And he came back -- when we went back to the motel that night he gave Robbie Duncan hell, and Robbie said, "Oh, come on, we were just having fun." I don't know how close he got to us, but, you know, we had to bury ourselves in the sand.

EISELE: Yeah. Robbie had a little bit of a problem doing that. I mean, it just wasn't a good thing to do, but he did it all the time, and it was designed to terrorize the flaggers.

JUNGE: (laughter)

EISELE: Some of them got wise to it after a while, and they always carried a bamboo pole with a flag on it. They'd just stick the flag in the ground, step back away from it. If he was going to buzz them he was going to knock the flag down first, so he always pulled up.

JUNGE: I also have a confession to make. You know, we stayed one time at the Travel Lodge in Rawlins. Marvin [00:26:00] Harshman, who was the recreation commissioner at the time, owned the Travel Lodge. Robbie was there, and we climbed that big rock opposite the Travel Lodge on the south side of the Main Street or leading to the highway. We had gone to the Golden -- what was the name of that place -- Golden Spike, which was just practically across the street, and they had strippers there, and we had drinks and we were having a good time.

We stayed up late, and you had told us, you know, "We're going to get started at four in the morning." And it was about 1:00 or 1:30 and it was stupid to go to sleep, but we did. We went to sleep and got up, and I was so

drowsy I didn't think I was going to make it through the day. And when I was out flagging I dropped -- I put the flag down and went to sleep under a sage bush. And I remember you flying overhead, and your fist was in the window like this. [00:27:00] Do you remember that?

EISELE: No, I don't remember that incident, but I could relate to it. I mean, getting up early is difficult. That's been one of the things over the years. I've always been a morning person so I can get up early, and I still can get up early. But I made a point of not staying out late at night when I was getting up early, too.

JUNGE: Yeah, you were pretty good about that, and you had -- your job was to make sure you had enough Avfuel and 2-4-D and diesel fuel. You had I think a truck that had two tanks, five-hundred-gallon tanks of Avfuel.

EISELE: Yeah, we had trucks, various stuff. Nothing like we operate now.

JUNGE: Really?

EISELE: We finally got into the modern age with our spray operation. We got turbine air tractors, spray planes, designed and built for spraying with turbine engines, 400-gallon tanks. We got three [00:28:00] trucks and trailers set up with fuel tanks on the truck and pull the trailer with mixed tanks on them and pumps and everything. We got

an operation that probably is second to none in the country that I've ever seen as far as the equipment that we operate. It's ultra-modern, good equipment. It's taken a long time to get to that point, but we finally got there. Now I'm getting too old. I got to think about stopping spraying. Probably this might be the last summer for me to spray.

JUNGE: Really?

EISELE: Yeah.

JUNGE: What do you mean, you're getting too old?

EISELE: Age. That's not an easy thing to do, fly six, seven feet in the air or less at 120 miles an hour and be alert enough and have everything to where you can remember where the power lines are at and all that sort of stuff. So it's more of a younger person's game than it is an older one. [00:29:00] I rely on my experience to keep me healthy and that, but still, I'm getting to an age where I'm going to have to think about stopping. I have been thinking about it, and this probably will be the last summer.

Anyway, we got good equipment. Spraying is a part of our Bighorn Airways, but it's actually become a small part. Spraying only counts for seven to eight percent of our income at Bighorn Airways. Our big income is our smokejumping aircraft. We operate seven of those, four

Casas and three Dorniers. The Casas are built in Spain, look like a baby C-130. That's a Casa there. We got four of those. That's a Dornier there. We got three of those. We operate those for the federal government [00:30:00] under smokejumping contracts. We provide the aircraft, the crew to fly them, and the maintenance, and all the jumpers are government employees. Four of the airplanes are in Alaska right now, at Fairbanks. Two of them are working, the other two will go on the first of May, right in that area there. We've been up there since '89, every summer, in Alaska. So we're pretty much -- we're almost native Alaskan, not quite, but we're close. They all know us up there and have accepted us over the years to where they don't throw rocks at us all the time. (laughter)

JUNGE: Whereabouts are you based, Anchorage or Fairbanks?

EISELE: Fairbanks. Fairbanks, on Fort Wainwright, which is an Army base. The BLM leases part of it, and the BLM has a huge facility there for warehousing [00:31:00], and that's where their jump base is. The main jump base is located right there on Fort Wainwright. They do have some satellite branches that, during the summer, depend on the fires, where they're at, the airplane could be based in McGrath or maybe [Galena?]. Galena is on the lower Yukon. McGrath I think is on the Kuskokwim I believe it's called.

We also get down in the Anchorage area in the summer and over on Kodiak Island occasionally, too, on jump missions.

So that's pretty interesting work. It's been rewarding, and the three airplane that are based down here work for the Forest Service. One of them is in Winthrop, Washington -- there's a smokejumping base there -- in the northern Cascades, and then one at Redding [00:32:00], California, up in the northern part of California, and then the other one is right over here at West Yellowstone in Montana, just barely in Montana there, west edge of the Yellowstone Park.

JUNGE: How long does it take you to fly to Fairbanks from here?

EISELE: Fly to Fairbanks? Normally in a Casa it takes about 12 and a half hours of flight time. We don't do it in one day normally. We'll go to Bellingham, Washington, fuel there, then up to Ketchikan up the coast. We like to go up the coast from Bellingham to Ketchikan, fuel in Ketchikan, and then go on to Juno and overnight there normally in Juno, and then the next morning get up and go on to Fairbanks. Most of the time the weather is not too good up the coast, but when it is clear, well, it's an absolutely scenic flight. I mean, it's beautiful all [00:33:00] the way up the coast. So it's an enjoyable flight.

JUNGE: Are you flying instruments all the way up?

EISELE: Yeah, pretty much so. Well, we're on an instrument flight plan. We're working the center and have [WILD?] instruments, but we're in and out of clouds sometimes. But all the airplanes are capable, full instrument flight conditions, have de-ice. They're twin-engine aircraft. Anti-ice, de-ice, everything necessary to fly. If the airlines can fly, we can fly.

JUNGE: So a lot of big fires up in that part of the country?

EISELE: Yeah, there is. The thing that's different about Alaska is there's very few roads, so to fight fire up there they have to do it with aircraft [00:34:00] or helicopters. And that's where the smokejumper base at Fairbanks is the largest one in the United States. There's 72 jumpers based there. And then when they have a big fire season, well, they'll move a bunch of the Lower 48 jumpers up there, too, to boost the base. It's a big operation. Fires up there, some of them they just let go. They don't do anything with them except watch them. It creates a problem when they do that in that it smokes in the whole valley and the tourist trade suffers a little bit when that happens, because a lot of smoke in the area and visibility is bad and breathing is tough. But they'll let a fire go until it starts approaching a village, and then they'll go out and put a

fire line around the village [00:35:00] to protect the village, and that's how they fight fire up there a lot. They just protect villages and cabin sites and stuff like that. That's what they do.

JUNGE: Bob, I don't have a good picture in my mind, and maybe a lot of people don't, of how a smokejumping operation works. I mean, how high are you flying? How do you load the planes? How do you drop these guys and what altitude and so forth?

EISELE: A normal, typical load in a Casa is eight jumpers, two spotters, and 2000 pounds of cargo. If you go to a fire and they decide to put the jumpers on the fire, they use what they call a [rameer?] shoot up there. So you put the jumpers out at 3000 feet. They jump quite high, and they got good control over their shoot. It opens up, and they can actually get something like 15 miles [00:36:00] an hour forward speed out of them, because it is a controllable shoot.

And once they're on the ground, then they'll ask for the cargo, and that becomes a purely pilot operation at that point, because all the cargo, even though it's on shoots, you put it out at about between two and three hundred feet above the terrain, so you come down low to the ground there and make pass after pass until you got all the

cargo that they want to kick to the fire crews. Usually they'll empty the airplane and put out the whole 2000 pounds of cargo to them. So that's got all their tools. Everything they need to fight a fire is in this cargo, boxed and everything, and then that shoot's attached, all their shovels or Pulaski's or whatever they use, and their pumps for pumping water. [00:37:00] All of that is parachuted to them, and then they're on their own at that point.

When they get the fire either under control or when the fire gets so far away from them that they can't do anything with it, gets out of control, then helicopters will pick them up -- a helicopter usually -- pick them up and ferry them to the nearest airport, which is usually an Indian village with a good airstrip, gravel airstrip. And then we'll go in and pick them up, retrieve the jumpers and their cargo, haul them back to Fairbanks and recycle them. They start again ready for the next fire, and they rotate them. They sort of have a jump list there, and they go through the jump list. If they've been on the fire, they're at the bottom of the list. But because fires develop, they can work back up, and on a good fire year they may jump a dozen fires. On a bad fire year they might

only get two or three. But [00:38:00] they'll get quite a few jumps.

JUNGE: Now is a fire year a season or the whole year?

EISELE: That's a season. That's the summer season. Of course, there's nothing going on, and other than training, they do a lot of training still in the winter, but not much activity up there in the winter.

JUNGE: When you're dropping this equipment, you say you're about 300 feet above the ground. How does a shoot have time to open?

EISELE: It does. That's the way -- the shoot is designed to open fast. It catches the air, and it's on a ripcord that's attached to the airplane, on the stack line or the vertical post, which is a thing that's attached to the airplane. They hook the line up to that, and as the shoot goes out the back, well, it pulls the ripcord on it. And it just barely is clearing the aircraft, and the [00:39:00] shoot's open. The shoot -- normally the shoots will open -- if you're above 150 feet the shoot will open before it hits the ground. Once in a while you get a little low and then it won't open, and you'll hear from the fire fighters on the ground. The fire boss, he'll say, "Pick it up a little bit. That one didn't open. We got stuff scattered all over here." So, why, it's --

JUNGE: Now these guys, when you drop them say 3000 feet, when I look at Alaska, and I've been there, riding a bicycle up in Alaska actually, it's all trees. Except where you get to --

EISELE: That's right.

JUNGE: I mean, you're fighting fires --

EISELE: It is trees.

JUNGE: So how do these guys --

EISELE: People don't realize. Most people don't think of Alaska as being trees, but it's all trees and brush until you get out farther to the north and west, and then it turns into the tundra country, or north of Brooks Range is all tundra. [00:40:00] There are no trees. The tundra will burn given the right conditions, especially out to the west, not so much to the north. But out in western Alaska, well, it's not unusual to go to a tundra fire out there, and they'll put people on it, try and put it off, especially if it's working toward a village.

JUNGE: But how does a paratrooper or a smokejumper land with all those trees? I don't get it.

EISELE: The spotter who's in charge of the mission will pick out a jump spot, and we usually do a low pass, still loaded, completely with jumpers and cargo, do a low pass. The spotter will pick out the jump spot, and it has to do

with something that doesn't have trees right there where they want to jump. There isn't trees there. It's an open spot. [00:41:00] Or it might even be a wet spot, you know. Water, a little water in a marshy area, they jump in, too. They don't like that very well because they get their equipment wet, and they don't want their equipment wet. Once they're on the ground they don't want the shoots wet, they don't want their jump coveralls that they wear [wet].

But anyway, he'll pick out the spot, and that becomes the jump spot, and climb back up and put out streamers to check winds and everything to determine what the drift is going to be. They do that at 1,500 feet, streamers at 1,500, and then climb on up to 3,000. So then you got to - - you're flying a racetrack pattern, and the spotter will direct you in there and keep you lined up with what he wants. Normally they'd put two jumpers out at a time. They call them sticks, sticks of two, and two jumpers will go out [00:42:00] on the same pass, and if they land and they got radios, all of them, they always check in and say everybody's OK. And when you got all eight jumpers out, well, then they ask for the cargo, and you usually put it about in the same place as the jump spot.

JUNGE: And then where do you go after that?

EISELE: Back to Fairbanks, and immediately the aircraft hits the ground, we refuel the aircraft, and they start reloading it with a jump load. And they got on their list, they got another eight jumpers ready to go, and those jumpers then become the -- move up the ladder in line for the next fire, or maybe they might elect to put more jumpers on that fire that they just put eight on. They might send out another eight on that fire. If they think they can capture it with some more jumpers, well, they will.

JUNGE: It's not a pretty lucrative occupation.

EISELE: For the jumpers you're talking about [00:43:00], or for who?

JUNGE: Well, for the jumpers and the pilot and people like yourself. I mean, is that worth --

EISELE: Well, the company, yeah. It's been good for Bighorn Airways. That's how we make most of our money.

JUNGE: But I heard that smokejumpers -- smokejumping is one of the hardest things you could do.

EISELE: Those guys work hard. They're in extremely good conditioning. They put them through a rigorous conditioning thing every spring. They do a lot of running and a lot of weights and stuff. They have to pass a test, they have to be physically fit, and all of them are that

I've seen. They're really, really physically fit. And something that always amazed me a little bit about the jumpers was their educational level. Practically all of them are college degree. I mean, they're smart guys and here they're out there to -- they look like they just come in out of the woods or something, you know, with whiskers and all this. But most of them got college degrees [00:44:00], and they're physically fit, and they know what they're doing very well. They know what they're doing.

JUNGE: Why do they do it?

EISELE: They love it, absolutely love it.

JUNGE: It's hard work.

EISELE: They describe themselves as fire fighters first. It isn't the jumping that attracts them, it's the fighting fire. They're fire fighters first, and jumping is just incidental for fighting fire, to them. So I don't know if that explains some of it, I guess, but they do like the jumping.

JUNGE: What about your Arctic experiences?

EISELE: Well, we do some other type of flying, other than for the government, in Alaska. In fact, right now we have an airplane working for ConocoPhillips, moving the crews around up out of Deadhorse, which is where all the oil

exploration started, at Deadhorse. That's where the
[00:45:00] pipeline starts, at Deadhorse.

JUNGE: Alaska?

EISELE: The Alyeska pipeline, the one that comes down to
Valdez. That all starts at Deadhorse, so there's a lot of
-- and currently is ongoing. They're expanding the field
up there to the west up toward Barrow, and one of my Casas,
an airplane like that, is flying for ConocoPhillips, has
been flying for ConocoPhillips since the first of the year.
It's about to be done doing that, and it will move to
Fairbanks. It will be a smokejumping aircraft and go on
contract there up around the 1st of May. But I was just up
there with another Casa, which is now sitting in Fairbanks
waiting to go on contract.

Occasionally we do what's known as our ice contract.
That is a Navy contract, and it's putting a camp out on the
Arctic Ocean, on the ice. [00:46:00] We'll start with
nothing. That's out of Deadhorse also that that happens,
and I did do one this spring. I just came back about three
weeks ago from finishing that camp up. They start with
nothing out there, and they move everything. It ends up
looking like that picture over there. That's a camp that
we put out there. Submarines show up like those two right
there, pictures. Usually two submarines show up under the

ice. The whole objective of the camp is to do experimental stuff with the submarines. There could be anywhere from 45 to 70 people in the camp, and there's of course nothing there but ice when they start, and we haul everything out, pre-fab buildings, fuel, heaters, teaching equipment.

They put up a big [00:47:00]-- it's quite an operation they put together there, and all of it is supported by two aircraft, one of them being mine. The Casa there hauls most of the cargo, and we land on the ice, and they put together a little bit. They drag a snow -- I call them putters, but snow machines out there, and they prepare a little bit of a strip. They drag it pretty good, knock down the snowdrifts and everything to where it's fairly smooth before I ever land. Then we just make repeated trips out there till we got everything out that they want and then support the camp and then haul a bunch of it off when they're done. A bunch of the stuff hauled back to Deadhorse.

JUNGE: You're doing that all year long?

EISELE: No, that's about a 40-day excursion, 40-day contract.

The one this year started late February. [00:48:00] I think we were in Fairbanks on the 24th of February, Deadhorse on the 26th of February, and I left there on 27th of March is when we got back to Fairbanks.

JUNGE: So you spend quite a bit of time away from home?

EISELE: Yeah, occasionally. This was a little unusual, but I normally go do this particular job myself when here again this is probably the last one that I'm going to do. Somebody else, one of other pilots, will have to do it, and I normally try and break in a pilot, get a little experience for somebody else, which I did this year, too. I had another guy up there that's a very experienced pilot, got him pretty well broke in on what goes on there and let him fly it a little bit. So it may occur again, it may not. I don't know. Who knows?

JUNGE: Is it [00:49:00] any different landing on ice as say opposed to a hay meadow or, you know, asphalt?

EISELE: Well, no, not really. The only thing that occurs up there, of course, you're at sea level and it's cold. Normally they don't -- it didn't very long. You got to have a good short-field landing technique, but the snow is fairly soft, so it slows you up pretty good, too, when you touch down.

JUNGE: Can you land on water?

EISELE: No, we don't land on water.

JUNGE: No, but I mean, you know, most of the planes, the private planes up in Alaska, and I think that state has more private planes than anybody --

EISELE: Yeah. A lot of them are mounted on floats. I do have a sea plane rating, yes, but I haven't used that hardly at all. I just got the urge to get the rating one fall up there. I wasn't doing much and went out and got the rating, but I haven't been on a set of floats since.

[00:50:00] Float flying is -- there's a little more to it than you would think. A guy's got to be pretty experienced to do it well. Of course, the only way to get experience is to own your own airplane or something and just go do it. (laughter) Nobody will let you rent their airplane for very long. They'll teach you to fly floats, but they're not going to rent it to you after that. You get your rating. If you want to fly a float plane, well, you got to go out and buy it. (laughter)

JUNGE: What kind of ratings do you have?

EISELE: Well, most all the ones that I need. I've got an airline transport pilot rating, which is the one that probably is used the most. That's for instrument flying, and it's required to fly some of our smokejumping operations. I call [00:51:00] it the ATP. Same rating airline pilots have. They're checked out in their equipment. I'm not checked out in their equipment, but I have the same rating as they do. I could be checked out in their equipment. I have a multi-engine rating to fly

aircraft with more than one engine. I have instructor ratings, both the instrument instructor, multi-engine instructor, glider instructor, helicopter instructor, and then various type ratings. Any airplane over 12,500 pounds requires a type rating to be able to be qualified in it. So you have to train specifically in that aircraft and take a check ride to get a type rating. The Casas are over 12,500, as are [00:52:00] the Dorniers, so we're type rated in those aircraft.

And, of course, back to Hawkins & Powers. I was type rated in most of their stuff, and that was the four-engine PB4Y-2, a Privateer. I was type rated in that. The C-119, Fairchild, type rated in that. The C-97, that's a four engine, a big airplane, a huge airplane, type rated in that. And a couple other airplanes that they had over there I was type rated in.

JUNGE: Which ones do you enjoy flying the most?

EISELE: I just like to fly. I probably like the Casa, as far as fixed wing. That's my favorite airplane to fly, a fixed wing. Helicopter. You know, I've got two, just two small helicopters is all I got, but I do like to fly the helicopters. And one of them is a turbine [00:53:00], one of them is the Bell Jet Ranger. It's an enjoyable helicopter to fly.

JUNGE: What's the difference between the two?

EISELE: What's what?

JUNGE: The difference between the Bell and the other one you mentioned?

EISELE: Well, the Hiller was designed in the '50s, and the one I've got was built in 1961, so they're old vintage helicopters. Still usable, still capable of doing a job, as long as you maintain them. Helicopters all have a component time sheet on them. Certain components you either overhaul them at a given time, or you take that component off and throw it away and put a new component on. That's how you keep a helicopter operating, is follow the component time sheet and replace parts or overhaul parts as necessary. So the old Hiller, we've been able to maintain it because we can still get parts for it, and [00:54:00] so we do that. The Bell Jet Ranger is a much newer vintage. It's turbine powered and got hydraulically boosted controls, so it's real nice to fly. And being turbine powered, it's got a lot of power to it. It will lift a fairly decent load for a small helicopter.

JUNGE: The engine on the Hiller versus the engine on the Bell, are they different? They're both turbines, aren't they?

EISELE: No. The Hiller is a piston engine, 6 cylinder opposed piston engine, like [Kome?] that sits vertical right under the transmission. The Jet Ranger has a turbine engine, which is an Allison C20B, and it sits in behind the transmission. It fits horizontally right up above, on the deck there. [00:55:00] So they're just -- the turbine is much nicer due to it's a later development helicopter. It's the newest technology, at least for me. There's helicopters now that have got a lot better technology than what I'm flying, but we don't have any work for something like that. So we wouldn't ever buy one, a three or four million dollar helicopter, if you didn't have anything for it to do. (laughter)

JUNGE: How much value do you have tied up in all your inventory? Don't you have like -- well, how many planes and helicopters you got?

EISELE: Well, we have 21 aircraft.

JUNGE: Two helicopters?

EISELE: That is included in the 21. So, you know, Bighorn Airways, I can remember when I started flying at Bighorn Airways I think it had three Cubs, a J-3, a PA-11, and a PA-18, and then one spray plane that was sort of [00:56:00] a combination of airplanes that had been put together to make a spray plane basically. It looked like a Cub, but it

had a J-3 fuselage with a PA-18 top, deck, and wings, and belly tank, and a 02-90-1 engine, which was a generator engine. Still, a six-cylinder opposed engine -- or, I'm sorry, it was a four-cylinder opposed engine. But we've progressed now to, like I said, in the spray operation we got turbine sprayers. I just bought one new here a year ago, \$700,000 for that aircraft, and it's still a sprayer, but it's a nice one. (laughter)

JUNGE: What's the name of it?

EISELE: It's called an Air Tractor, built only in Texas by a firm down there that's [00:57:00] been in business for years building spray planes. They manufacture a bunch of them, and they sell a bunch of them. They're real -- everything is changed in the spraying, you know. We talked about flagging. There's nobody on the ground flagging anymore to begin with. The EPA wouldn't let you have anybody out there where you're spraying anymore on the ground, due to chemical getting on the flagger. What you got is electronic guidance. You got a GPS system in the aircraft that can keep you within three feet of the line that you want swathed over the field. Now, it can keep you within three feet. The pilot probably can't (laughter). He probably can't keep three feet all right, but it will

keep you down to -- it will tell you when you're on your swath.

JUNGE: They [have?] similar [00:58:00] devices, don't they, for tractors and plowing?

EISELE: Yeah. Yeah. It's similar technology there, and it's picked up from a satellite up above, so you got it all the time. And the system in the aircraft displays a map, you got a map you can look at. You can also print it out to where you put it on a computer, where you can see what your swath, each swath. You can actually see whether you missed a swath or not. It's pretty good technology, and, of course, we have that in our spray planes now, too.

JUNGE: Well, you appreciate that, don't you?

EISELE: Oh, yeah.

JUNGE: That's a nice advancement for you.

EISELE: Yeah. Yeah. That's a good device. That's great, great equipment.

JUNGE: When I worked for you in '69 you had Aero Snow Commanders -- is that what they were -- [00:59:00] or ex-Snow Commander?

EISELE: They were called Snow because Leland Snow was the guy that designed and built them. He [sold?] that design to another company and shortly thereafter started building the Air Tractor right there in the same plant, and then it

became the Air Tractor. But it was called the Snow before, and we had a couple of those to begin with that we'd bought from Leland Snow. Those I sold and bought two of the Air Tractors, brand new, from him. And we have recently parked both of those -- we bought them in '76, and we've operated them for years. They had radial engines on them, big round engines. It was [01:00:00] an excellent aircraft. But even there technology finally got the best of us on those. It was getting hard to overhaul the engines, and they were not as comfortable to fly, so both those have been parked. I still got them --

JUNGE: Do you?

EISELE: -- but they're parked, and we're using the two turbines that I have now. I bought one used in Canada, and that was the first one we tried, likeable, flyable, a good aircraft, and then I bought the new one that I bought a year ago.

JUNGE: Why wasn't the Snow Commander a likable plane?

EISELE: It was likeable. It was just the technology got beyond it. They actually sort of stopped building them and went to the turbines. If you could still get parts, you could keep them, you could keep them maintained, but they were not as comfortable an airplane to fly [01:01:00]. Spraying, especially as I got older, comfort becomes more

of a factor, and you wanted less noise, more comfort, easier controls. All the controls are balanced on the new ones. You don't work as hard to fly it. The older ones, the old Air Tractors that I got sitting over in the hanger over there, they worked you pretty hard to fly them. Controls didn't move that easy.

JUNGE: Now you say radial engines. Are these pistons that are opposed to one another?

EISELE: Yeah. Yeah. Well, they're not opposed. They're in a circle, cylinders. Cylinders are around a case and crank shaft and stuff, and it's called a round engine. That was the vintage round engines. If you go back far enough, well, round engines was the thing in World War II. Prior to that is when Pratt & Whitney started building the R-985 [01:02:00] and then the 1340, and then when the war started and they went on up to 1820s, Wright 1820s, Pratt & Whitney 1830s, and they started building them bigger and bigger all the time. Pretty soon they had the old Wright 4360. It had four rows of cylinder, round, four rows of cylinders, a huge engine.

JUNGE: So that Commander looked like a fighter plane. What did it resemble in terms of a military fighter plane?

EISELE: Well, not that much, other than just looks maybe a little bit. Exterior looks, it looked maybe like a fighter

plane, but it wasn't anything like it. What it had was a big round engine up in front. The back of the engine was all tank, was your storage for spraying, it was spray material. From there back to the cockpit was all tank, and then the cockpit you sat back a ways behind. That was for [01:03:00] safety purposes. You sat behind the tank. Between you and the ground you had the engine and the tank, so you could absorb a lot of stuff there before the cockpit got damaged any in the event of an accident. So --

JUNGE: Well, if the tank hit the --

EISELE: -- the design was safety in mind.

JUNGE: Yeah, OK. Well, I remember you pulling up and banking and coming back down in just a matter of seconds.

EISELE: Yeah. Well, a 1340, a Pratt & Whitney 1340, is a powerful engine, 600 horsepower. It's also a heavy engine. The turbine that produces 750 horsepower weighs about half of what the round engine, the radial, weighed, so this is another reason for going to turbine.

JUNGE: Didn't they have turbines in the past?

EISELE: Well, turbines didn't come along until -- [01:04:00] the Germans had a turbine in World War II, late World War II. Then the US after World War II started putting jet engines in fighter planes. Turbines never got to the airlines until, oh, I don't know, like the '70s, I think,

early '70s, and didn't get to spray planes until I'm going to say in the '80s probably. The turbine engine is an expensive engine in comparison to a round engine. They're expensive to purchase, they're expensive to overhaul. They do run a lot longer, but they are expensive.

JUNGE: OK. Boy, there's a lot I want to ask you. [01:05:00]

Are you doing OK on time?

EISELE: I'm OK for probably another hour, but then by three o'clock I better be done. It's two o'clock now.

JUNGE: All right.

EISELE: I got two airplanes I got to test fly yet this afternoon.

JUNGE: Test fly what, new airplanes?

EISELE: No. No, they've had work done on them, and we haven't flown them since the work was done. One of them is the turbine spray plane. It had a bunch of work done over the winter.

JUNGE: That makes you basically a test pilot.

EISELE: Well, yes and no. Somebody's got to fly it, so
(laughter) I'm not the only one. My son goes and flies them, too, all the time. In fact, he does more of it than I do.

JUNGE: Is he a good pilot?

EISELE: Yes, he is, a very good pilot.

JUNGE: Who taught him?

EISELE: Better than his old man. His old man taught him, but he's far exceeded what my capabilities are. Where he's exceeded me is in his instrument flight. He's really a good instrument [01:06:00] pilot. There's more technology there. He grew up in the computer age. Well, all this, a lot of our airplanes now have got very sophisticated radios and instrumentation, what they call a glass cockpit. It's all sort of got beyond me a little bit. I struggle with it, whereas he grew up with it, so he doesn't. All our younger pilots are the same way. They can handle that real easy, where I get in there and I can't remember how to run the damn radio. (laughter)

JUNGE: Now, Bob, are you kidding me?

EISELE: No, that's true, because they've changed. Everything has gone to GPS navigation. Very little is ground-based, it's all satellite-based. Well, you got to have it all set up right, and you got to know how to go run through it all the time [01:07:00], too, and if you don't use it every day, well, you forget that stuff, and I don't use it every day. I'm more into sitting here managing a little bit, watching the business end of the business. I don't fly near as much as I used to. I do go flying all right, but not as much.

JUNGE: You've seen a lot of change in aviation, haven't you?

EISELE: Yeah. Yeah, it's been huge, huge changes in aviation.

JUNGE: What are some of those changes?

EISELE: Well, just the sophistication of the equipment is the primary one, and that's from the aircraft to the engines to the electronic gear in them. Probably one of the biggest changes is the GPS navigation. That's the greatest stuff that ever come along, but you got to know how to run it, too. I get by, but I'm nothing special on that. When we take out of here and go from here to Fairbanks, [01:08:00] well, we do it all on GPS navigation. I mean, we'll go -- I'll just file direct to Bellingham, and the GPS keeps me right where I want, and the center accepts that. I mean, they know -- we got a code that we put into our flight plan that shows that we have that equipment on board, and they'll clear us from Sheridan direct to Bellingham.

JUNGE: What center is this?

EISELE: Salt Lake Center is the one that controls all the aircraft flow in the Rocky Mountain area. I'm talking about for instrument flying now. When we file an instrument flight plan from here to Bellingham, well, we get the clearance from Salt Lake Center, and then we're talking to Salt Lake Center until we get west of Missoula, and then they turn us over to Seattle Center. Seattle

Center will talk to you and handle you all the way into Bellingham. Then when you file out of Bellingham, going up [01:09:00] the coast to Ketchikan, well, you're working with the Canadians there, and we have to file an international flight plan. But it's all the same procedures and everything. It's all the GPS navigation.

JUNGE: Is there a lot more paperwork in the business these days?

EISELE: Yeah. Yeah, the paperwork is huge, and of course that's been brought on by our federal government.

(laughter)

JUNGE: And I note that you are a Republican.

EISELE: Well, that's right. That's right.

JUNGE: A strong Republican.

EISELE: I don't really like what's happening to our country right now. In fact, I don't like it at all. It's worrying me.

JUNGE: What's worrying you?

EISELE: Current administration in Washington is worrying me, you know. I don't know where that guy's going, but it isn't good for the country, I know that.

JUNGE: What is it that specifically [01:10:00] bothers you?

EISELE: Everything. Everything paperwork-wise. There's many federal agencies that watch everything we do now, from the

FAA to the EPA to the OSHA. Ag Department, Wyoming's, got some agencies that thank God they're nothing like the federal. At least they're easier to work with, and they're trying. But it's become a chore to be in business. It's not easy to stay in business these days, because there's too many agencies telling you how to run your business and what to do and how to pay taxes and how much taxes you got to pay and employees that you have to protect and provide everything. And it's all expensive, so you better have a pretty good income or you'll never stay in business. If you don't have the work, you're not going to stay in business very long, because the paperwork [01:11:00] will eat you alive.

JUNGE: I'm curious about the work. From the time that I was working for you I always wondered how you got jobs. Like did a rancher like Shepperson, Frank Shepperson, did he by word of mouth hear about Bob Eisele and say, "Bob, I want you to come up here and land on my little strip and get this sagebrush sprayed"?

EISELE: You know, probably a little bit. If he had some sagebrush he wanted to spray he'd probably give me a call and let me know that he was interested, and then I'd go talk to him. But it's years and years of having done it around the state. There's a lot of ranchers that do know

about Bighorn Airways by word of mouth. A lot of them we have worked for in the past. It's sort of come and go. They don't always do work every year, but a lot of them repeat and do work every year.

JUNGE: They call you?

EISELE: They call me. Sometimes I [01:12:00] just send out a letter to the ones that I know are talking about doing some more like sagebrush spraying. I'll send out letters in the spring just to refresh their memory that it's getting that time of year, and if they want to do something, then we need to get together and talk about it.

JUNGE: Sagebrush spraying no longer exists, right?

EISELE: No, that's our big business as far as spraying.

JUNGE: OK. I thought there were some problems with 2,4-D -- by the way, what is 2,4-D?

EISELE: It's just a herbicide that kills weeds.

JUNGE: Is it the same as Agent Orange?

EISELE: No, it's not the same. (laughter) Agent Orange has got the bad reputation from Vietnam, and it was a brush killer more than anything. It killed trees and stuff. But 2,4-D, while it might be similar in some of the respects, it's been around for years. [01:13:00] It's a very good product. And sagebrush spraying is still allowed, and 2,4-D is still used on it.

JUNGE: You mix that with diesel, right?

EISELE: No. You mix it with water. We no longer use diesel as a carrier on anything.

JUNGE: Why not?

EISELE: It's mixed with water. We use a wetting agent. A wetting agent breaks down the surface tension on the plant and let the herbicide be absorbed into the plant before it evaporates, you know, before it can evaporate. So that's the purpose of the wetting agent.

JUNGE: And that's what diesel fuel used to do?

EISELE: Diesel did something similar, you know. It sort of put an oily film, and it wouldn't evaporate as fast. Some of the problem there for a while was evaporation of some of the product you was trying to get on the leaf, but the wetting agent has taken that to where water will work just fine. So [01:14:00] we haven't used any diesel in years and years and years.

JUNGE: Now I know the answer to this question, but I want you to explain, for people who don't know, why you had to spray early in the morning.

EISELE: Because of calm conditions. You want calm and cool conditions. Early in the morning the ground hasn't started to heat up, so when you go out there and spray, well, the liquid will settle down to the ground. Once the ground

starts warming up, well, you get your convective currents rising off the ground, and it tends to take this stuff up instead of letting it settle to the ground, so you can get some evaporation. You can also get some drift problems if the wind comes up. Warm and windy is not a good time to be spraying. Cool and calm conditions is the time to be spraying, so that occurs in the morning primarily. Usually by nine o'clock in the morning, well, you're done. Things are -- the ground is starting [01:15:00] to heat up, and you shut it down, wait for the next day.

JUNGE: Why do you spray for sagebrush anyway? Why do ranchers want to spray for sage?

EISELE: Well, land has become very expensive, on an acreage basis. Like even in Wyoming here, some of the country, you wouldn't think it would be expensive, it's going for \$600 an acre, this range land. Well, you can spray sagebrush for \$20 an acre and get triple your production in two years of grass. By getting rid of the sagebrush, that allows the moisture to get to the grass, and you'll increase the grass production. So a rancher can increase his herd size, his productivity of that land, by spraying sagebrush. Maybe he can't afford to buy more land, but he can afford to spray sagebrush and thereby increase his [01:16:00] grass production, which will let him run more cattle.

JUNGE: And as I understand it, the sagebrush stays in place, so it provides habitat, right?

EISELE: The woody stalk will stay right there, yeah, to a certain extent. Over the years it will deteriorate, it will break down, but it will stay there and catch the snow in the winter and hang onto some of the moisture, but yet it isn't pulling any of the moisture itself because it's not growing. Yeah, it's one of the better practices that I know of that can be beneficial to a ranch.

JUNGE: Now I want to throw some stuff at you. What about environmentalists who say, "Well, this is not good for the land, it's not good for anything"?

EISELE: That's because environmentalists say that about everything. (laughter) They don't look at it from a practical standpoint, they look [01:17:00] at it from their one-sided view that we're destroying this earth that we live on. I don't take that view. I don't think man is capable of doing anything to this earth that would -- lasting. A volcano erupting puts more dust and stuff in the air than man can put up in years, one volcano. So I just don't take that view, and I don't think that a lot of what a rancher -- they're good stewards of the land. They have to live off the land, so they're not going to go out there and damage the land or damage the grass. They're

going to make it work for them, make it better, not worse.
So I don't care much for environmentalists, let's put it
that way. (laughter)

JUNGE: Now I've read an article about you getting into some
controversy [01:18:00] with a guy who was a -- what do you
call them? They're bee farmers.

EISELE: Yeah, a beekeeper. I just call them beekeepers. We
have over the years had difficulties with the beekeepers
because they feel that we're killing their bees. I think
on occasions we may have, with certain insecticides. Most
of the time we're very careful with it and try to be
careful, try to protect them. We give them the opportunity
to move their beehives. You know, all these beekeepers,
they don't own the land. The ranchers own the land or the
farmer, and they seek permission to set their bees there.
Well, then they got their -- they're freeloading their bees
out there, and the bees are doing some good with
pollination and stuff, so the bees are [01:19:00]
necessary, but it's sort of got to be a cooperative effort,
because the ranchers need us, too, to protect their crop.
So we got to be out there doing our job, and we try and
work with the beekeepers, but there is some controversy
there, no doubt about it.

JUNGE: Well, where does the controversy come in? Is it the stuff you're spraying?

EISELE: Beekeepers don't like anything that's a chemical that will kill a bee, and there are a lot of chemicals that will kill a bee, there's no doubt about it. But there's also other things. There's mites. Bee colonies are having a hell of a time now. Their colonies are just completely disappearing, and with everything I can read it's still somewhat of a mystery what's causing it. But there are some mites and stuff that are in bees, and they kill them off right and left. And also the [01:20:00] beekeepers, you know, they work those bees. These local guys, they crate their bees up and haul them off to California in the winter and work them down there, and that mortality rate is pretty great, doing that. They lose a lot of bees moving them that far and getting them adjusted.

So I don't know anything really about the bees. I know we do our best to try and not damage them. The beekeeper, the local one here that we have the most trouble with, and I won't even say his name, I'm not going to say his name, but he doesn't believe that we do anything to protect these bees, but we do a lot to protect these bees.

JUNGE: Like what?

EISELE: Like not spray when his beehives are there, should have moved them. We'll see the beehive, and we'll just back off and we won't spray that field that day. We'll go and tell the rancher, "Hey, those bees are there. You better get a hold of the guy and get them moved."

[01:21:00] And the rancher will raise hell, and he'll call him up and say, "Get those goddamn bees out of here right now, or they ain't going to be alive tomorrow."

JUNGE: What are you spraying that will kill them?

EISELE: Well, insecticides. Certain insecticides will do harm to them. Bees don't -- I mean, if an insecticide were sprayed that will kill an alfalfa weevil, it's going to kill a bee, too.

JUNGE: What are you spraying for with your insecticides?

EISELE: Well, one of the primary things that we spray around here is to control the alfalfa weevil. They get in and damage the crop. The alfalfa weevil will pretty much wipe out an alfalfa field in a short period of time. The larvae will eat the plant. So the ranchers hire us to put an insecticide on it to kill the weevil.

JUNGE: What about mos-- [01:22:00] This particular bee incident that I was reading about had to do with mosquitoes, spraying for mosquitoes.

EISELE: Yeah, that's the one. It's a proven fact that the county and the health department pay for this mosquito spraying -- county weed and pest is the sponsor of it -- and it's a proven fact that the material that we're using will not kill a bee. It's been scientifically all checked out completely, won't kill a bee. But you can't convince this one beekeeper here that that's true. He's digging and looking and trying to figure out some way to blame us for his bees that are dying when probably just poor management on his part is the reason his bees are dying.

JUNGE: Interesting. Wouldn't the insecticide kill off the mites that live off the bees?

EISELE: I don't think so. It will probably kill the bee before it would kill the mite.

JUNGE: So what material --

EISELE: Bees, you know, [01:23:00] it depends on the material. The stuff we're using now for alfalfa weevil spraying is not that bad on bees, not that harmful to them, and the beekeepers will tell you that, say, "Hey, we like this stuff that you're using now, because the bees tolerate it pretty good."

JUNGE: How do humans tolerate it?

EISELE: No problem at all. You got all sorts of labeling. All chemicals have a label, and you have to follow the

label, and it gives you all the directions and how you can use it and safety features and safety equipment and all that sort of stuff. So the labeling is all important, and every chemical drum has a label on it, and we follow the label. That's how we use it.

JUNGE: I think you were spraying alfalfa when I was working for you.

EISELE: Well, and, you know, going back that far, there wasn't as many rules and there was different chemicals used. [01:24:00] Some of those chemicals were probably a little more harmful to various -- like bees. But that's been 30 years ago, too, 35.

JUNGE: You still use Malathion?

EISELE: Malathion is still used for mosquito spraying in the Laramie area, and we spray a bunch of mosquitoes down there. But what we're trying to control there is the adult, the actual flying mosquito. West Nile virus is a big deal and has been for several years. People die every year of West Nile virus and a lot of stock. Horses are really affected by it. The sage grouse are killed off right and left by West Nile virus. So this is why mosquito spraying programs have become more active around the state, and more of it's being done, [01:25:00] is to try and control this West Nile virus to cut down the

mortality rate on humans, on stock animals, and on the birds. The sage grouse has really taken a hit from West Nile virus.

JUNGE: What percentage of your business is spraying?

EISELE: Well, overall, like I'd said, I think I mentioned five to seven percent of our business is spraying. Very little of our business is spraying anymore. The smokejumping, the shop out here -- we take in and we do a lot of outside maintenance, we sell all the fuel on the airport.

JUNGE: Bob, when this Bighorn Airways developed or expanded, which it has since I worked for you, because you weren't -- I don't know if you were on your own, maybe you were. But how does it expand? How do you get into all these things like charter service, flight instruction, ground support, [01:26:00] fuel, smokejumping, spraying? You started out with three planes.

EISELE: That's right. It was a matter of being at the right place at the right time and knowing when to do something, being active enough to do something, to make a move, to buy that first smokejumping aircraft. Actually I bought two at the same time and acquired -- they came with the contracts. An operator in Alaska went broke, and I went up there and bought the two Casas that he had for sale, and with those Casas was the contracts, the smokejumping contracts. They

transferred them over to us, and we was in the smokejumping business. So that's how we got charged with smokejumping.

Spraying, that just evolved over the years, and the only thing that's happened with spraying is it used to be ninety percent of our business, now it's six or seven. The equipment is much better that we're using, but the total business in dollar volume [01:27:00] probably is higher than it was 30 years ago, because we didn't charge much. The charter, we got some nice equipment out here that we charter aircraft, that we use for charters. We don't do a heck of a lot of charter business, but we fly hospital people around from Casper. That hospital down there uses us a bunch. We have an air ambulance license, and we work for the VA hospitals hauling patients around.

JUNGE: What about people who have heart attacks? Do you fly special cases?

EISELE: We don't have specialized equipment to do that. Where we have an air ambulance license, we pretty much do the set-up type patient, VA stuff. We have to maintain a license for that, but we don't do hardcore air ambulance. We don't have the equipment. We don't want to do it.

JUNGE: Why not?

EISELE: Those are usually connected with the hospital, [01:28:00] contracted to the hospital. We don't do that.

Our contracting, while the VA hospitals use us, they just know that we're available and they have used us for years, so they keep using us. And that's Cheyenne hospital, Sheridan hospital, and the Salt Lake hospital. Those are the three we normally fly for.

JUNGE: Cheyenne, the Casper --

EISELE: Cheyenne, Sheridan, and Salt Lake.

JUNGE: And Salt Lake.

EISELE: Yeah.

JUNGE: OK. But with the population aging, don't you see a market for flying people out for emergencies?

EISELE: No, because the hospitals have that all tied up.

JUNGE: Oh, you mean they have their own air service?

EISELE: They contract. They put out contracts and they hire helicopters, they hire their own fixed-wing fleet of aircraft, and those people don't do any other flying than that. They sit around, they get paid for sitting there. If you ever wondered why it costs so much to be [01:29:00] sick, well, that's part of the reason.

JUNGE: OK. I didn't know this before I started researching Bighorn Airways, but you claim -- and I suppose it's true, you'll have to tell me if it isn't -- that Bighorn Airways is Wyoming's largest and most complete air charter service.

EISELE: Yeah. I don't know of any independent charter service that's any bigger in Wyoming. Sure, there's airlines that are bigger. There's corporate aircraft, fleet, some corporate aircraft that have got more airplanes than we got as far as -- for moving people around.

JUNGE: Like [McMurry's?], [True's?], these?

EISELE: Yeah. Yeah. They got their own fleet of aircraft for moving their people around. But as far as pure charter, where we offer our services to anybody that wants to charter an aircraft, we're about the only one in Wyoming that has a fleet of aircraft for that.

JUNGE: How [01:30:00] did it happen that this should be based in Sheridan, Wyoming, and not in Rock Springs, Cheyenne, Casper?

EISELE: Well, I think that has to do with just I wanted to live in Sheridan, Wyoming, so we operate everything out of here.

JUNGE: But I guess what I'm getting at is you're the one that built this place.

EISELE: Well, with a lot of help from a lot of other people that work for me. I didn't build it alone. I built it with the help of the employees, well, hiring the right people and keeping them on track for what we want to do.

That's been the key to Bighorn Airways, is having the right people.

JUNGE: Well, LeBron James is the star of the Miami Heat, and without him I doubt whether they'd be world champs or national champs in the NBA, but he always gives credit to his teammates.

EISELE: Well, that's what you want to do is to give credit, and a lot of credit is due to them. I mean, I got some good people working here, there's no doubt about it.

[01:31:00] My shop manager and mechanics out there and pilots, we got some very experienced pilots work for us. Bighorn Airways employs 48 people.

JUNGE: I didn't realize it was that many.

EISELE: Yeah. Yeah.

JUNGE: You are a major employer in Sheridan.

EISELE: In Sheridan we are a major employer.

JUNGE: That's a long way from three little planes.

EISELE: Uh-huh. And that's a little known fact in Sheridan, Wyoming. Everybody thinks that Bighorn Airways is still three little airplanes. Even in Sheridan they still think that. (laughter) You mention airplanes based in Fairbanks, working in Fairbanks, and they'd look at you like "What are you talking about? Are you a liar or what?" "No, I'm not

a liar. We've been in Fairbanks since '89, flying up there every summer." (laughter)

JUNGE: Is everything based here? I understand you have a satellite operation in Casper.

EISELE: Not really. [01:32:00] We used to. We pretty much shut that down several years ago. We advertise our services there in the Yellow Pages, and we do quite a little flying for the hospital there, the big hospital in Casper. We'll go down and pick up their doctors and take them around to Rock Springs, various places. So we do a little flying out of Casper still, but we don't have a base there any longer, no.

JUNGE: How many pilots do you have flying charter?

EISELE: Well, charter, there's only four that fly charter. I've only got really three aircraft that are -- really only two that are charter. They're both turboprops, and we've got four different people that can fly those two aircraft. Charter is not a big deal either. Back to smokejumping, that's where [01:33:00] we got probably 10 captains that are qualified smokejumping pilots. We have to provide relief crews on all these contracts. They'll only let them work for 12 days on, then you got to give them two days off, and we have to provide a relief crew on that two days off, too. We got other people to go up there and fly them.

So we got that. Some of the airplanes, the Casas, are two-crew aircraft, so they require a co-pilot also. We got mechanics right now in Fairbanks that are there for the summer.

JUNGE: Do you have a base up there?

EISELE: Yeah, pretty much.

JUNGE: Like this?

EISELE: Not this sophisticated, no. But we've got an office trailer, we got a storage facility where we keep all our parts and tools and various equipment, heaters and everything, and it's all right there on the BLM [01:34:00] facility.

JUNGE: How much time do you spend in Alaska?

EISELE: Well, I don't spend all that much anymore. I usually go to Fairbanks three or four times a summer and spend maybe five days there each time. I used to do more than that but I'm trying to let other people do things and me slow up.

JUNGE: Well, what are you going to do when you retire?

EISELE: I'm not going to retire, but I'm going to slow up, I can tell you that. I am slowing up. I have no intentions of retiring. I don't know what I'd do with myself retired.

JUNGE: And you have no intentions of not flying and you're going to continue to fly?

EISELE: No, I'm going to fly as long as I'm physically able to fly.

JUNGE: Do you ever hear of Clyde Ice?

EISELE: Yeah. Yeah.

JUNGE: Did you know him?

EISELE: Yeah, I had met the guy before. He's no longer alive.

He was a guy that his family made him quit [01:35:00] spraying when he was 75. I'll be 76 in a month.

JUNGE: (laughter)

EISELE: So I'm sort of watching myself there a little bit, too, saying, well, you got to quit sometime.

JUNGE: Well, I think on his 100th birthday his son allowed him to take over the controls, at 100. I interviewed him --

EISELE: Is that right?

JUNGE: -- 24 years ago. He was 102.

EISELE: Really?

JUNGE: He told me some stories and, Bob, I know you can tell me some stories. But he told me a story one time. I said, "Well, how did you get into this business? How did you get into flying?" And he said, well, he was working for a barnstormer, and there was a line of people waiting this one time. And this guy liked to drink coffee, he says he was a real coffee hound, so he'd go into town and he'd get his coffee. And meanwhile these people wanted to fly, and

this one guy was very insistent [01:36:00] and said, "I want to fly." So Clyde knew the basics, and he got in the plane and taxies down to the end of the runway and came back. He said he did it once or twice and this guy said, "You don't understand. I want to fly." He took off again and he figured, "Oh, what the heck." And so he -- I guess, what do you, you pull back on the stick? He went over this fence, went to a town about 10 miles away, circled the town and came back. I don't think he landed in the same place. I said, "Well, how did you land?" He said, "Well, I found a stubble field down there that looked like it would do as well as anything." And he said, "I dropped it level with the ground and turned the key off."

EISELE: (laughter)

JUNGE: Now this guy was flying within probably a decade of the Wright brothers, OK. He was born in the 1880s. But the sequel to this story was so funny. He said, "You know, years later," he said, "that guy looked at me. He said, [01:37:00] 'Do you know who I am?'" He said, "Sure, I know who you are." He said, "You gave me my first airplane ride." And Clyde said, "I didn't have the heart to tell him that it was my first flight, too."

EISELE: (laughter) Yeah.

JUNGE: But, you know, did you know any of these pioneer aviators besides him, or did you have much to do with him?

EISELE: I just met the guy once. I didn't know him personally. Now Dan Hawkins could have told you stories on Ice. He come from that country. That's where Dan came from, over there in the [pear, peer?] country. So he had met him and knew him pretty well, and he told some stories about him, too, but I just met him once is all. I didn't get over that way very much.

JUNGE: Anybody else that goes way back that you met?

EISELE: Not really, not that I can think of right off the top of my head.

JUNGE: So [01:38:00] do you consider yourself a bush pilot?

EISELE: Well, yes, to a certain extent, but then I like to think that I'm capable of doing the other type of flying, too, the instrument flying, cross-country instrument flying. But I've always been a pilot that probably did better the seat-of-the-pants flying. I always did that better probably.

JUNGE: Do you got any stories about some of that flying?

EISELE: Well, yeah, but I can't think about them, and I don't like to tell stories about myself anyway. So you're not going to hear many stories from me there. I don't know what else, in fact I've pretty much covered a lot about

where we're at and where we've been and where we started.
As far as where we're going, who knows? Who knows? Just
like any other business right now, I'm trying to [01:39:00]
keep enough business to keep ourselves going.

JUNGE: Well, how many kids you got?

EISELE: I only got one, one boy.

JUNGE: Chris. Does he have any kids?

EISELE: Yeah. Yeah, he's got two.

JUNGE: You got two grandkids?

EISELE: Yeah, I got two grandkids.

JUNGE: Well, what do you think about them? Do you want them
to follow in your footsteps?

EISELE: No, and he doesn't want them to either. (laughter) He
wants them to be lawyers or something like that. I said,
"Well, I think you maybe ought to pick something different
than a lawyer. They're not too well respected."
(laughter)

JUNGE: Well, you know what they say about lawyers? It's 98%
of the lawyers give the other 2% a bad name.

EISELE: (laughter) I think there might be a little truth in
that all right.

JUNGE: So what do you want to see? What do you hope for?
Don't you want somebody, one of your grandkids, to fly?

EISELE: Oh, yeah. I want them both to learn to fly, but I don't want them to necessarily be in the flying business. There's got to be better [01:40:00] ways to make a living than aviation. Aviation has been good to me, but it's also been hard on me, too, you know.

JUNGE: Physically hard on you?

EISELE: No, well, physically a little bit, but not so much. I'm still in pretty good shape for 75, but it's just running a business of this size, it isn't really a big business, but 48 employees, there's always something going on.

JUNGE: Well, it's a multimillion-dollar business.

EISELE: Yeah. Yeah, it is that.

JUNGE: I mean, you've got at least that in inventory I would assume.

EISELE: Yeah. Well, we got a bunch of stock out there, but parts and stuff.

JUNGE: I got a question, and I don't know if you can answer this, but I got to thinking this morning, you know, when I drive from here to Bob Orchard's place at [Natrona?] International, which is what I'm going to do, I have to figure out [01:41:00] how many hours it's going to take. I know when you fly you have to figure out how many hours it's going to take.

EISELE: Say hello to Mr. Orchard for me. I know him pretty well.

JUNGE: Do you?

EISELE: Tell him you just came from talking to me.

JUNGE: OK, I will. But it seems like time and space would change radically for a person like me if I knew I could go to Fairbanks in 11 hours or if I knew I could go to Denver in a half an hour.

EISELE: Yeah. Yeah. It makes the world a little smaller, let's put it that way. Yeah, it's nice to be able to go up to Fairbanks and be familiar enough with everything that the operators know me, I know them, I know my way around Fairbanks real well, as far as driving, the eating places. Speaking of eating places, Fairbanks has some of the best restaurants in the country. The food is just unbelievable up there. There are several nice places to eat steak, go get a good steak or a prime rib. [01:42:00] So it's nice to be able to do that, but even that, I'm getting old enough that that gets more difficult, too, to go do that. So I'm getting a little more content with staying right in Sheridan. (laughter)

JUNGE: Well, you're a Sheridan boy.

EISELE: Yeah.

JUNGE: Right?

EISELE: Yeah. Yeah.

JUNGE: Can you go back to that first solo flight for me?

Tell me about that.

EISELE: Well, as I had said, Dick Yentzer taught me to fly.

Well, when I talked Dick Yentzer into teaching me to fly, he was busy spraying. It was in the summer, and he looked at me and he almost -- I thought he was going to throw me out of his office when I said I wanted to fly. (laughter) But he finally, spraying every morning, and he'd come in from spraying and all he wanted to do was lay down and take a nap. I'm standing there waiting. I want to go fly.

[01:43:00] He had this old J-3, a 65-horse J-3 Cub, that he instructed in. You had to fly -- I had to fly it from the back seat. He, as the instructor, was in the front seat, and there was a reason for that. When you finally got around to soloing in the airplane, well, you had to solo it from the back seat due to CG purposes, to keep the CG to where the air -- to where the balance was right on the aircraft.

JUNGE: CG, what's that?

EISELE: The center of gravity, to where it was balanced fore and aft. You had to fly it from the back seat when the instructor finally got out, so you started learning to fly from the back seat. Well, you can't see nothing from the

back seat in a J-3 Cub. So I mean, we was down here. I was running off the runway still and had a whole two or three hours. And at three-and-a-half hours Dick Yentzer got out, and he said, [01:44:00] "It's all yours," and he never got back in the airplane with me. He gave me that J-3 to fly for about 30 hours. He went back to his spraying, and I did anything I wanted with the J-3, flew it around. Of course, I paid for the airplane, but still, I flew it, and he didn't give me any more instruction for probably another 25 or 30 hours. Then we went to work -- he had a break in the spraying -- got to work on the cross-country stuff and the maneuvers I needed to know.

I pretty much taught myself how to fly that J-3, with some basic stuff from him, but he just allowed me to teach myself to fly in that airplane is what it amounts to. I look back on that, and I say -- of course, I was used to machinery, because I had been around machinery all my life. Caterpillars [01:45:00] and [bicycles?] and all sorts of stuff like that, so I knew a lot about tractors and everything and knew how to handle that. So it wasn't difficult. I enjoyed that, and I look back on that and say that was a great time. A great time.

JUNGE: Do you think about that much?

EISELE: Yeah, once in a while I'll think about it. I remember that.

JUNGE: How much was gas or Avfuel at that time?

EISELE: I'm wanting to say 25 or 30 cents a gallon, somewhere in there.

JUNGE: What is it now?

EISELE: Five and a half, six bucks. That's here. In Fairbanks it's seven dollars a gallon.

JUNGE: When you first started flying did you have any idea that you'd be where you are today?

EISELE: No. [01:46:00] No, I didn't really look at it that way, although I always liked being my own boss. So I guess I just naturally fell into the various things, had the opportunity and took advantage of the opportunity, ended up being the boss and doing things the way I wanted to do them and always knew that I usually had the right thoughts of how they should be done, too.

JUNGE: I've always wanted to ask you this question. What does it take to be a good pilot?

EISELE: To be a good pilot? Well, you have to be somewhat skilled. The same skill that could be applied to driving a vehicle well applies to flying an airplane well. You know, some people can't drive worth a damn, some people can't fly worth a damn. So flying is an acquired skill, [01:47:00]

and I think I've always had that skill and I always applied myself. I always was able to teach myself real well.

JUNGE: It's like you said, you taught --

EISELE: I've never been to a training school of any type. I was all self-taught. Manuals, I'd study the manuals. As far as instrument flying, I studied. I always had an airplane, and I'd hire an instructor to give me some instruction, instrument instruction, but it was my airplane. I'd study the manuals and the training stuff and take the test all on my own. I never sent to any school to do that.

JUNGE: Even the helicopters?

EISELE: Even the helicopter. The helicopter doesn't even require a rating. Well, I say it doesn't require a rating. If you got a commercial license, well, all the helicopter is just an add-on [01:48:00] to the commercial. So it's just an additional rating there, all right. You got to take a check ride with an FAA guy or an examiner. So you have to do that, but there really isn't any -- you study a flight manual on a helicopter. As far as the studying end of it, there's manuals that shows you what makes a helicopter fly. You read up on all that, how it's put together and the aerodynamics of it, and what allows it to fly, and that's just a book you read up on. Then the

flight manual itself tells you everything specifically about the particular machine that you're flying.

JUNGE: Isn't the control of it totally different from a fixed wing?

EISELE: Yeah. Yeah. But here again, that's a matter of reading and then having an instructor give you that hours of instruction to start with. [01:49:00] No one that I know of -- that was one thing that I would say about the helicopter. The first, say, eight to ten hours of helicopter instruction I didn't think I was ever going to learn to fly that damn thing. I mean, they're difficult. It wasn't like the old J-3, three and a half hours, and I was on my own with it. Not so with the helicopter. They're different. But once you begin to get what it takes to fly them and how the coordination is and everything, well, then it begins to fall in place. They're absolutely great to fly, there's no doubt about it, but they're not easy to learn to fly, and what you do with them is not easy either. You know, a helicopter's usually got a specific purpose. When you go out to fly it, you're going to do something that a fixed wing won't do. So you may be landing up on a landing pad up [01:50:00] on a mountain somewhere, and that's difficult. You may be spraying with it, that's difficult.

JUNGE: You said that you had to be skilled, and that made a good pilot. But I have a feeling there are some other qualities.

EISELE: Well, I don't know exactly what I'd point it at other than an aptitude for what I do. I like what I do, too. I've always liked -- flying has never been work to me. It's always been enjoyable, never been work. It never has.

JUNGE: Well, I look at you and I say I've always known you to be a practical person.

EISELE: Yeah.

JUNGE: Focused, goal-oriented, right?

EISELE: Yeah.

JUNGE: Am I right?

EISELE: Yeah.

JUNGE: OK. So I couldn't fly and be a good pilot because I'm too scatterbrained. I have ADD [01:51:00] basically, and I think I always have had. Do you think that a good pilot is a person who has got a certain sort of a mental construct that forces his attention on the job? Do you know what I'm trying to tell you?

EISELE: Well, yeah, I think I know what you're saying there. You certainly have to be able to concentrate on what you're doing and apply yourself to that goal or what you are doing right then. I mean, when you go out to fly, you better

have your attention on flying, and I do that. I think about it. When I fly, well, that's what I'm doing is flying.

JUNGE: What about not panicking in a touchy situation?

EISELE: Well, you know, I guess there's a certain amount of that. Learning replaces the fear factor there. If you know enough about what you're doing [01:52:00], well, any unusual situation you can handle. You don't get excited about it, you can handle it.

JUNGE: Give me an example so I know what you're talking about.

EISELE: Well, a lot of pilots in multi-engine airplanes have never shut down an engine, never had an engine shutdown or an engine failure. I've had numerous engine failures in multi-engine airplanes over the years, and by engine failure I mean the engine, something happens to it that you have to shut it down. On a multi-engine airplane, you can shut down an engine and you should be able to keep that airplane flying OK, if you keep your orientation. If you keep your concentration and know what you're doing, know the airplane, well, it will fly on one engine just fine if you do everything right. Well, most people have never even shut down an engine, but I've actually had [01:53:00] probably half a dozen engine failures that required

shutting down the engine, some of them on instruments, some of them at night.

One particular incident that I do remember I was working for UPS, hauling UPS freight at night. During their Christmas rush we'd always do a little work extra for them, at that time of year, and I was going from Boise to Salt Lake every night and then the next morning back, from Salt Lake back to Boise. Well, this particular night, I mean, it was terrible weather, snowing. I was on an instrument flight plan, at about eighteen or nineteen thousand feet climbing out of Boise, and the weather was getting really lousy in Boise but it wasn't that much better in Salt Lake.

But I ended up losing oil pressure on one engine, and it [01:54:00] was [terrible?]. They were turbine engines. It was a 690 Commander, and I shut that engine down and went most of the way from Boise -- I didn't want to turn around and go back to Boise, went from there to Salt Lake. Instrument conditions at night on one engine and had a load of cargo on board. I went in and had to shoot the approach into Salt Lake. Weather was lousy there, too, on the one engine. And that particular night, the concentration level was pretty high there for a while, I'll tell you.

(laughter) That whole flight had my attention.

JUNGE: I'll bet. Were you a little limp after that was done?

EISELE: Well, you know, it wasn't something that -- it didn't bother me all that much. I mean, I'm used to doing odd things, and that one went well, did things right, and everything was fine. [01:55:00] But...

JUNGE: OK, we're about done here. But is it like trying to run a marathon when you've lost a leg? I mean, what's so difficult about flying in one engine? I know they were meant to fly on two.

EISELE: You lose half of your performance with the aircraft or almost half. Not quite half, but you lose a lot of performance. It wouldn't stay up there where it's at, it would start sinking down. It wouldn't stay at that altitude, it was coming down slowly. I think I got down to fourteen thousand, and it maintained fourteen thousand, as I recall, which gave me plenty of clearance. I was still on a flight plan above the MEA, minimum en route, altitudes. Directional control, two engines, one out on each wing, you lose one on a wing, you suddenly have a directional control. This one over here is working real hard, but it's trying to pull you around. So you have trim issues, [01:56:00] you got to re-trim it and get it to where it's flying good, and all this time you're doing it all on instruments.

You're looking right inside the cockpit, you're not seeing anything outside. All you see is right in front of you, everything, the engine instruments, the altitude, gyros, directional gyro, all that's in front of you, and that's what you have to go on. So that's what you're using, and you're still talking to center. I had to advise center that I had shut down an engine, precautionary shutdown. And, of course, as I taxied in at Salt Lake, well, there was the FAA to greet me, wanting to know what had happened and what I did and how come I didn't land back in Boise. I said, "Because Boise's weather was going down rapidly, and it was nasty in Boise." I said, "I wasn't about to turn around and go back to Boise." (laughter) So I had a little explaining to do there. They didn't quite understand why I continued on. [01:57:00] Then they asked, "Well, why didn't you land at Twin Falls?" and I said, "Well, the weather was lousy there, too." Salt Lake wasn't good, but it was better than some of the other places, some of the other options.

JUNGE: Was that your first experience with a shot engine?

EISELE: No, no. No, that was the second time in that airplane. The other time was going into Denver at night from Omaha, hauling freight, and had an engine problem

there and had to shut it down. Don't remember which engine it was, but it was the same airplane, I can remember that.

JUNGE: Is this the first time you were talking about, the one in Denver, the first time an engine ever went down on you?

EISELE: No. No, I'd had engine failures before. Flying Hawkins & Powers tankers there was lots of engine failures. (laughter) Lots of them in those smokejumping aircraft.

JUNGE: Oh, my God. [01:58:00] The first time it happened, what did you think?

EISELE: Well --

JUNGE: Or can you remember that?

EISELE: No. I was spraying mosquitoes down in Laramie with a C-119 and had an engine, and it only -- those were big round engines -- had one of them, a [Soner?]. It swallowed a valve in the Soner and backfired a couple times, and I knew that you didn't want to let that go very far or long or you'd have a real problem. So I pulled the power back, identified the engine, shut that one down. I was in a spray run headed right toward the Medicine Bow range, going uphill pretty good, and then it's all high elevation there to begin with. Well, when the thing backfired first, I just pulled out of the spray run and shut it off. It started turning immediately to where I was headed back downhill, not uphill. I shut the engine down, and I got it

back a ways working off a dirt strip [01:59:00] down there
by Laramie. What is --

JUNGE: Brees Field?

EISELE: No, I wasn't working off the field, off the airport.

I had a rancher, they built me a six or seven thousand foot
dirt strip there that I sprayed off with that airplane.

Anyway, that was an engine failure, just one of quite a few
that I've had.

JUNGE: Did you ever have to auto rotate?

EISELE: Only the one that was not successful. (laughter) That
was going good until the gear broke.

JUNGE: How high above the [Hurley?] were you?

EISELE: Oh, I was low, because it was in a snow storm, and I
was just following this road, and it flamed out. I know
what happened to it, it got a bunch of water -- on a
turbine [02:00:00] helicopter there's this thing called a
particle separator, and it separates out the particles so
that you don't get a bunch of dirt in with the engine, in
with the air. And the particle separator, I was concerned
about it icing up a little bit, because it was smelling
pretty good. So I lit to check it a couple of times, and
this was the first time I lit to look at it and make damn
sure it wasn't icing up that particle separator.

Well, I had no sooner lifted off, and following this road I was about fifty, sixty feet in the air, and the engine flamed out. Well, of course, I immediately auto-rotated, and I was doing OK, but I think I touched down a little bit fast. Should have been able to touch down at about 20 miles an hour, and I was probably 35 when I touched down, sliding down the road. Like I say, I was doing all right until I could feel it was muddy and I could feel this mud starting to -- it was sort of [lurching?] just a little bit. [02:01:00] Finally the right gear broke out from under it, and it rolled over on its side and pieces went everywhere. But I think in hindsight, looking back on that, I think what was happening, my mistake was landing to look and see if there was any ice in there, because on the ground it was melting around there, and I think it gobbled up a little water. I think it got some water in with the air, and that's what flamed it out. So it was probably my fault as much as anything that that happened.

JUNGE: But again, there was a little angel sitting on our shoulder. We're just about there. I have to ask you, you've landed in some pretty hairy spots. I remember when you were flying me to a job as a flagger, and there was cows covering the path, because it wasn't an airfield. It

wasn't a strip. I guess you might call it a strip.

[02:02:00] But to me it wasn't a strip, it was a cow path, and there were cattle down there. And you strafed these cattle, and they skidded --

EISELE: Moved them out of the way?

JUNGE: Yeah, you moved them out of the way, and you came back and you did it again only this time you landed, and I thought, "There were cows still there, Bob." And I thought, "There is going to be hamburger all over this metal." But you just seemed totally unperturbed, and you just landed that thing.

EISELE: That comes from doing stuff like that quite a little. You don't get that way to start with, you have to build up experience. Everybody has to build up experience, and the only way you build up experience is by doing it. So if you do it, well, you get to know more and more what to expect. I probably even knew what to expect out of the cows and probably wasn't worried about them because I knew which way they were going to run, and they were probably already moving that way, out of the way, when I lit or I [02:03:00] wouldn't have. If I had thought they were moving across I wouldn't have lit, I'll tell you for sure.

JUNGE: So what are the toughest places you've landed in?

EISELE: Well, I just came from a job that's probably the toughest, landing up there on the ice with that big airplane on a short ice strip. Now that's a tough job.

JUNGE: Why?

EISELE: That's a tough job, because it's short. The airplane wasn't really designed to land in that, although it did it real well. If you look at the manual you're supposed to add three thousand feet of runway, according to the manual. They said it had nineteen hundred feet. I think there was probably every bit of that, probably, but it does it fine. The technique has got to be right. You got to hit -- you don't want to touch down halfway down your ice strip. You want to touch down the first twenty, thirty feet of the strip, and then the aircraft has got [02:04:00] props on it that will reverse, for stopping, and that makes a big difference. With that airplane you can stop it by using what they call beta and reverse pretty effectively. Use a bunch of it, and it's like throwing out a brick, I mean.

JUNGE: But isn't it sliding on the ice?

EISELE: No, the brakes aren't even usable. You don't use the brakes on ice. This is propellers that are changing the blade angle to where they're not trying to pull, they're trying to stop you. They're actually moving air the opposite way. They're moving air, they're picking air up

and moving it forward. Instead of the air moving through a propeller and back behind the aircraft, this thing reverses the blades to where it's picking up air from behind the engine and moving it up through the blades forward, and it's stopping it.

JUNGE: How can you get that -- it's not like a car where you can slam a car into reverse?

EISELE: No, it isn't that. It has nothing to do with reverse. It's changing [02:05:00] the blade angle, the propeller blade angle, to where it's cutting at the air differently. Instead of pulling you forward, it's pulling you back is what it amounts to, because you've changed the blade angle on the blades.

JUNGE: OK. Well, you got to go. In Wyoming what's the toughest or smallest or most unusual place you've had to land? Like [Shepperson's?] wasn't ideal.

EISELE: Yeah, that's a nice airstrip there. I've been on his airstrip numerous times. I don't know. There's lots of airstrips that we use. Some of them, depending on the time of year, they can be muddy. This time of year you'd have to be very careful where you lit with any aircraft off airport, because of the mud. Knowing what the conditions are, knowing what the weather conditions are, some of these ranch trips can be soft and difficult. There's places up

Spear-O-Wigwam up on the mountain, they had an airstrip. You can't hardly [02:06:00] see it anymore. Every time I drive up there, I drive down to look at it. But I've laid up there numerous times with airplanes. Not the big airplanes, the little airplanes like Cubs, I fit in there with a Cub. I have been in there with my 180 a time or two. And in Penrose Park, there is no airstrip there, but there's a place that I can land, that I have lit, on Penrose Park that's smooth enough. There's not any rocks in it. You got to know where you're at, if you can land there.

JUNGE: What about holes? Medicine Bow Airport, some of those places?

EISELE: Well, there again, you better know what's there and then be able to see it. Up on the Bighorns it's more rocks and holes you got to worry about. But anyway...

JUNGE: OK. How did you escape Vietnam?

EISELE: You know, I think I was just at the age where I just barely missed it, but I don't know. I certainly didn't want to go, because I knew what was going on over there. And I never [02:07:00] even -- I did have to take a physical once. I got as far as a physical. But I had a broken arm at the time, so they didn't look at me too hard.
(laughter)

JUNGE: You're the most lucky guy! This is a cliché of course, but don't they say there's old pilots and bold pilots but no old, bold pilots.

EISELE: Well, that's a pretty good saying. That's a pretty good saying really, and it does apply, you know. You can be too bold, and you won't get too old, if you're too bold.
(laughter)

JUNGE: That brings me back to Robbie Duncan. I wonder if he's still alive.

EISELE: Other than the fact that he might have just died of old age or meanness. Could be just meanness that he died of, I'm not sure. I'm not sure. He's quite a character. I remember him well.

JUNGE: Well, thanks, Bob.

EISELE: Hey, thank you. I enjoyed it.

JUNGE: [02:08:00] Good.

EISELE: I hope you got something you can use there though.

END OF AUDIO FILE