

**The David and Barbara Pryor Center
for
Arkansas Oral and Visual History**

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Arkansas Memories Project

Jim Younkin

Interviewed by Scott Lunsford

August 24, 2014

Arkansas Air & Military Museum, Fayetteville, Arkansas

Objective

Oral history is a collection of an individual's memories and opinions. As such, it is subject to the innate fallibility of memory and is susceptible to inaccuracy. All researchers using these interviews should be aware of this reality and are encouraged to seek corroborating documentation when using any oral history interview.

The Pryor Center's objective is to collect audio and video recordings of interviews along with scanned images of family photographs and documents. These donated materials are carefully preserved, catalogued, and deposited in the Special Collections Department, University of Arkansas Libraries, Fayetteville. The transcripts, audio files, video highlight clips, and photographs are made available on the Pryor Center Web site at <https://pryorcenter.uark.edu/about.php>. The Pryor Center recommends that researchers utilize the audio recordings and highlight clips, in addition to the transcripts, to enhance their connection with the interviewee.

Transcript Methodology

The Pryor Center recognizes that we cannot reproduce the spoken word in a written document; however, we strive to produce a transcript that represents the characteristics and unique qualities of the interviewee's speech pattern, style of speech, regional dialect, and personality. For the first twenty minutes of the interview, we attempt to transcribe verbatim all words and utterances that are spoken, such as uhs and ahs, false starts, and repetitions. Some of these elements are omitted after the first twenty minutes to improve readability.

The Pryor Center transcripts are prepared utilizing the *University of Arkansas Style Manual* for proper names, titles, and terms specific to the university. For all other style elements, we refer to the *Pryor Center Style Manual*, which is based primarily on *The Chicago Manual of Style 16th Edition*. We employ the following guidelines for consistency and readability:

- Em dashes separate repeated/false starts and incomplete/redirected sentences.
- Ellipses indicate the interruption of one speaker by another.
- Double underscores indicate two people talking at the same time.
- Italics identify foreign words or terms and words emphasized by the speaker.
- Question marks enclose proper nouns for which we cannot verify the spelling and words that we cannot understand with certainty.

- Brackets enclose
 - italicized annotations of nonverbal sounds, such as laughter, and audible sounds, such as a doorbell ringing;
 - annotations for clarification and identification; and
 - standard English spelling of informal words.
- Commas are used in a conventional manner where possible to aid in readability.

Citation Information

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Scott Lunsford interviewed Jim Younkin on August 24, 2014, at the Arkansas Air & Military Museum in Fayetteville, Arkansas.

[00:00:00]

Scott Lunsford: Jim—um—we're here today at the Arkansas—uh—Air Museum. Is it Arkansas Air & Military . . .

Jim Younkin: It is now.

SL: . . . Museum?

JY: It used to just be Air Museum.

SL: Um—here in Fayetteville, Arkansas, at Drake Field. And—uh—today's date is June 24—um—2014.

[*Airplane noises*] And I have to tell you it's a great honor to be sitting across from you because . . .

JY: Thank you.

SL: . . . I know many people that've experienced your conversation and your company, and—uh—they all—um—are just thrilled that you've—uh—agreed to—uh—let us do your interview. [00:00:40] Now first of all, before I get much further, it's—it's Jim Younkin, but what is your full name?

JY: James Ray Younkin.

SL: Okay, James. I'm gonna call you Jim, if that's . . .

JY: Oh, yes.

SL: Okay.

JY: That's—uh . . .

SL: My na . . .

JY: . . . even when I was small, I refused to be even called Jimmy. It had to be Jim. I remember that. That's an early memory of mine.

[00:01:03] SL: That's great. Well, my name is Scott Lunsford, and you're here with the Pryor Center—uh—staff—um—to record—uh—the story of your life. We're—we're collecting Arkansas stories, and—um—you've been nominated, and—um—so we're gonna start—uh—really early in your life, really, with your earliest memory. But before we get to that, what were your parents' names?

JY: Howard Younkin and Evelyn Bracewell. Maiden name was her—she—her maiden name.

[00:01:38] SL: And what was your father's occupation?

JY: He majored in journalism, and his father had been editor of a small Iowa town newspaper, so that was probably the reason for that. And then he eventually—uh—after several situations in journalism, he ended up with my early memory being of he was in the car-dealership business. Now to divert just a little bit, we lived, by then—and I was born in Fairfield, Iowa. And an early

memory about the car business was that he had a dealership on the west side of the square, beyond the square, selling Chevrolets. He sold that, and then he was into something like O'Reilly's is today. Then the family was discussing the fact that he would—he was going—that he bought the Ford dealership. And I was very upset, and I couldn't've been—well, we got our first Ford—uh—in 1934. I'll come back to that in a moment. And I was upset because, to me, a Ford was a Model T, and I thought they were ugly. Why would my dad [*SL laughs*] be selling Fords? And I had to be no more than four years old because he went to another city in Iowa and drove the first Ford home and parked it in front of our house. And it was a—in the night. And there was a street light across the street, there was a little illumination. So all the family members go out individually or together, and . . .

SL: Uh-huh.

JY: . . . one by one we sat in the Ford. And so here's this Ford. This four- or five-year-old child, probably five, looking over the hood of the car, and I thought, "Boy, I've never seen a hood that wide." [*SL laughs*] And that was pretty narrow. S . . .

[00:03:37] SL: Now what year were you born?

JY: [Nineteen] twenty-nine.

SL: Wh—and the month and day?

JY: April 3. But this was probably early in [19]34, so I was barely five, if five at all.

[00:03:50] SL: Wh—what about your mom? Was she a housewife? Did she take care of the house or . . .

JY: Oh, yes. My—uh—yeah, in those days, that was pretty standard for . . .

SL: Mh-hmm.

JY: Her background was that she was an English major at the University of Iowa. My father, as I said, was a journalism major, and—um—she came from a very educated background. Her father was an attorney, very successful attorney, in Southwest Iowa, so that's pretty much the background of where I came from.

[00:04:21] SL: Well, now do you remember her mother and father?

JY: Yes. Uh—her father was extremely gentle as a grandfather. I think one of my fondest memories was that he would set me on his knee when we'd go to visit him in Corydon, Iowa, and tell me stories of Peter Rabbit and that sort of thing. And he was an excellent writer, also. I've even got a copy of a ri—letter somewhere that he wrote to my brother before I was born. Quite an interesting letter. So he was a very warm—uh—

individual. [00:05:04] My grandmother—uh—seemed like a—
uh—little bit soft, and by the time I got to know her, she was
maybe getting a little senile, and . . .

SL: Uh-huh.

JY: . . . I remember her that way. Uh—my grandfather died in
[19]36, and then off and on she lived with us for a while while
she was getting adjusted. I'll tell you a funny story. She was
childish. We had moved to Texas by then. My father had sold
his dealership, and we had a little fruit orchard right on the edge
of McAllen. And she was stayin' us—with us, and the little house
was pretty crude. It didn't even have electricity. So we've gone
from having a luxurious house in Iowa to that for the time being
until my dad could decide what he was gonna do. [00:05:58]
Anyway, one day we were sitting at home alone, she and I,
and—uh—my parents were somewhere. And she was a German
lady and liked her beer. So I said to her one afternoon,
"Grandma, would you like a beer?" She said, "Yes." [SL laughs]
So I go in the kitchen, I open the beer, I gave her half of it, and
I kept the other half.

SL: Oh! [Laughs]

JY: That's when I developed my taste for beer. Wasn't so easy after
that because my parents didn't like to share—for me to be—well,

I guess they didn't even know that. But that was kind of a funny experience.

SL: That is.

JY: That was later in life. That was by 1937. Back to Fairfield, Iowa—uh—one of my early memories was that—uh—well, too many of them. But one in particular—when an airplane about like the antique you see sitting here, the black, old-looking . . .

SL: Uh-huh.

JY: . . . airplane or a biplane—any time an airplane flew over, everybody came out of their homes to see the airplane fly over. And aviation, from an early age, began to be part of my life. For example, every afternoon after school, we'd all run home to see Jimmie Allen and his flying aces on—to hear them on the radio. So—uh—and then there was a time when some aviators set up a field right on the edge of Fairfield. Put up bleachers, and they put on an air show. These were barnstormers, and I remember that clearly. So aviation was the high-tech thing of the day, and—uh—it really drew the interest of everybody. So—uh . . .

[00:07:40] SL: What about—um—what about your father's side of the family? Did you know his . . .

JY: Okay, back to . . .

SL: . . . mom and dad?

JY: . . . that. My father's father ran a newspaper in a s—town called Lone Tree, Iowa, almost a suburb to Iowa City. And there my memory goes different. He was a very strict disciplinarian, and when you wanted to play with something of his out of the garage, you had to put it away even at lunch. And he was not a warm person at all. I never did develop a feeling of warmth with him whatsoever. And his wife was a little aloof to me, too. So I didn't have a very strong—uh—relationship with those people. It was the other side of the family.

[00:08:27] SL: Now d—uh—what was your grandmother's name on your dad's side? You member?

JY: Mary. I don't know the first . . .

SL: You don't know the maiden name.

JY: No.

SL: But—Mary . . .

JY: The—his was William Howard. My father's name was Howard William. [*SL laughs*]

SL That's fun. Um—so [*airplane sounds*] let's go back to—uh—I'm always looking for the oldest story.

JY: The what?

SL: For the oldest story.

JY: Story?

SL: Uh—do you member any stories that your—either of your gran—any of your grandparents told you about? Like maybe life in Germany or . . .

JY: No, the only recollection I have—my mother probably told me more about the ancestors. But—uh—I knew nothing, really, beyond them as a child.

[00:09:21] SL: Okay. Um—well, let's talk a little bit about the house that you—do you member the house, the—the first house? Very much of it?

JY: Very well.

SL: And—uh—you mentioned radio, that you had listened to programs on the radio. Um—do you member the radio in that house?

JY: Yes.

SL: Or did you not pick up radio till Texas.

JY: It was in the living room.

SL: Uh-huh.

JY: We would all come home from school and lay around on the couch or on the floor listening to these programs like Jack Armstrong and Jimmie Allen and that sort of thing.

[00:09:54] SL: What about the music side of radio? Was there any—uh . . .

JY: My mother was very interested in opera. Beyond that in the very early years, I don't remember any involvement with music. But that came later. We got very—I got very interested in music as the years went on.

SL: Mh-hmm.

JY: As a . . .

SL: Um—were there any musical instruments in your house growing up?

JY: My—the—early on before me, my brother, my middle brother, played a clarinet. As soon as I was of—uh—junior high age, I inherited the clarinet and began playing it, which later went on to be a lot of music in my life as the years went by. I later on played tenor sax and from there I played [*phone rings*] in dance orchestras in college and—uh—so I guess I gotta . . .

SL: Yeah, we gotta . . .

JY: . . . get that to s . . .

SL: . . . get—silence our phones. Just stop for just a moment.

[Tape stopped]

[00:10:58] SL: Okay. Jim—um—what were your—how many brothers did you have?

JY: Two.

SL: And what were their names?

JY: Bob was the oldest, eight years older than I, and Bill was five years older than I.

SL: And I—are they still with us?

JY: No, they're not with us.

SL: Both are gone. So any sisters?

JY: No.

[00:11:20] SL: Well, let's talk a little bit about growing up with your brothers and—how—how was that?

JY: Uh—for the most part good. Nothing's perfect, you know.

SL: Right.

JY: There were—and—uh—we were a close family. We—I'd say we were close, very close, and—uh—I remember little things like sitting in front of the register in the floor above the basement tying our shoes, getting ready to go to school, and my brother Bill teachin' me how to tie my shoes. Such as that. Little things that you'll remember 'cause you never know what you're gonna remember for sure. [00:12:06] And—uh—I remember the pond across the street called Loudon's Pond. It was a backyard thing. It was a pretty good sized pond, and the kids would ice skate in the winter. And I remember me being the little kid in my snow suit goin' out there, and they had chopped a hole in the ice probably six inches deep. And I slipped and fell into it . . .

SL: Oh!

JY: . . . and almost under the ice, I guess, and another—one of the big kids pulled me out. I remember walkin' up the hill—it was about a half a block from our house, which was across the street, and that was a [*laughs*—an early memory. I member that. I was very young then.

SL: Yeah. You're very lucky.

[00:12:53] JY: Then there was the other time of the year when the big kids would—the swimming pool was only beyond the bla—it was a block away or a little more. And it was a big round pool with a gravel bottom and a cement border around it. And out at the middle of the pool was the place we called the keep off. That's where the diving boards were. Somehow I'd get out there, and the big kids'd throw me in the water, and I'd sink or swim, and [*SL laughs*] I learned to swim when I was about four, I think. And—uh—then I learned something as I retrospect on all of this that carried through to my later years. [00:13:35] I'll never forget the scene. My grandfather in his business suit, and my father in his business suit, and me in the water where I thrived. You know, I just lived at the pool all summer long. They had a tub, a wash tub about typical size, two or three feet across.

SL; Right.

JY: Around. And the—it was Fourth of July coming up, and the little children were to have a tub race. And I'll never forget seein' them pointin' with that tub and tryin' to get me to get in that tub 'cause they wanted me to participate in a tub race, and I was not about to participate [*SL laughs*] in a tub race, and I won. They finally gave up. But if they hadn't been there, I'd've spent the whole day in the tub. But I was not going to do that, and that carried forth with me throughout life. I never wanted to participate in a race or things like that. I was very shy about things like that. I did a lot of things in aviation that were very exciting, and I enjoyed being familiar with it. These two airplanes are racers, you know, reproduced.

SL: Yuh-huh.

[00:14:45] JY: But as for me per—they wanted me to enter that in a race to Oshkosh a few years ago, and it would've been an antique rep—in the midst of modern airplanes. They just wanted it there 'cause it was an air racer. I—I volunteered, and then I thought, "No. I couldn't do it." It was from Indianapolis to Oshkosh. And I just couldn't be part of a race. But I re—that goes clear back to the beginning. I . . .

SL: Tub race.

JY: I was that way [*SL laughs*] from the get go. I was made that way.

SL: Well, let's—how long were you—um—where you were born? How long did you live there before y'all moved to Texas?

JY: So I was six or seven.

[00:15:24] SL: Okay. Well, can you tell me a little bit about the town that you were raised in there?

JY: Oh, it was a beautiful little town like—similar to what Fayetteville used to be. Probably a town of, I'd guess, six or eight thousand.

SL: Mh-hmm.

JY: Had a beautiful city square, and there would be band concerts in the summertime. It was in a bandstand in the middle of—a permanent thing. That was an interesting aspect of it. And—uh—it was a—how can I say? It was just a typical—uh—neat, clean little town with a lot of old colonial homes, large homes, on the main road through town, you know. Where—in the neighborhood where we lived were some beautiful houses that had to have dated back into the 1800s. And—uh—one interesting thing about it. The Burlington Route went through Fairfield. Fairfield was very—in fact, very close to Burlington, Iowa. And the first streamlined train went through there, the Burlington Zephyr, and that was exciting. And it would go

through at about fifty miles an hour. It didn't stop there. And the railroad crossing in the middle of downtown, one block from the city square, the train went through there. And there was no illuminated signal.

SL: [*Laughs*] Oh, man.

JY: A lot of people got killed at crossings . . .

SL: Really?

JY: . . . in those days.

[00:16:51] SL: Hmm. Well, so were you all—was your house close to downtown, or were you more out on the . . .

JY: No, I was—um—close to the east edge of town. The swimming pool a block or two east of me was right at the absolute edge of town.

SL: Uh-huh.

JY: We were probably six blocks, maybe, somethin' like that, from downtown.

SL: Oh, that's not too bad.

JY: No.

[00:17:19] SL: Well, what about—were the streets paved?

JY: Oh, yes. Yeah, it was a up-to-date town.

SL: So you had electricity and . . .

JY: Oh, everything.

SL: . . . natural gas and—and . . .

JY: Well, we had coal.

SL: Coal. So you had coal delivery, and you had a coal chute that was down into the basement?

JY: Yes.

SL: Do you remember much about that?

JY: A lot. Um—I had a bu—a Boston terrier that was a few months older than me. [*SL laughs*] We were inseparable. And my dad had a driveway dug down to the basement for a basement garage. And—uh—the first morning he backed out of it, he ran over my dog.

SL: Oh.

JY: Irreplaceable dog. We tried a couple of wire-haired fox terriers after that, but they just didn't make it. And that was an early thing in my life.

SL: What was that dog's name?

JY: Jigs.

SL: Jigs.

JY: Mh-hmm.

[00:18:16] SL: And the house itself, was it a single-story house?

JY: Two story.

SL: Two stories. Uh—and did it have porches on it at all?

JY: Had a porch on the side—the fay—it faced on a north-south street, and on the south edge of the house, it had a nice, big sunroom porch, you know . . .

SL: Uh-huh.

JY: . . . fancy porch on—entering from the living room. Yeah.

SL: Were they—uh—ceiling fans? Attic fans?

JY: No.

SL: No. And so there really wasn't any . . .

JY: In the summertime a lot of people slept out in the—uh—yards. The summer of [19]36 was an extreme summer, one of the hottest on record up to then. And that's what people did. Or in the basements.

[00:19:05] SL: Um—how large was the yard or the lot that the house was on?

JY: Well, for its time, it was probably—it was a large—I'd say sixty feet, at least, in width, maybe more.

SL: Mh-hmm.

JY: That would be a big lot in a typical town. It was very nice neighborhood. Brick streets. It was very nice. It was the—one of the nicest neighborhoods in town.

SL: Um—what about garden? Did your family have any kind of garden in your yard or . . .

JY: No.

SL: I—it's interesting, you know, you're—you c—you're growing up during the Depression, really. And so I'm just wondering did you see any signs?

JY: We personally did not. My dad—I remember in 1936 sold a new Ford—he sold the average of a Ford a day, which was a lot of income in those days.

SL: You bet.

JY: And so he was well fixed financially. And the farmers in Iowa were not in the drought. They were all doing quite well. That's why he could sell so many Fords. So we didn't—I didn't know there was such a thing as a Depression until a mu—a little later.

[End of verbatim transcription]

[00:20:35] JY: I do remember, if you don't mind me jumpin' down to . . .

SL: Not . . .

JY; . . . McAllen, Texas.

SL: No.

JY: We lived outside of town, and the next town east of McAllen was Pharr, only about three miles apart. The Rio Grande Valley was McAllen, Pharr, San Juan, Alamo, Weslaco, Harlingen, San Benito, Brownsville. [*Laughs*] So I went to the second grade in

Pharr. And I could walk to the school and back along the irrigation canal. It's a wonder I didn't get bit by a rattlesnake. But my parents would give me ten cents to eat, to buy my lunch at school. I had a friend who liked to have me come down to his house every so often to eat lunch with 'em. They always had the neatest meal you ever saw. Cornmeal and beans or something, just cornmeal. They were poverty stricken. I didn't know about poverty, and I didn't know that they were poverty at the time. I just thought I liked their cornmeal. In retrospect, I can see that they were a product of the Depression. So . . .

SL: Well . . .

JY: I jumped ahead with you there . . .

SL: No, that's fine.

JY: . . . because you asked about . . .

SL: We'll get—we'll . . .

JY: That was my first knowledge or exposure to the Depression.

Then I had to learn about it more later on.

[00:22:07] SL: Right. Whu—so do you remember first grade?

JY: Haha. I sure do. It was about s—five blocks from where I lived. And if we took the direct street—and the big kids were all walking over to this old brick schoolhouse, a big square schoolhouse, big enough for four rooms and a big hall out in the

middle. It was a very nice, old-fashioned school house. And we'd walk to school. But if we wanted to take a shortcut, we could cut through a pasture of—like the hypotenuse of a triangle. I was okay with the big kids, but the animals had horns, and I wasn't about to walk through there by myself. [Laughter] But in the first-grade room, I remember we had a farm over in the corner of the room. And I had a pretty good hand at drawing, so I'd draw the farm animals—about this long I guess—and the other kids would color 'em. And we had a farm over there in the corner of the room. And then we had a nice, nice lady teacher in the first grade.

[00:23:24] SL: Well, now, if there were only four rooms . . .

JY: No, that was the first floor.

SL: Oh, first floor.

JY: There was probably a basement, first floor, and second floor.

SL: I see. I see.

JY: Yeah. It went clear through the eighth grade to high school. But you only had one room per grade, you know, so like a—maybe two, but I think it was—you could go up to the fourth grade on the first floor and the eighth grade on the second floor, somethin' like that. Then I went to kindergarten there, too. And it was interesting. We did a lot of crafty things there.

[00:23:54] SL: Now living that close to the school, did you go home for lunch, or did they serve lunch at school, or everyone brought their lunch? Do you remember?

JY: If I—I guess I don't remember vividly, but I would've—we didn't eat lunch at school to my recollection. It wasn't that far but it's—you got me on that one.

SL: [*Laughs*] Okay.

JY: There's a lot of things that make an impression, but I don't have a recollection for sure of that.

[00:24:25] SL: What about—were you responsible for making your own bed every morning or . . .

JY: No.

SL: Your mom saw to that?

JY: Mom did it.

SL: And what about—and we can apply this to Texas, too, what about any chores around the house? Were you assigned—I mean, did you take turns doing dishes or . . .

JY: Not at that age.

SL: . . . helping with laundry?

JY: Not at—not in Fairfield, Iowa. Then as time went by, I had things to do like mowing the yard and—as I got older and could do it. I don't remember ever any kitchen chores.

[00:25:05] SL: What about the refrigerator or the icebox? Did they . . .

JY: It was a refrigerator.

SL: It was a refrigerator. So there was already Freon happening, and it wasn't just a block of ice o—sitting on top of it or . . .

JY: No. It may have had coils up on the top, but I don't remember the details of that. I remember the kitchen in that house well, but I don't remember the—I know where it sat on the north si—north wall and the sink was on the west wall, and so on.

SL: Well, now—so you had coal heat. How was the stove fired up? Was it an electric stove or—you probably don't quite remember that.

JY: Probably electric.

SL: Yeah.

JY: We didn't have gas. It'd have to be electric.

[00:25:58] SL: Well, let's just go ahead and go to Texas. When was it you moved to Texas?

JY: [Nineteen] thirty-seven.

SL: And was that kinda . . .

JY: Or [193]6—[193]6 or [193]7.

SL: . . . was that an adventure for you, or was it traumatic? What . . .

JY: Well, it . . .

SL: Did you wish you didn't move?

JY: . . . was a big adventure for the family because we went from what I'd call a very state-of-the-art, luxurious house in Iowa. On this little fruit orchard was a house—they called them box houses. The way the walls, exterior walls were built in this very warm climate, you had vertical boards with short strips between them. And it's not a double wall with 2x4s in between. Very crude little house. No electricity. It had plumbing. We had a windmill out in the back yard, so we had water from that, had running water. And . . .

SL: But it was from a well.

JY: . . . we—yes, and then we had a tank up high for . . .

SL: Yep.

JY: . . . the windmill pump. So we had water pressure. [00:27:05] We had no electricity. We had a wind charger that was set up and mounted on top of the house. And the—one thing I remember more than anything, my mother's washing machine had no electricity to run it. My oldest brother had a one-cylinder engine—that's a story unto itself of how he got that back in Iowa. He kept begging my father to buy him an engine so he could build him a little car to drive around on the sidewalks in

the—when he built one that was neat enough like a soapbox derby racer would've looked. He got him an engine, and the first thing my brother did, he built him something just 2x4s, engine, and steering wheel. He drove all over. [*SL laughs*] He even put it on our lawn mower in Iowa, the engine. He did. He was . . .

SL: Now which brother is this?

JY: The oldest brother. He was very mechanically inclined. So we moved to Texas, and he rigged the engine up to a washing machine so my broth—my mother could have a washing machine with a gasoline engine. Finally before we left there, the REA or whoever they were did bring electricity out to that place.

SL: Well, so now was the street paved . . .

JY: That was—the road out in front was paved. It was cement, not asphalt. Two-lane highway. It was a back highway. It was not a heavily traveled road at all.

[00:28:34] SL: So do you remember the—what was the reason to move to Texas? Do you remember—I mean, it sounds like you had a really . . .

JY: My dad wanted to go to a warm climate and get away from the cold winters. I guess that was the reason given to me. Or that's what I figured out.

SL: So what was the difference in the school?

JY: Oh. [*Laughs*] Well, they were both nice, brick schools. It was a one-story school down in Farr, and it went up through the sixth grade—well, I don't think it went through high school—grade seven. We only had an eleven-year system in Texas, so after seven years in grade school, you were in high school. And so it was a very modern school for its time. And the biggest difference was that in Iowa, where we had a twelve-year system, you only got to print—you only learned to print in the first grade. That's where the difference was in the first two grades. In Texas they learned to write cursive, they call it now, but we—they learned to write. So here I am in the second grade, and I go to school, and the teacher's on the board writing, and I . . .

SL: In the cursive.

JY: . . . couldn't read it. Thank goodness my mother worked with me. I should've been put back in the first grade 'cause I did not know how to write. And so she helped me overcome my year of being behind. And that was quite an extraordinary thing for me to suddenly not be able to write. [*Laughs*]

[00:30:21] SL: So when you moved to Texas, did you—with the—you said you had a wind charger.

JY: That was a—well, it was like a windmill with a generator on it. We called that a wind charger. The wind would cause the thing

to rotate. It would generate electricity. The electricity would charge a battery. So you had battery power so you could listen to the radio. That's about all you could do with it.

SL: Well, that's what I was gonna ask, if it—if that . . .

JY: Yeah.

SL: . . . if you forfeited radio when you moved . . .

JY: No.

SL: . . . to Texas. But you were able to have radio . . .

JY: Yeah.

SL: . . . and I guess light. But you said you had gas. Did you use gas . . .

JY: We . . .

SL: . . . lanterns or . . .

JY: . . . had both. We—the wind charger would—the battery would, obviously, make lights work somehow. They couldn't be standard hundred-volt lights, but I don't remember any oil lamps at that house. Apparently, the wind charger took care of it all.

[00:31:20] SL: And then what about—you said you were—you did have running water. Did you have an indoor toilet there?

JY: Yes.

SL: Or was it out . . .

JY: Yes. Indoor.

SL: . . . outdoors?

JY: Yeah, we had everything. Except electricity.

[00:31:32] SL: And so did your father continue with the car business in Texas?

JY: Yes, he did. Yeah. Much to my regret. He—we moved from McAllen up to Alice, Texas. He started a Studebaker dealership. And we also had a nice, modern, state-of-the-art house, a really fancy house—I think we have a picture of it. Maybe if we do or not. But yeah. Our standard of living went up considerably.

[00:32:03] SL: So tell me about Alice, that town. What was it like?

JY: It was another small town about the same size. I'd say 6,000. It was forty miles west of Corpus Christi, and so that meant if you want to go to the city or whatever, you're gonna drive over to Corpus Christi to go to the amusement park or go swimming or whatever in the Gulf or things like that.

SL: Do you—what—do you remember the first time you saw the Gulf?

JY: Yes. When we lived down in McAllen, we would drive over to—through Brownsville and over to the Gulf, and we'd go swimming. And we'd spend the night. And I was so worried about [*laughs*—goin' clear back to Iowa when my mother would be doing the vacuum cleaner and stick it down the cold-air

return to the furnace, I was petrified that she would fall in. [*SL laughs*] Then at the Gulf, when we lived down in McAllen, they would park the car at night, and I was afraid the car would come out of gear and go off into the Gulf. I was scared to death that my mother would drown in the Gulf. But they assured me they locked the steering wheel, as a Ford could do in those days, and if it did come out of gear, it would turn.

SL: It would turn.

[00:33:31] JY: But I was so worried about my mother at that, so that's my first [*laughs*] recollection of the Gulf.

SL: Well . . .

JY: Swimming there.

SL: . . . it—now this is way down by the tip, southern tip of . . .

JY: Yeah, McAllen . . .

SL: . . . Texas. I mean, browns . . .

JY: Our house in McAllen, out in the country, was three miles from the Rio Grande.

SL: So you're three miles from the Mexican border.

JY: Yeah. I can tell you somethin' else about—but—I have a lot of aversions. I didn't—at that time I didn't give it much thought, but a few years later when we lived in Harlingen, I remember my parents going to Brownsville and across the river to eat in a

restaurant in Matamoros right across the river. And I remember a young kid comin' out and sayin' for a quarter he'd guard our car. [*SL laughs*] I felt so unease being in Mexico. I didn't wanna be there, even at that young age, I—and I never got over that, either. One of my peculiarities. [*Laughs*]

[00:34:47] SL: So what was the makeup of the populations that—are—was there any diversity at all in the tah—in the small towns in Texas that you were living in?

JY: They all had, or at least McAllen had, its mec—its main part of town, and it had a Mexican section of town. And it was all split between whites and Mexicans. There were no blacks there that I can recall. Up in Iowa it was different. There was a black child in grade school with us, and it all—we all just felt very comfortable. There was no—it was a totally different feel.

SL: This is . . .

JY: I didn't know that the . . .

SL: [Nineteen] thirty-five, [19]34, [19]36.

JY: Oh, I can remember later in life in Fayetteville when I was in high school—goin' out—I played my tenor sax and—we're jumpin' ahead now. I . . .

SL: That's all right. I'll get us back.

JY There was a guy down on Dickson Street, a black guy, that was

kinda the mayor of the black part of Fayetteville, and he . . .

SL: Buddy Hayes.

JY: Buddy Hayes.

SL: Yep.

JY: Good friend of mine. Real good friend of mine.

SL: Kay.

JY: And I would play in his little band out at the Bubble Club. And I didn't realize what was happening but it—when we'd take a break, we would go outside, walk down to the hood of his car. We'd all have a beer or something down there. And it never occurred to me why we were walkin' down there and doin' that, you know, we—I just—he was a friend of mine, and I don't know. It was just—was a cer—*[laughs]* I didn't realize what it was all about at the time.

[00:36:25] SL: You know, this is interesting. We're gonna stay on this a little bit. Tell me where the Bubble Club was.

JY: Okay. You know where Colonel Sanders is at the corner of Rolling Hills and . . .

SL: Yes.

JY: It was right in that general area. It could have been—couldn't have been very far south 'cause you're startin' up the hill. It was on level ground. It set back from the road, and it had an

adequate parking lot and, you know, that was it. It was considered by the social elite of Fayetteville to be kind of a—of—not highly . . .

SL: Not quite as desirable as . . .

JY: . . . regarded. Huh?

SL: Not quite as desirable as other clubs?

JY: Yes. It was the only nightclub in town, and a lot of the do-gooders probably didn't think it's a healthy place for a person to be. I didn't know that, either. I didn't care.

[00:37:17] SL: Okay. We'll get back to Fayetteville here in a little while.

JY: Yeah.

SL: When was the first time you saw a motion picture?

JY: Oh, in Fairfield, Iowa, we—you know, in those days and times, that's what you did. You—they—and I still look at old movies on Turner and think, "Goodness, is this what we settled for?" Some of 'em are so dumb, [*SL laughs*] and they made so many of 'em. But we—the people of that time would look at anything that moved. Yes, we—and in Lone Tree it was even worse than that. I won't say worse, it was more primitive than that. I remember going to see my grandparents in Lone Tree, and they didn't have, in that town—they should've had by 1934—sound, but

they had silent movies and had somebody playin'.

SL: On a piano. Yeah.

JY: The town—that's a—I was surprised at that. So yeah, I got to see a lot of—a few silent movies there. But Fairfield was very advanced. We had—how many movie theaters did we have? I know we had at least two.

SL: That's pretty amazing for a town that size.

JY: Yeah.

SL: To be that active with that.

JY: Yeah. We had too. But I remember . . .

SL: So do you remember the . . .

JY: . . . where they were and what they were.

SL: Do you member the . . .

JY: And what I saw at 'em. What?

[00:38:34] SL: What—do you member some of the names or the—of the films or the actors?

JY: No, but I remember one was about the navy. It was *Anchors Aweigh*, I think, and it made a huge impression on me. And I'll tell you another one. At the other theater—well, one thing I never forgot was a certain Disney comedy that was striking and—several Disney comedies in color. You know, I guess they were drawn in color. I don't know. Anyway.

SL: Cartoons, you mean?

JY: Yeah. But I remember it like it was yesterday the news reel showing Bonnie and Clyde and their car all shot up. I saw that actually on—you know, we had news—every . . .

SL: Yes.

JY: . . . movie had news, and I remember seein', in probably about 1934, Bonnie and Clyde—their car and them bein' shot up.

SL: Yeah, I can understand how that would stick with you.

JY: What?

SL: I can understand how that . . .

JY: Yeah.

SL: . . . image would stick with you.

JY: Yeah. Yeah.

SL: That news reel. Do you member any of the other news reels?

JY: Not specifically. I could be . . .

JY: That one's kinda hard to top.

JY: Yeah.

SL: Until the war, I guess. [00:39:56] Well, in Texas—and the Mexican population that . . .

JY: Yeah.

SL: You said it was kinda a separate part of town. Were there any of the segregation—was segregation practiced in any other way in

Texas back then?

JY: Probably. You know, I just didn't pay that much attention, but people that had household workers, they would be more likely to be—well, they would be—that was one of the things they did. They did—you know what—they would work in the fields, they would—they didn't have—now we had a really prominent Mexican physician in McAllen, Texas, in the early [19]30s, so they could move up.

[00:40:52] SL: What about the . . .

JY: Now . . .

SL: . . . the cuisine? [*Laughs*] Did the cuisine change from Iowa to when you got down to Texas? You mention the meal in the . . .

JY: Yes, only to the extent that in Iowa you never heard of Mexican food. And here's something interesting. When we would go out to eat—and you didn't go out to eat very often in those days. There were restaurants around—my favorite thing was a hamburger with mustard, onion, and pickle. I also liked cherry pie. [*SL laughs*] But that was at home. On one of our trips south—it had to be in McAlester, Oklahoma, we stopped at a restaurant. I can see it in my mind's eye. It was on the east side of the road. Nice big restaurant on the south edge of McAlester. And the—I ordered my hamburger with mustard and

onion and pickle. Then I was given a drink of Dr. Pepper.

SL: Yeah.

JY: I had never tasted Dr. Pepper.

SL: Ah.

JY: And it went so well with that hamburger. They complimented each other so much. All through life, when I get a hamburger, I have to have Dr. Pepper to this day, and I'm still tryin' to recapture the essence of that early flavor, how they—I'm still searchin' for that, and it's not gonna happen. [*SL laughs*] But you know, I was a child with a very sensitive everything.

SL: Sure.

[00:42:21] JY: And then they served me a piece of cherry pie. And I was pretty outspoken, and I was saying, "There's no cherries in there," and I was makin' a fuss about it. It was all goo.

SL: Yeah.

JY: Maybe a cherry every so often. [*Laughs*] But that was a—the interesting thing about that was I was introduced to Dr. Pepper.

[00:42:39] Then as I moved to McAllen, the item down there that originated in San Antonio was a bag of Fritos. They started in San Antonio on a small scale. And the Fritos were exactly, then, to my recollection, like they are today.

SL; And they're great. They were great then . . .

JY: Yeah.

SL: . . . they're still the same thing now.

JY: And there were little stands around, even up into the [19]40s. I remember in McAllen on Main Street, you'd go south, and you'd pass the big city hospital, and just beyond it was a little stand where you could go to get Mexican food. You'd stand out there. They'd ma—the lady or person inside would make it, and it was very good. And I remember one time in a few years later in a—in Corpus Christi, I watched her—I was getting a taco. She would drop the tortilla in the . . .

SL: Fryer.

JY: . . . fi—in the fat, in the grease.

SL: Yeah.

JY: It would sink and come up again. When it came up, it was just the right—and she put it in the tort—taco, and it wasn't crisp. And a taco should not have crisp around it. They break apart when you try to chew 'em. And that's not how they did it in—down south where they knew what they were doin'.

[00:44:07] SL: That's good. So what about the neighborhoods in either place, Iowa or Texas, and the kids that you lived by? What—did y'all participate in sports, or what kinda games . . .

JY: Well . . .

SL: . . . did y'all play?

JY: . . . some kids did, but I had several friends—quite a few people, young kids, were as into aviation as I was. And I remember that I built model airplanes. When we moved to McAllen, downtown there was a drug store with an open front. You—they would just open up, and you could buy model airplane kits, Comet model airplane kits. That's what I would do with my ten cents that I didn't spend on . . .

SL: Lunch.

JY: . . . food. I'd save it to go buy model airplane kits. So I built free-flight models, the little 1/16 square balsa covered with lightweight tissue. And I was actually building those in the second grade. [00:45:18] And so that was what I did, and then as I moved from town to town and did different things, I would always kinda get together with people with my interest, which to a great extent I could lan—find several model-builder friends.

SL: So were your brothers also building model airplanes?

JY: Yes, they did. Yes.

SL: And so . . .

JY: So naturally the little brother's gonna follow suit.

[00:45:49] SL: Yeah. Yeah. So did your father or your mother have any interest in aviation at all?

JY: None whatsoever. None at all. My father was probably—he liked to go every fri—every afternoon, in Fayetteville, for example, in the later years, where the Holiday inn used to be until a few days ago.

SL: Yeah.

JY: There was Shyly's. Little, small, white building, a little beer joint. And he was always out there in the afternoon with his buddies havin' a beer. And then he got into fishing, extreme fishing in his later years. In fact, he was interested fishing earlier than that. But none of my brothers—none of us cared about fishing. We were aviation oriented or mechanical oriented, but we didn't have much common with him.

[00:46:46] SL: So the—that—the balsa wood and the skin on the balsa wood and—these planes would fly. These model . . .

JY: Yes, they would.

SL: . . . planes would fly. These are not the . . .

JY: And I was a little bit on the . . .

SL: . . . the plastic.

JY: I was a little young to be doin' that, but that's how far back my model building went. And it got—by 1940 I was—I know that when we moved to Harlingen, I wanted a little gasoline engine. My dad said, "No, you'll get your finger in the propeller." He

re—wasn't really able to buy me a very good one. But I managed to get one, and now I'm gonna divert again.

[00:47:39] I was born with a growth on this eye where there's a scar today. You didn't get eye surgery just anywhere. But the University of Iowa medical school had a very good surgical department where they also could do this operation. So in about 1940 we drove from Harlingen, where we lived at the time, to Lone Tree, which was a suburb of Iowa City. And Dr. Broyle—Boil, not Broyle, Boil, operated on my eye in this Catholic hospital. There was a certain kind of a gasoline engine for small free flights called an Atom. They came in different sizes. Class A was the small one, was an Atom. Class B was a little bigger with a displacement of 30.3 cubic inches. The leading one in that was a Forester .29. Then you got up to the really high-dollar one for a class C. The big one was an Ohlsson .60.

SL: Okay, well so . . .

JY: Any—oh, go ahead.

SL: Go a—what were the price differences?

JY: They were all probably out of my league. A used Atom—a new Atom would've been \$12.95. An Olsen .60 would've been \$16.95 up to \$21.95, which was a lot of money in 1940. They were very expensive. So here I am in this hospital, and I'm

coming out of the ether.

SL: Kay.

[00:49:11] JY: I can't believe that I did this. [*SL laughs*] But [*laughs*] I started saying, "I want an Atom. I want an Atom." Well, the nun didn't know what the heck I was talkin' about. An Atom? What was this kid—well, anyway, I pull—I don't—that wasn't premeditated, it just happened. So when we got home, my mother made sure that my dad bought me a used Atom. And sure enough I did—I had started it one day, and I was reachin' around to undo what we called the booster. You had to hook a dry-cell battery to it to make the glow plug work, so you—onto the ignition. Spark plug works so it's—run then it had its own ignition system. And I reached around. I got my thumb in the propellers. I didn't let him know it. Kinda bruised it.

[00:49:56] But yes, I was really into free-flight models. If I can jump forward . . .

SL: Sure.

JY: . . . just a little bit. I finally got my dad to buy me a new engine. It was called a Brown E. The bigger Brown was a Brown D, which was a very good engine, but the E was very hard to start. If you got it started, you were lucky. You'd crank and crank and crank. [*SL laughs*] Now we're back in McAllen again.

We had moved back there. And south of town we had a Sunday afternoon airplane contest in the Rio Grande Valley almost every weekend a different town would sponsor an airplane contest. So here I am out southeast of town on a sloping terrain. Funny I can remember all those details. There aren't many hills in the Rio Grande Valley.

SL: Right.

[00:50:54] JY: And to get an official flight, it had to last more than twenty seconds. And you had to get three official flights, and you were allowed a twenty-second motor run. You'd have a timer on, a pneumatic timer that shut off the ignition at twenty seconds. Somehow I'd gotten two official flights. And I was up to do my third official flight, and this was at the end of the day. And just as I was up there to launch the thing, it quit, so I threw it as hard as I could. The big kids—remember I'm a little kid. I'm in junior high, and they're in high school—gave me credit for an official flight. I don't know whether I—I don't think it stayed up twenty seconds. So then, as I'll show you later on, here we are downtown a few days later. A newspaper guy's standin' here. Three of the guys from high school are there, one of them holding his big model, and I'm holding my Comet Zipper, which was a very popular free-flight model of the day. I'm holding it.

And I—they took a picture of us, and I've got a picture of that, of me having won the Class B in that. [*SL laughs*] To this day, you'll see when we go to my place where I live. I—you can still get the drawings to those. I had a Comet Zipper hanging up which is exactly the size and shape and a duplicate of what I had. And it's even got the same engine 'cause an engine collector friend of mine gave me one of those engines. So that was kind of a diversion off into the future of modeling. I was—that was a—I think that was about the high point of my modeling world.

[00:52:33] SL: Were there any other town, neighborhood kids that had any interest in building model planes? Was this totally . . .

JY: Yes. In fact when I moved to Fayetteville, I had several friends that build models. Now before it was—we were too young for 'em to really be building serious models like gas-powered free flights, no. That had to come when I got a little older.

SL: Well, back to the—so in the grade schools and junior high, did you have a favorite class? I'm tryin' to look for the—it's like you were already . . .

JY: Well . . .

SL: . . . tinkering and building . . .

JY: Oh.

SL: . . . things early, early on. And I'm tryin' to . . .

JY: Okay.

SL: . . . look and see how that applied to your everyday life of public school and relationships, you know, in that community.

JY: I can remember in McAllen I very much enjoyed manual training, where you would make things. That was kinda like—some other child might've preferred to go out for some athletic thing. I preferred to go to this manual training shop where you could build—make things, build things, use a lathe to turn out a piece of wood and such as that, where you could actually even use a jigsaw and things like that, and I enjoyed that very much.

[00:54:19] Going on, though, by the time I moved up here—by the way, we moved to Fayetteville in fi—[19]42 when I was a freshman in high school.

SL: Okay.

JY: And so we could come to that. But to answer the one specific question, in high school, for those who wanted to do it, across the street from the old high school, there was a building down there where you could go and take an automotive mechanics course. I didn't do that. I took physics. I took academic courses. I don't know what made me realize that I would need all that and wanna go that direction. And I also had some

friends that were into that, that were academics, and so I had to maintain the pace with my closer friends who were all oriented toward that, so I took every advanced course I could in high school, and I didn't take automobile mechanics or shop of any kind.

SL; That's interesting 'cause I would've thought that you probably would've been taking shop as an al . . .

[00:55:30] JY: No, I was—[*laughs*] I enjoyed physics immensely.

And one course I did not like was English. I never could see the point in it. [*SL laughs*] If you're gonna have good grammar, you're gonna learn it at home. My mother happened to have been an English major, so I learned grammar there. I don't—I couldn't see the value in diagramming a sentence. What does that serve? And what I really—now I'm jumpin' ahead on you again, but in English we had to give oral themes. I was so shy that I would go to the library on the second story of the old high school. And then in the library—the study hall's here and the library was there. I'd look at *Reader's Digest* and try to find somethin' to talk about. Then I'd have to get up and talk about it. And I was shy, and I didn't wanna be there. And I had a terrible aversion to oral themes. [00:56:32] Now I'm gonna jump ahead again in case it won't ever come up again. [*SL*

laughs] As an engineering student looking forward in the program, when you became a junior, you had to give a talk in speech. And here I am dreading giving a talk in speech. Well, I got in there, and they said you could talk about anything you wanted. Well, I'd been working in my brother's wheel-aligning shop. And the art of balancing an automobile wheel by the techniques of that was a pretty complicated deal. So i was able to give a talk on that subject, and I loved it 'cause now I'm talkin' about technology, and I just thrived on it. And I been talkin' ever since. [*Laughter*]

[00:57:26] SL: Well, it's important that you do what you like to do.

JY: Yeah. Well, once I could do my own thing and have a purpose and something worthy of talking about—in fact that's one reason I came back from industry and taught at the university in electrical engineering, to develop further my ability to do that sort of thing.

SL: Now so . . .

Trey Marley: Scott, scuse me, we've been going about an hour. Did you wanna take a break and . . .

SL: Yeah, let's take a break.

[Tape stopped]

[00:57:52] SL: We've taken a break, and now we're comin' back.

This is our second session.

JY: Just I thought you might be interested in when I had my first airplane ride.

SL: Well, yeah. Sure.

JY: My father, as I already told you, was a Ford dealer. The Ford Motor Company was sending a Ford Tri-Motor—we've all heard of Ford Tri-Motors, the early airliner—from town to town. So being that he was a Ford dealer, it came through our town with their sponsorship. So we traveled up to the town from which it was going to depart to come to Fairfield, and I got to ride back to Fairfield in the Ford Tri-Motor.

SL: Oh.

JY: I even remember what seat I had, but my brother eight years older than I got to ride back in the airplane that flew along beside the Ford Tr-Motor, and what do you think it was? It was a Travel Air like the one I possess even now [*SL laughs*], a Travel Air. So I was envious as a four year old or five year old. I think I was a five year old by then—of him getting to fly in that open cockpit biplane 'cause I sure knew what they were. I think I already mentioned to you about the barnstormers coming to town and putting on an air show in a vacant field.

SL: Well, yeah.

JY: I already talked about that. So that was my first airplane ride in the Ford Trimotor. And we've got a picture of that airplane . . .

SL: So how old were you then?

JY: . . . sit—five.

SL: Five.

JY: And it was in a field. It—there was no airport at Fairfield. They just landed in an open field that was [*airplane sounds*]*—where the farmers said they could. And there was a lot of weeds in the field. It wasn't what you think an Iowa field should look like with either corn or nice grass. It's interesting to see what that was.*

SL: Well, now . . .

JY: So you'll get to see.

[00:59:54] SL: You know, we can jump to when y'all got to Fayetteville 'cause I can remember seeing—I believe they were a biplane that would take off from the grass airstrip there kinda where the hospital is now, Washington Regional. There—didn't you all . . .

JY: No.

SL: . . . used to have an airstrip?

JY: North of there. Yes.

SL: Yeah, north of there.

JY: Yeah. My brother had an airport. He put it in in 1952.

SL: So it was actually north of the hospital.

JY: Yes. In fact, there's a street emanating south from the hospital from whatever that road is that goes across. Ye—Bob Younkin Avenue or something there.

SL: Yeah.

JY: That was his airstrip right there.

SL: And wasn't it biplane that . . .

JY: Oh, all kinds of planes flew in there. He had a World War II fighter called a Grumman FM-2, and even that fighter with a 1400 horsepower engine flew in and out of there, and I flew my twin-engine Comanche, Piper Comanche, twin Comanche in and out of there, and so it was no big deal. [*SL laughs*] It was not the place you should be flyin' an airplane like that, but I did.

SL: Right. Right. Well, now . . .

Trey Marley: Scott, I wanna stop one second. We got a fly that's kinda really . . .

SL: Yeah?

TM: It's making it—makin' a big appearance.

SL: Yeah. Yeah.

[Tape stopped]

[01:01:25] SL: We had a little interruption with a fly that was kinda flyin' around. I see him again.

JY: Yeah, I felt him.

SL: But we'll just keep goin'. So you know, what's interesting to me is that you guys are movin' around a lot when you were growing up. And was that just based on market where . . .

JY: No, I would ge . . .

SL: . . . cars were selling?

[01:01:48] JY: We went from McAllen to Alice, Texas. The Studebaker dealership failed.

SL: Well, of course.

JY: My dad was a very successful Ford dealer in conservative Iowa. He wasn't up to keepin' up with the Texans. He did it again in San Angelo, and it failed, and that carried us to 1939. We were there until [19]39. And I have fond memories of San Angelo. The—a river flowed through town, and I would follow the river downtown. I'd ride my bicycle downtown. We lived right on the northwest edge of town. That—you know, it was so different that you could ride your bicycle to the center of a city.

[01:02:35] In fact, one of my fondest memories—and this really has a musical connection. They had a brand-new swimming pool across the river south of the downtown area. And I would go to that swimming pool, you know, ride my bike downtown, go over there, all by myself as a fourth grader. Can you believe that?

And the music absolutely captivated me. What do you think they were playing on the jukebox? Glenn Miller.

SL: Well, yeah. Big band. Yeah.

JY: And I was so taken by that. I have the fondest memories. I'd never heard anything like that in my life, and I fell in love with that, I can tell you. And I was a fourth grader hearing Glenn Miller for the first time. I never got over that.

[01:03:22] SL: What about the differences in radio programming from Iowa to Texas?

JY: Well, I was old—it was not a matter of where we lived 'cause radio programming was the same everywhere. They were, you know, NBC and whoever else. And in Iowa we had that. The things I remember most about being in Texas—one program for sure was the *Hit Parade*. [*Train whistle*] You may . . .

SL: Sure.

JY: . . . recall that.

SL: Absolutely.

JY: And then in the evenin' we had, on Tuesday night, like it. . .

TM: Sorry, Scott . . .

JY: . . . went on forever . . .

SL: Okay, we're gonna stop and let this train go by.

TM: Yeah.

[Tape stopped]

[01:04:00] JY: While we still lived in McAllen, before moving—wait a minute. As we lived in San Angelo, it all started. On Tuesday night, we had *Fibber McGee and Molly* and then *Bob Hope*. And that went on, it seemed like, year after year after year. On Thursday night, we had the *Kraft Music Hall*.

SL: Yep.

JY: I had to hear it. My folks would want me to go to bed because it came on, I think, at nine o'clock. That didn't work out. I—if I did go to bed, I was gonna hear it anyway. And [*SL laughs*] one of my favorite things about it was the music and—now I'm not gonna be able to say his name. Dammit. See—his theme song was "You and I." He wrote *The Music Man*.

SL: Oh. *Music Man* is—oh the . . .

JY: I should be able to—he's one . . .

TM: Gershwin?

JY: . . . of my favorite.

SL: No, it's not Gershwin, it's . . .

JY: No, he wrote the *Music Man* and he . . .

SL: Yeah. We did that in high school.

[01:05:19] JY: Oh boy.

SL: Was our high school play.

JY: I sh—anyway . . .

SL: Hammerstein?

JY: No.

SL: No, it's—well, we'll figure that out. We can add that to the transcript.

[01:05:29] JY: I can't believe i can't think of that. I liked to hear him. And then we had some skits on there. Fannie Brice. She was a female comedian. The music—they did the story of her life sort of on . . .

SL: AETN.

JY: . . . *Funny Girl*.

SL: Oh, *Funny Girl*. Okay.

JY: You know, *Funny Girl*? That was . . .

SL: Yeah. Yeah, yeah.

JY: . . . Fannie Brice.

SL: Yeah.

[01:05:55] JY: And then we had another guy that was interesting on the program named Bob Burns.

SL: [*Laughs*] Yeah.

JY: And his bazooka. And of course, the bazooka of World War II is named after the bazooka. And even today in Van Buren they have a museum, and they have his museum down there. I went

and talked to the ladies one day, and they didn't know this— what this funny-lookin' thing was. [SL laughs] They had it in their museum, and there it was, and they didn't even know how to talk about it. So I enjoyed Bob Burns.

SL: Yeah.

JY: And he made a few movies, too. He was a well-known personality of the [19]30s. And I remember where they used to have a museum in his house as you would drive through Van Buren before highways emerged. So I enjoyed the Craft Music Hall very much.

[01:06:48] SL: Let's get back to . . .

JY: Well, that was just givin' you the difference in the *Hit Parade* and all of that.

SL: Yeah.

JY: Those are things that were different with time in my life. But not location.

SL: One thing we haven't talked about is—was there any role of religion or churches or any church activity when you were growing up? Were you expected to go to church on Sundays or . . .

JY: [Laughs] I can remember in Iowa my brothers being sent to Sunday school. I was too young to go anywhere, I guess. And

they would—they didn't wanna go. And they'd kinda have it out over that. Beyond that, we were all on our own. So that was where that is.

SL: So there wasn't any—there wasn't like any kind of Bible study or—at home, even? I mean, it—was there . . .

JY: No, not when I was a child, no.

[01:07:45] SL: Okay. If—was there—at the dinner—I mean, when your ma—I'm assuming your mom pretty much fixed all the meals. Were you expected to be at the table . . .

JY: Yes.

SL: . . . when dinner was ready . . .

JY: Yes.

SL: . . . at that time?

JY: Yes.

SL: And . . .

JY: And we ate together, you know.

SL: So your father would come home and have . . .

JY: To the best of my recollection.

SL: . . . dinner, at least. And did you—did y'all have breakfast together in the mornings?

JY: Yes.

SL: 'Cause that's pretty big deal to . . .

JY: Yeah.

SL: . . . coordinate everybody and . . .

JY: Well, you see but what else could you do? You couldn't stop at McDonald's on the way to school.

SL: That's true.

JY: It was different. There weren't many cafes in those days. Not many. And households where the father worked, the mother maintained house. How was how 95 percent of 'em, according to my estimate, would've been. So they had kinda cooperate and eat together.

[01:08:42] SL: When did you start playing the clarinet or . . .

JY: In junior high in Harlingen, Texas. I started playing it, and then we moved to McAllen, and we had a very good band director there. By then I had talked my father into buying me a better clarinet, a wood clarinet, you know, instead of a metal one. And I took some private lessons from him. And . . .

SL: From your father?

JY: From the band director.

SL: Oh, from the band director.

JY: So I was really getting interested in music. In fact, I talked about the *Hit Parade* earlier. A song came out while I lived in McAllen. "Blues in the Night."

SL: Okay.

JY: And I thought, this is too good to fade away. A song would come and go and fade away. Maybe it would later on become a standard. A lot of them did, you know. And like "Someone to Watch Over Me," "Stardust" . . .

SL: Sure.

JY: Those became standards, you know, to us musicians. [*Airplane sounds*] But Blues in the Night really got my attention. I thought, "This one's gotta last." Well, it did. And I was only a fifth or sixth grader, or seventh, I don't know what it was, but I could recognize a tune being so different that I knew it had to last.

[01:10:06] SL: So you were a member of—was it a marching band? Were you required to march and go to . . .

JY: Okay. When we lived in Texas—I don't remember. We went to band one hour a day. The high-school band marched. The junior-high-school band did not march. Then when I moved to Fayetteville, I took band. Are you ready jump up to . . .

SL: Sure.

JY: . . . Fayetteville? So I joined the band. And across the street south of the high school was a little house where a piano player music teacher, Mr.—well, now I can't say his name. But I

thought I would go take private lessons on the clarinet. I got over there, and I found out that he was trying to teach people how to play orchestra music. He would have orchestrations. His ti—his—Mr.—ah, it doesn't—his students would come and sit in this little room and read their orchestrations and big band music. And I thought, "Boy, this neat." So I went down to Guisinger's music store. My dad was not gonna buy me a horn. And I bought a tenor sax. And I financed it. It cost \$110. Now how was I gonna pay for that? Well, I found out that since all the veterans were gone—I m—not all the sol—all the military-age people . . .

SL: Yeah.

JY: . . . were gone to war, that there was a shortage of musicians, so I got to where I was playing in a dance orchestra. We would play at the high school. We would play at the university, and I could make about ten dollars every time we did it, so I paid for the horn. So I transitioned from playing a clarinet in a marching band to being . . .

SL: A big band jazz guy.

JY: And I quit high-school band at the end of my sophomore year. I didn't wanna be—and the band director was terrible anyway. I couldn't stand that. So that's how I made the—got . . .

SL: Transition.

JY: I got with that teacher south of the high school. He introduced me to dance band music, and it all happened from there. I still would be playing my horn except my piano player that accompanied me when we'd go over and play on Saturday nights in Eureka Springs died some years ago.

SL: Oh, I'm so sorry to hear about that.

JY: I still have—and I s—of course I probably . . .

SL: Now I could probably hook you up with . . .

JY: What?

SL: I could probably hook you up with some musicians if you wanna . . .

JY: Well, right now I'm too weak to do anything.

SL: Oh. Okay.

JY: But I—it hasn't been very long since before my illness that I was playing with a group over in Siloam Springs at a special occasion. I still would be if I felt better, but we'll see.

[01:12:58] SL; Now what—how is it that your family, your dad, chose Fayetteville, Arkansas? What was the big draw to Fayetteville?

JY: He'd been through here, saw it was a beautiful town. But he didn't initially [*laughs*] choose Fayetteville. He choose Fort

Smith. So we lived in Fort Smith. We moved there in the spring of [19]42. And he opened up a automotive wheel aligning shop. And then he got to thinkin' he'd really like to live in Fayetteville, so we moved here while he left the business going. But the individual with whom—he would go down there every few days or every week or so and the—he was being robbed to death . . .

SL: Oh.

JY: . . . by the manager, and it didn't work. And he sold that. So now we're in Fayetteville, and he wanted to be here because the university was here. It's also a beautiful place to be.

[01:13:59] SL: You know, I can re—the icon for your realignment shop, the family business, was a Volkswagen or some little car.

JY: A Fiat.

SL: A fee—was it a Fiat on top of big pole or a tall pole.

JY: Well, you know, that was Younkin and Sons.

SL: Yes.

JY: And by then I had just gotten out of high school. It was [19]46. My brothers were building that building. I would drive a surplus army truck to Joplin and put 400 cement blocks in there, which was twenty thousand pounds, and then I would drive back. I did a lot of the driving. Not all of it. And getting over the hills north of Bella Vista was one place where you had to be in low gear or

compound to even get up the hill with all that load. So I was involved to some degree with helpin' build that building. But I painted the sign on that car. "Is your car safe?" with a big question mark.

SL: Yes.

JY: I painted that.

SL: [*Laughs*] It was great. I mean, that was a Fayetteville landmark, really.

JY: Yeah.

[01:15:05] SL: So did—let's go back to your brothers. Now they're—the older brother's name was . . .

JY: Bob.

SL: . . . Bob. And the young—and . . .

JY: Bill.

SL: And Bill was older than you, too. You were the . . .

JY: Five years older, and Bob was eight years older.

SL: And they did not have to serve in the war.

JY: Yes.

SL: Oh . . .

JY: Oh, my goodness.

SL: They did.

[01:15:28] JY: We'll come—if you wanna hear about it.

SL: Yes, I do.

JY: My brother tried college in thi—he graduated from high school in San Angelo, Texas, in [19]39.

SL: This is Bob.

JY: And he went to North Texas Agricultural College 'cause they had an airplane-repair [*SL laughs*] program there that he wanted to be involved. And of course, that evolved into North Texas State. So he went to college there one semester because of that. But my parents then lived in Harlingen, so he came back to Harlingen, which is right next to Brownsville, and got a job with Pan American airlines, which had their main overhaul facility for their entire fleet at Brownsville. So there he got to learn all about airplane engines and airframes, and that's what he did for a living. He was into the airplane build—maintenance—engine building. He finally, later on in life, put in an overhaul facility for Pratt & Whitney airplane engines 'cause that's what he did up until he retired. So during the—he joined naval aviation in June or late May of [19]42—we're six or seven months into the war now. And he got his wings in one year they were so desperate for pilots. But they took his entire class and assigned them to Corpus Christi Naval Air Station as instructors. So he instructed for a couple of years in twin-engine Beechcrafts like my

grandson is presently doing air shows in today. That airplane that he is flying was built in 1943. So that's what he did in the navy. [01:17:14] My other brother Bill joined only five or six months later in October, and he didn't get his commission until the war was over because they'd brought so many people into the program, they didn't know what to do with 'em all. So that was quite a difference. But they were both naval aviators. And then, to sum it all up, because my brothers had been naval aviators, when at the tender young age of seventeen—I graduated when I was barely seventeen. I went to Kansas City with another young man and took three days of testing to join naval aviation V-5 program led by then, it was two years of college of your choice, where they would pay you fifty dollars a month plus books and tuition. Which was pretty good money . . .

SL: Great.

JY: . . . for that day and time. [01:18:10] And then you would be a cadet for a year, and then you would be an officer for two years, which would've put me right in the middle of Korea. September came, and they—I got a letter saying they had inserted one more year. I was told that might happen. After being—getting—being a cadet, I would now become a midshipman for a

year. Now I'm up to signing away six years of my life, and I'm still only seventeen and a half by then. So I said, "This is not good." I found out that I could join the army for a year and a half and get full GI benefits from World War II since they had not shut them down yet. They were a little slow at doing that. GI benefits like I'd been getting shot out. So they, in turn, for me giving them a year and a half of my life, spent \$6,500 on my education. And that's more than a young engineer could've made in a year and a half. So that's how I got my education paid for by being in the army for a year and a half, where I had the misfortune of playing in a dance orchestra, so I didn't learn much about growing up, you know. [*SL laughs*] I should've—I'd've been better off I'd've been driving a truck, I think.

SL: Well, so did you go to the University of Arkansas?

JY: Yes.

SL: And you were an engineering major.

JY: Yes.

[01:19:36] SL: Who was the—who was—do you remember any of your instructors?

JY: That came up just the other day right here. Somebody else came by who had graduated five years before me. He graduated in fi—[19]47. I graduated in [19]52. The dean of the

engineering school was Dean Branigan, and the head of the electrical engineering department was a fellow named Bill Stelzner. He was right in his twilight years. He was already obsolete, you know, as—in fact, he and my father became very good friends. They were of the same age, and they used to play poker every night down at our—not every night, but every so often at our place, the gathering was. But in those days an electrical engineering graduate either was gonna work for the power company or the phone company. There was no job in Arkansas for an electronic engineer. I told you I got into engineering, and my direction went—took me into electronics. And so I thrived on that. Found out that I—I picked a thing called control systems. Servo mechanisms. That's what autopilots are all about. They're control systems. Today we see these dronelike things everywhere. That's how far things have come by now. Way beyond what I would've ever dreamed of. [01:21:04] So that's what I did. I moved as rapidly as I could from job to job until I finally was able to get myself into the world of autopilots. I think we're jumpin' forward too much here, so let's . . .

SL: Okay.

JY: . . . let things . . .

SL: Well, let's go back to Fayetteville High School, then.

JY: Okay.

[01:21:27] SL: Did you have a favorite course or teacher in Fayetteville High School?

JY; My favorite course probably was physics, high school physics. I enjoyed algebra and trig. I enjoyed those courses. If I had to pick a favorite, I'd say that.

SL: What was the—let's see now, the population of Fayetteville back then was probably, what, ten . . .

JY: Eight thousand.

[01:21:59] SL: Eight thousand, probably. And were there—what was the social life like for you in Fayetteville High School back then?

JY: Probably maybe two tiered. The girls had an organization called Sub Debs, and they were socially, they thought, above the rest. The young men had a high-school sorority called Delta Sigma. I was involved with that, but I think my best friends were friends away from that. So that was of—they were more socially oriented into dances and parties and such as that as the others were. [01:22:56] Actually there weren't—as near as I can t—recall, they probably had all the parties. I don't know. I didn't—I don't recall too clearly. But there was a—that's how social life

seemed to thrive in those days at that school.

[01:23:14] SL: Now there were three movie theaters in town?

JY: Four.

SL: Ozark, Palace, and the UARK?

JY: There was the UARK. There was the Ozark on North College.

There was the Palace on the east side of the square. And there was a Royal where all the rednecks went that weren't rednecks then. The Royal was the low end of everything. They showed cowboy shows, and they didn't show, really, the better movies of the day I guess. Not hardly any of us ever went to the Royal.

SL: Now where wa . . .

JY: The Ozark . . .

SL: . . . was the Royal?

JY: Huh?

SL: Where was it?

JY: Okay. Do you know the corner building is where Penney's was?

Right next door to it to the east was the Royal.

SL: Okay. All right. I d—you know, I do—that name is really

familiar. I'm not sure I ever saw the Royal. I probably did.

Well, now, here in Fayetteville in the early [19]50s, I can—there was segregation in Fayetteville. I can remember the . . .

JY: Oh yes.

SL: I can remember the African American kids would sit in the balcony in the theaters.

JY: Yeah.

[01:24:31] SL: Seems like I can remember a "whites only" bathroom sign maybe at the bus station or something. I . . .

JY: There was segregation—and one thing I recall hearing about was the swimming pool. Some outsiders came to town to desegregate the swimming pool. My wife's father happened to be mayor of Fayetteville at the time.

SL: And what was his name?

JY: Parrish.

SL: Parrish.

JY: For now I've forgotten his first name. So he gets with Buddy Hayes, who was really the mayor, so to speak, of the black part of town. Buddy was the main guy.

SL: They called it Tin Cup.

JY: Yes.

SL: Yeah.

[01:25:19] JY: So he talks to Buddy, and Buddy helps him keep things sorta under control. But that—I don't know the details of all that, but that was considerably years later that was—had to be getting well into the [19]50s if not into the [19]60s. Probably

was into the [19]60s. I remember when we got our first black student at the university. I was—I may have been teaching then in the mid-[19]50s. And this poor guy had to be off to himself. I don't think he even shared the classroom. It was a very bad thing, you know, but . . .

SL: Well, was this in the law school?

JY: Yes.

SL: So we're talkin' about Silas Hunt.

JY: Hmm?

SL: We're talking about Silas Hunt, then.

JY: Yeah. Okay. That's how it started, you know, with . . .

SL: So . . .

[01:26:20] JY: Course I already told you about Buddy Hayes and me playin' at the Bubble Club.

SL; I know.

JY: So . . .

SL: I love that.

JY: Was that this morning I told you or was that before that?

SL: No, that was this morning.

JY: Yeah.

SL: The—so some of the other members of that band—I'm tryin' to remember their names.

JY: I ca—I got a bad memory for names.

SL: Okay. All right.

JY: Buddy played the trumpet, and so it went. So there were two or three others with him.

SL: Do you member those names?

TM: Oh, the names? No, I don't.

SL: 'Cause they're—we've got—we actually have a recording of Buddy Hayes playing at George's that was done.

JY: You do?

SL: Uh-huh.

JY: I used to play at George's more recently. We had a Dixieland combo, and we would play at George's when they were just did everything in the front room, and they had a stage over in the southwest corner. Yeah, I played there a number of times.

[01:27:20] SL: So the student population at Fayetteville or at the university back then was probably four or five thousand kids?

JY: I'd say thirty-five hundred.

SL: Thirty-five hundred?

JY: Somewhere in there.

SL: Yeah. So I mean, your father liked Fayetteville, and part of the reason was because of the university. Do you remember the university affecting your life in high school or your family's life—

how—what . . .

JY: To the extent that I got to go up on campus and play at the old student union on Maple Street in the band shell on the south side of a beautiful dance—what do you call it, a hall. They had . . .

SL: The ballroom.

JY: . . . lights that changed colors. You could walk through the doors out onto a balcony over facing Maple. That was a wonderful place. Too bad it's—well, the first thing that happened to it while I was even teaching, I think it started downhill. The psychology department took that big dance room and compartmentalized it into . . .

SL: Chopped it up.

JY: . . . cubicles, and that was the end of that.

SL: I remember going to dances in that ballroom. In fact, the very first audio recording I ever did was a live recording of a musical performance in that—it was magnificent.

[01:28:39] JY: So that was my involvement with the university. [SL *laughs*] But that was pretty significant to me.

SL: Well, yeah, it was. That's pretty big time for a kid to be up there on that stage that young. Well, what about television? When did you see your first television?

JY: [*Laughs*] Yes. Over on Ila Street. When I was teaching, I lived on Ila Street. No. I was a student. Because I had a friend who live down the street to the west. And at the end of Ila Street where it teed into another street, Jug Wheeler lived there. [*SL laughs*] Jug Wheeler had a TV set. We would go down there to look at his TV. And this had to be in [19]52 'cause I graduated in [19]52, so it had to be in the early part of [19]52. So he had the first TV set that I ever saw. And of course, sometimes you could get a picture, sometimes you'd just get snow, as they called it. [*Airplane noises*] But that was my first encounter with seeing television.

SL; Do you member what it was?

JY: No. It was [*laughs*—just to see it move, you know, that's all you—you didn't care too much what it was. Just to see it happen was what it was all about.

[01:30:11] SL: Well, I can remember there—they—it wasn't programming all day or all night.

JY: No.

SL: To—shows were only on for . . .

JY: Yeah.

SL: . . . at certain times, and the rest of the time it was a test pattern.

JY: Yeah.

SL: That was on the TV. [01:30:28] Well, Jug Wheeler. So Jug Wheeler—was he your age, or was he . . .

JY: No, he was—when I was in high school, Jug Wheeler had two sons that were probably—I should know. Jim Bob and the other name. There was—eight or ten years younger than I. Or somewhere in there. Fi—between five and eight years. Five and ten. And Jug Wheeler would eh—he would referee the basketball games that were played in the gym north of the high school. I remember him doin' that. I remember him more than that for the D-Lux Cafe. I would go down at lunch hour to the D-Lux, and I'd have twenty-five or thirty-five cents, I forget what it was, to buy lunch down there. If I really wa—could have a little extra money and wanted to splurge, I could get some kind of a little steak. But what I would do, I'd conserve my money 'cause then I'd go a block south—west on Dickson Street to the pool hall.

SL: Oh, Roger's Rec.

[01:31:41] JY: Well, was . . .

SL: it wasn't Roger's yet.

JY: It was—not Roger's Rec, yeah, but it predated. It was—I—the Bartels owned it back then. I don't know what they called it.

And I used to like to go down there and play snooker before I was old enough to play snooker, then I got old enough and I probably never did it much after that.

[01:31:59] SL: [Laughs] Now was City Lumber Company or Dyke's Lumber Company . . .

JY: Yes . . .

SL: . . . back behind there?

JY: There was a lumberyard about halfway between Jug's Drive-in and the pool hall, which was a nice, large yabber—lumberyard.

SL: So di—Jug Wheeler—I remember the drive-in. I member my brother taking me there one time.

JY: Yeah.

SL: So did Jug Wheeler also own the D-Lux?

JY: Yes. And the drive-in . . .

SL: And the drive-in.

JY: . . . both.

SL: I never knew that.

JY: Yes.

[01:32:31] SL: And I always heard that he was able to deliver beer to the campus. He had a—they let him deliver beer to the fraternities and . . .

JY: I don't know anything . . .

SL: You don't remember that?

JY: . . . about that. No, I was . . .

SL: Yeah.

JY: When I was a student, I was busy being a student, and I was married, so I didn't get into any of those things. But I remember you could sure get a beer at Wheeler's drive-in. [*Laughs*] I remember that so well.

[01:33:12] SL: Do you remember—was Ronnie Hawkins around at all?

JY: I remember the . . .

SL: Back then?

JY: . . . name. I . . .

SL: Yeah. He probably came a little later. I think he may have graduated Fayetteville High in the mid-[19]50s a few years later, but apparently he would play—he'd play his guitar over there at the drive-in.

JY: What?

SL: He'd play his guitar and . . .

JY: Yeah.

SL: . . . and s—he only knew [*laughs*] three or four songs, but . . .

JY: Yeah.

[01:33:43] SL: But Buddy Hayes's band influenced Ronnie Hawkins

quite a bit. And the Cate—Ernie and Earl Cate.

JY: Yeah. Well, they all—but that—by the time they came around, I was so involved in . . .

SL: Aviation.

JY: . . . my . . .

SL: You had not . . .

JY: I wasn't living here, you know, I was away from here. You know, it's—I left here in [19]52. And I always lived away from here until I moved my work back here in [19]69.

SL: Oh, okay.

JY: So I was gone from [19]62—[19]52 to [19]69 except when I was teaching at the university in the mid-[19]50s for a li—for a year.

SL: So your two brothers stayed here, though?

JY: Oh, yes.

SL; And had the alignment shop?

JY: Well, the older—they started it together, and the older brother moved strictly into aviation and built the airport out there and went into the aviation business.

[01:34:39] SL: You know, it's funny, I had a friend, a lifelong friend, that came up to visit this past weekend. And his father, Dr. Wilson, brought him to your—I don't know if it was your shop or

your brother's shop. He seemed to think it was your shop. Just as a high school kid. Dr. Wilson was a VA doctor and he knew either you or your brother and wanted to bring his son into the plane shop. It was a garage kind of place. I don't know if that was you or your brother.

JY: Well, if it was me . . .

SL: It wasn't until [19]69.

JY: . . . I was on the Springdale airport. I had the hangar built in [19]69, and I had an engineering lab set up there where I still did development work on autopilots for the company that had purchased the autopilot company. I did some contract work for them. And then I finally decided to retire totally and build—nothing—just build airplanes. Well, when I was semi-retired, I built that biplane that we talked about, and then I really got serious about it, and that's all I did for quite a number of years was build airplanes.

[01:36:01] SL: So do you wanna talk about your family? Ya—I guess you married fairly young, first wife, and did y'all have kids or . . .

JY Three children. My oldest child was my daughter. She died recently of a heart attack.

SL: And what was her name?

JY: Kathy.

SL: Kathy.

JY: And then my son was Bobby. He was killed in a mid-air collision about eight years ago doing an air show up in Canada. And so my grandson, his son, is now flying one of the airplanes that he did air shows in. So it's continues. And . . .

[01:36:47] SL: And then you had a third child?

JY: What?

SL: A third child.

JY: And then I had the third child. She was quite a bit younger than they. It all started off with those two bein' pretty close together, and then Robin, who is still with us, is the only child I have le—the only one I have left in the immediate family. And she's a nurse up at the nursing home in Springdale.

SL: Okay.

JY: And she has a daughter, so I have that granddaughter, and then I have—a daughter of Kathy's, in fact, is returning here as we speak. She finishes her is—her residency as an endocrinologist at Barnes Hospital. She's been employed . . .

SL: In St. Louis.

JY: . . . by Washington Regional. She will be the only endocrinologist in the Washington Regional system, and she'll be

arriving here early in July because she completes her time there in June. Well, a few days from now. And they've already bought a home here, she and her husband. And she's all set to go as a—she'll have her own office away from the hospital, and she's gonna be one busy person, I can see that. She's Kathy's oldest daughter, and then her other daughter is a college student now.

SL: Well, that's good to have them come back home and . . .

JY: Yeah.

SL: . . . have them close. Now your—did your brothers have family, too? Did Bob . . .

JY: Bob never had a child.

SL: Okay.

JY: Bill had two daughters, and one of 'em is still in Tulsa. And she's the younger of the two, and the older of the two is local, and she's retiring from the kind of work she's doing this year, I think. So . . .

[01:38:59] SL: Well, now of—did any of the siblings or your children or your brother's childrens, did they also get into aviation and air shows and . . .

JY: Yes. We got Bobby, who was—he was one of the most widely known avi—air show pilots in the country. And now his son is flying that antique twin-engine Beechcraft that we talked about.

And he just is returned today from Twin Falls, Idaho, where he did an air show. The week before that he did an air show in Toronto. And he's got a very active air-show business flying that 1943 Beechcraft. *[SL laughs]* And he has to take a mechanic with him 'cause it's a maintenance hog, you know, it's not that easy. So he's doing very well in the air show business, my grandson is. That's the only one that's aviation oriented.

[01:40:03] SL: Well, was it your daughter that took part in air shows, too? Wasn't there a . . .

JY: Sh—my granddaughter. She was killed in an accident in Brownsville, Texas, several years ago. So she's not with us now. But she was heavy into aviation, too.

SL: So was she with your grandson when that happened?

JY: No, she was married to an individual from Neosho, and they did wing walk acts. And his engine quit, and he went into a grove of trees, and the fire trucks were late getting there, so she burned to death in . . .

SL: Oh!

JY: . . . the airplane. So.

SL: Well, that's hard.

JY: Yes.

SL: But they . . .

JY: But I lost my son and my granddaughter. But my grandson's still doing air shows.

SL: Well, let's talk a little bit about . . .

TM: Hey, Scott, we need a break for one second.

SL: Okay.

[Tape stopped]

[01:41:15] SL: Jim, we just had a little lunch break. You had to deal with your better half's car breaking down. [*JY laughs*] We've got her, and we've all been fed now. I'm not exactly sure where we left off in our second segment, but I think we can go back to Fayetteville. Now you know that when we're talkin', if something comes up that you th—that makes you think of something that happened in your childhood, you can go back there. There's no real rule here. I try to keep us in a chronology, but we've already been jumping back and forth anyway, so if you think of something that you wanna go back to . . .

JY: [*Clears throat*] I don't know . . .

SL: . . . it's no problem.

[01:42:04] JY: The early childhood was filled with events that kinda foresee or foretell what you're gonna be.

SL: Yeah. I believe that.

JY: And looking in retrospect at the sandbox situation, where I was

playing in the back yard in my sandbox at the age of probably four or five at the most with a truck that might've been six inches long, and my friend from across the street comes over with a truck that's totally the wrong size. I didn't know what the word scale meant, but I knew what it meant if two things didn't fit. [*SL laughs*] And the average child that age would never think of such a thing, and looking at that in retrospect, that said a lot of where I was destined to be, you know, engineering oriented, all of that. So I think it was significant that there was a precursor of what I would grow up to be. That was significant. It just was one of those things that happened, and I've reflected back on it, and said, "Oh, well I can't be responsible for what I am now because Mother Nature was already makin' me that way when I was that young." [*Laughs*]

[01:43:30] SL: So in—you mentioned you were playin' with a toy truck. I mean, I wonder if the mechanical toys or a—toys. Do you remember any other toys that you played with early on? I—when did you first start building the model airplanes?

JY: When I was seven in the second grade. Also at that point in time, we lived where there were ma—several irrigation canals and an oil refinery, I could call it. Maybe it was a oil well. I remember that we had a big oil-well fire, and you could see it

glowing in the distance, and we'd drove over there, and there was a huge crater. So beneath the windmill in the very sandy soil of the Rio Grande Valley, I had little irrigation canals running around. And the only thing I ever did with fireworks was to blow up things in the . . .

SL: In the canal?

JY: I never cared about fireworks at all except if I could do something like that where I was—as a child doing something similar to what they did in the adult world. That was interesting. That was an indicator of where my mind was going. But I—the building of the airplanes was far more advanced than diggin' canals in the back yard.

[01:44:57] SL: Well, yeah. So the rest of the neighborhood kids, were they, like, pickin' up on sporting activities, baseball, and basketball?

JY: More than likely, yeah. We all liked to play football in the vacant lot and stuff like that. I did that. So yeah, that's what kids do even today, I guess. Not too many kids in those—a few kids were building the models. Not 50 percent of them, but some reasonable number. More so—there's none of that today, building models. There's other stuff to replace it. They're doing a lot of—it's a different world.

SL: It—totally different world.

JY: It—they're working into pushing buttons and seeing software and all that from childhood, so that's a diff—we're in a totally different world.

[01:45:51] SL: [*Airplane noises*] We'll let this one pass. Can you tell what kind of plane that was?

JY: No.

SL: No.

JY: They all have the same engines.

SL: Yeah.

JY: I think it was a twin-engine airplane, I can tell you that much. It was probably, knowing what's based down here, it was probably a Seneca. Piper Seneca.

[01:46:15] SL: When you have more than one engine, do those engines need to be in sync?

JY: They need to be pulling equally. If one engine loses power, you will turn into the dead engine. If you lose the engine all the way, you've got your hands full flying the airplane. You know, you'll deflect the rudder to compensate for it, and you've got a real heavy foot pressing on the pedal to compensate for that, and it's not an easy situation to deal with.

SL: If they're—so if they're—when I say sync—it's doesn't really

matter. What matters is the amount that they're pushing, that each of them are—or pulling the plane or . . .

JY: Yes. And if the propellers aren't turning exactly in unison, you'll get a beat for you—they'll get noisy and then they'll get quiet, and you'll hear the intermediate frequency between 'em, and that's annoying. You don't wanna be flying around with your propellers out of sync.

SL: So that's an audio event.

JY: That's an audio thing.

SL: So we'd call that, maybe, out of phase? Or not.

JY: That's correct.

[01:47:27] SL: Yeah. That's fascinating. Well, so you graduate from Fayetteville High School when you're seventeen. And you enroll—you first try to enroll in the navy air program, but they were changing the rules on you.

JY: Well, they simply inserted, as they said they might, an additional year beyond the original five. And I didn't wanna go six years of commitment at the age of seventeen and a half.

SL; Right. So th—you went to the army air . . .

JY: For a . . .

SL: . . . side of . . .

JY: For a year and a half. Yeah.

SL: And so do—you didn't see—were you ever stationed anywhere?
Did you . . .

JY: Of course. I was stationed—initially I went to Camp Lee, Virginia, because on my enlistment papers it mentioned that I played a musical instrument, and that's where they had a band training unit. Then they moved part of the band training unit to Fort Knox, Kentucky, and I happened to end up there. So that was kind of an interesting thing. [01:48:43] That was 1947 by then, early [19]47 or late [19]46. At Fort Knox they have what they called a—what the heck they call it? It was a training unit for teenagers where they would put in six months to get beyond their draft. Universal—UMT, Universal Military Training unit.

SL: Kay.

JY: And they would take the seventeen-year-old kids, or eighteen, seventeen, and they would—they painted all the barracks real fancy. They served them—they didn't get in chow lines. They served them at the tables. They always had a pie or two at each table. I was not a part of that. I was in the special service providers of that. I—they had to have a dance orchestra to play a dance for 'em in the USO or the service club, as they called it, every Friday or Saturday night, so I was part of the group that supplied music to that. And I'm the same age they are, if not

younger. But I had—because of the instrument I played in the orchestra that provided them dance music. And yeah, it was UMT, Universal Military Training Experimental Unit for seventeen years old. I think it failed. They probably didn't continue it very long.

SL: Sounds pretty elite.

JY: It was. It was not real military at all.

SL: Right.

JY: If you gotta be in the military, you go to boot—you go si—you join, you go to boot camp, you do guard duty, you do hikes, you do all these things. That's the real army. It was not the real army at all. Somebody's bright idea.

[01:50:42] SL: Well now, so when you weren't playing in the band in the army, what were you doing?

JY: Well, we were rehearsing. And all the—this didn't go over good. We stood reveille in the company street at nine or ten o'clock, everybody else at seven. Nobody else in the headquarters company liked us at all. *[Laughter]*

TM: Hey, Scott.

JY: It was a bad scene.

TM: He's got a little something on his lip right there.

SL: Oh.

TM: Bottom lip.

SL: I see it. Can you . . .

JY: Huh?

SL: Yeah. Gra—there you go.

TM: You got it.

SL: You got it. [01:51:13] So well, did you enjoy being in the army band?

JY: Well, I enjoyed bein' in the dance orchestra, and I was also, at a later point in time, in an actual army band, and it was okay, too. We played for special events like, oh, where they'd have a graduating class they wanted a band there, we would do that. So that sort of thing. Typical army band as you might picture it. If you saw The Glenn Miller Story, you remember he was out there doin' his thing, and he kinda jazzed it up a little bit.

SL: Yes.

JY: That was an army band.

SL: So and you were playing clarinet at that time?

JY: In the band, yes.

SL: Yeah.

[01:52:01] JY: I was playing sax also. No, I was playing the sax in the dance orchestra. I'd've been playing it in the other band, too. Yeah.

SL: Well, so you were in the service for a year and a half?

JY: That's correct.

[01:52:22] SL: And when you got out of the service, what did you do?

JY: Well, I worked for my brother from—I got out in March. I worked through the summer for my brother, then I immediately started in the university.

SL: So this was at the wheel alignment shop.

JY: Mh-hmm. Yes.

SL: And so by going to the university, you started studying at the university at that time, took advantage of the GI Bill or . . .

JY: That's correct.

SL: Now you could've gone—could you have gone anywhere with that GI Bill?

JY: Anywhere, yeah. Any university. But naturally, I wanted to stay at the U of A.

SL: Yeah.

JY: This was . . .

SL: That would—that was a great program, wasn't it?

JY: It was. Very much so.

SL: There was a big influx of veterans.

JY: Oh, very much, yeah.

SL; And they . . .

[01:53:23] JY: I'll tell you what happened to me—the best thing that could've happened to me to get my life straightened out. My musician friends were not inspiring [*SL laughs*] for academic things. I had a lot of—several musician friends. I was talkin' about engineering, and one guy says, "Oh, you don't wanna take engineering. Everybody flunks out of engineering." You know, that's what he thought. Well, I took engineering anyway. And then I got to meet some veterans who were there. And my circle of friends consisted mostly of veterans. They were serious about being there. They weren't like kids just out of high school who were there because Mother and Dad were paying their way. So the best thing that could've happened to me was to get associated with veterans who had to be careful or they would lose their GI Bill if they flunked out, you know, that sort of thing. So that's a—that was one of the better things that ever happened to me was to get associated with people that were really serious about an education.

SL: Well, they were quite a bit more mature than your typical college student.

JY: Well, some of 'em were quite young, too, they—if—there was a range there.

SL: Yeah. But they had—I mean . . .

JY: Yeah, some of 'em . . .

SL: Some of them . . .

JY: . . . had seen combat . . .

SL: . . . had actually seen combat.

JY: . . . some of 'em had not.

SL: And . . .

JY: Yeah.

SL: . . . that kinda puts . . .

JY: Yeah.

SL: . . . a whole different light.

JY: Yeah.

SL: On life, I think.

JY: Just the fact that they were there on the GI Bill meant they better shape up and do it right and be serious. So it was good for me that I became associated with the more serious group of students. As opposed to the ones that were there because Mommy and Daddy were sendin' 'em there . . .

SL: Right.

JY: . . . to socialize more than to study.

SL: Right.

[01:55:08] JY: i got into that later when I taught. I might as well

say that in the mid-[19]50s, I taught engineering. I taught some advanced courses in the process. But I did not do—I didn't like it as much as I might've because I felt that most of my students were there because Mother and Dad said that's where they needed to be, and they were payin' the tuition for 'em to be there, and they weren't that serious. I was so disturbed and disgusted with 'em that I would make out a pop quiz on the homework. So I was gonna get results outta these kids, and I talked real loud because I was enthused and . . .

SL: Right.

JY: . . . if they weren't we were havin' trouble. So I was—I had all of the junior-level students. Two sections of 'em in electronic engineering. And my standards were a little bit on the high side. When I'd give a test, the grades would run from about five to ninety-five. Now who am I to judge what a person should make on a test? When I make out a test, I can't say seventy is a C. I don't know. My standards were maybe tough. If you made a fifty average, you were a C. You know, we distributed it. But any—among all that, I had a pretty—greater than normal students that flunked. So they had to repeat the course the next semester. Up until I taught electronics, they always taught the first half in the fall and the second half in the spring. After I did

my thing, now you could get the first half in the spring.

SL: Fall—yeah.

[01:56:52] JY: Well [*laughter*], that—I worked hard at it. I really did. I don't think I could've endured the pace I set for myself for very long. I really put everything I had into it. And then an interesting hap—thing happened. Back in those days we'd eng— had engineer's week in March. When the various, you know, chemical, electrical, mechanical—they'd set up displays, and the parents would come and visit. And then at the end of the week on Saturday night, they would have an engineering banquet. And that was generally held, in my day and time, in a banquet facility abo—across the street from the UARK Theater on the second floor there was a big . . .

SL: Yeah.

JY: . . . banquet room up there.

SL: Coupler's—it became the Coupler's pla . . .

[01:57:41] JY: Well, normally a teacher had to work several years to get the recognition that got him a golden chicken award. Every year, in each department, they would offer the golden chicken award to the most deserving teacher, that is, the most difficult teacher.

SL: Yeah.

JY: In my first year, I got the golden chicken award. [*SL laughs*]
But that's not the end of the story. [*Laughs*] I got an
addendum to the award. And the golden chicken was a little
thing with a golden chicken on a pedestal. It was a real
significant thing. There were no . . .

SL: Yeah.

JY: They gave me an addendum to the award in that they hauled
out a shovel with a ribbon on it full of chicken shit. [*SL laughs*]
I got that, too. I—[*laughs*] so I was not your typical, easygoing
teacher that would let the kids get by with just anything. I'd
been there recently teaching out of the same books that I'd used
as a student.

SL: Well, yeah.

JY: So I was pretty demanding.

SL: Yeah.

[01:58:39] JY: And I was using the standards that the veterans had
been subjected to. I could remember what we were subject—
and the department was headed downward in their standards. I
could see that. So I was not gonna compromise. I wa—I taught
by my early standards. That's how I got the award. I thought
that was kind of an interesting . . .

SL: Yeah, that's great. I—you were definitely shoveling it out to the

kids, weren't you?

JY: That's right.

[01:59:06] SL: So do you remember who the president of the university was back then?

JY: I can remember the dean of the engineering school. I can't place the president at the time. I should know, but it's . . .

SL: Okay.

JY: . . . out of my mind.

SL: Okay.

JY: The o—the EE department was a fellow named Newton Barnett. He and I hit it off very well. In fact, because of his liking to me is how I got the job of teaching in the first place. Yeah, he and I were very, very close.

[01:59:40] SL: So how long did you—were you an instructor?

JY: I was the instructor for a year because I wanted to get back into developing things. But unusual thing happened. I was promoted to assistant professor at the end of one year.

SL: That's . . .

JY: That's unusual.

SL: Yes.

JY: Usually it takes five years or so.

SL: Yeah.

JY: And so and that's what he thought of me. But I wanted to get back into aviation, and I went from there to a place calls Collins Radio. And that's where I got to combine my engineering with aviation 'cause they were the foremost supplier of electronic equipment to the airlines and all of that sort of thing. So that's where I went.

[02:00:26] SL: You know, so I think the—as a child growing up, the airplanes—the whole aviation thing was like—tech—the most advanced technology . . .

JY: Yes.

SL: . . . at the time, and so I think it's quite natural that you were attracted—and everyone. I mean, it was a big event when an airplane flew over.

JY: Yeah, well, when we get on to later life, not too much later, and we talk about the golden age of air racing. It was—the national air races were like the Indy 500 is today if we get around to that. That'll explain this airplane and that one.

SL: It's like the NASCAR of . . .

JY: Yes.

SL: . . . of that time. [02:01:12] Okay, so you leave the university, even though you'd already become an assistant professor.

Which I guess . . .

JY: Yeah, but I didn't—I didn't acce—I went on.

SL: Yeah.

JY: But I had been promoted. And if I had come back the second year, I would've been an assistant professor, yes.

SL; Which would've guaranteed you tenure?

JY: I don—I never thought . . .

SL: I think . . .

JY: . . . about that.

SL: Yeah.

[02:01:34] JY: I only knew one thing. I was only teaching to develop my skill at explaining. Also, when I left the university and got into industry, even though I'd been a very good student in math courses, I found myself designing stuff by intuition. You could design a circuit if you assumed values for certain components, and then you had little R boxes or C boxes, as we called them, where you could adjust to make it work right. I found that I was oriented toward that, and I was dissatisfied with the fact that I had left my academic life at home or back at a school. So I went back and taught myself also—taught also to reacquaint or resubject myself to the academic world. So that was the second reason I did that. Then I got back into industry, and I was back to my same old way of doin' things anyway.

SL: Just by intuition.

[02:02:41] JY: In fact, while I went to Collins Radio, my boss was one of these guys who would sit at his desk and calculate and calculate, and I'm—my job was to find applications in control systems for transistors, which were new. And I would be doing my thing, and he would say, "Don't you ever calculate anything? You should be sitting here calculating." I had an office next to him. And he was very critical of me. Well, I liked one hour of credit to get my master's degree. Iowa State University would send a teacher over to Cedar Rapids every semester I guess, or maybe once a year. And engineers would take a course. And I'll never forget the name of the course. It was Transience in Linear Systems. That's a neat name. So I took the three-hour course to get one hour of credit. My boss also took the course and several other engineers did. And there was only one A, and he didn't get it. [*Laughter*] He left me alone after that.

[02:03:56] SL: Newfound respect for his employee.

JY: Yeah. Finally.

SL: Finally. Well, okay. So you're at Collins, and you are developing radio control systems or . . .

JY: No—well, servo mechanisms parts.

SL: Servo mechanisms.

JY: Things for that. While there, another engineer, an older engineer who even had his own airplane, which was something—and he used to run an engineering operation for automotive customers over in Detroit. He said, "What general aviation needs is a transistorized, magnetic controller for a directional gyro." And he knew about gyros. So I—in my work there, I happened to be helping a rather helpless engineer to develop a new slaving system for the Collins slave directional gyro. I would draw him a schematic, he'd go out and work, and he became my technician, more or less. And I pretty well got—had started designing my magnetic slaving system that I later on finished in my backyard down in Texas. I moved away from Collins to avoid a conflict of interest. So I got down to Texas, and I did my part, but my engineering friend, who also moved to Texas, he never did do his part. [*Airplane noises*] I became aware of a company in Dallas or in te—in Houston, I mean, developing the first new gyros for general aviation to replace World War II surplus gyros. Up until the early 1960s, all airplanes new—built new had World War II gyros in them. [02:05:50] Somehow I found out about this company, and I made contact with 'em to see if they would buy my slaving system for the new directional gyro they were developing. Yes,

they did, but a contingency was I had to become part of the group. So now I'm in the development of gyroscopes for airplanes in the late 1950s. That was my real encounter with general aviation 'cause now the market I'm sharing now is not the airline market, but general aviation in general. Beechcrafts, Mooneys, and all of those. So that was my real venture fully into general aviation.

[02:06:33] SL: So where was Collins?

JY: Cedar Rapids, Iowa.

SL: Cedar Rapids, Iowa. Okay.

JY: And they also had a facility in Dallas.

SL: Okay. But you were up in Iowa.

JY: Yeah.

SL: And then the name of the company that you, I guess, sold your servo to?

JY: Aviation Instruments.

SL: Aviation . . .

JY: It was a real small start-up company. And . . .

SL: And they were where in Texas?

JY: Houston.

SL: Houston. Kay.

JY: I maintained my work in Dallas. I didn't wanna live in Houston.

The major stockholder in that company was also the major stockholder in another startup company up in Dallas. So I was able to have an office up there, and I would go down to Houston about every other week for a day or two.

TM: Watch that scratching there.

[02:07:18] JY: An interesting . . .

SL: What.

JY: . . . occurrence. I'd been there two or three days, and we came to the end of the day, and I was in the engineering office talking to my associate down there, my counterpart. We were trying to decide whether to come back the next day and finish what we were doing or come back that evening after dinner and finish. I said, "Well, I've never ridden on the new Lockheed Electra that Braniff has recently acquired. Let's take the ten—I'll take the ten o'clock Lockheed Electra flight back to Dallas." About that time, one of the employees came by and says, "Why don't you come across the field and get some free simulator time"—in what they call the link trainer of the day. I thought, "That's great. I'm working on an instrument rating. I'll just come back tomorrow, and I'll go across the field and get this free time." His wife was an instrument instructor on the simulator across the field at Hobby Airport.

SL: Okay.

[02:08:25] JY: So I did. Come out of the hotel the next morning, and the headlines were "Lockheed Disintegrates over Buffalo, Texas." Three of those airplanes over the course of a couple of years had this problem that they were tryin' to figure out. And so I was almost on that airplane, and we wouldn't be havin' this conversation.

SL: Now when they say disintegrate, what do they mean? It just falls apart?

JY: It falls apart but it—what happened, it had—you've seen a C-130.

SL: Yes. The cargo . . .

JY: It has those huge engine, the cells, and huge propellers.

SL: Yeah.

JY: They were first on the Lockheed Electra. So it was flexing in the wing. A gyroscope that's spinning, if you try to tilt it this [tilts flat, upright hand forward] way on its axis, it will go that [turns flat, upright hand to the right] way. There's 90 degrees of difference in the resultant and the input. So they would set up a gyroscopic mutation. It would start doin' this [moves hand in a rolling, twisting motion] real rapidly and rip the wing off. That's what happened.

SL: Wow.

[02:09:27] JY: They lost three airplanes before they finally figured that out. The first thing Braniff did, or the FAA made 'em do, was slow the airplane down figuring that'd be—would be a part of it. Well, that didn't help. So I was that close to bein' on that. [Child's voice in background] I've had other near misses in aviation, but that was an interesting . . .

SL: That wa—was that maybe your first that . . .

JY: Yes.

SL: Yep.

[02:09:53] JY: Oh, it was funny my reaction. I came out of the hotel and looked at the headline—or the motel. I thought, "Boy." I didn't have an emotional occurrence. It was already history. The adrenalin didn't flow. I'm looking at this thinking, "I was lucky not to be on that. I wasn't on that." Yet it didn't just—like a near miss where a bear jumped out in front of you on your path and you . . .

SL: Yeah.

JY: . . . the adrenalin—it wasn't that way.

SL: Hmm.

JY: It was already history. At least I don't remember the adrenalin flowing.

[02:10:29] SL: Okay. So you go to this smaller company. And how long were you there with them?

JY: Oh, several years. There was an individual where I finally made my headway in aviation west of Fort Smith in a town I hate called Mineral Wells.

SL: Okay.

JY: You've heard of Mineral Wells?

SL: No.

JY: Well, it's west of Fort Worth forty miles. This individual named Don Mitchell, who'd been chief engineer of Motorola during the war and was credited with developing or of being the lead engineer on developing the walkie-talkie and . . .

SL: Right.

JY: . . . other things—after the war, Motorola though briefly about getting into general aviation, and they began developing a product. They decided not to—they gave him this navigation product, and he moved to Texas and went in business for himself setting up what they called Mitchell Industries. A gadgeteer over in Dallas, not an engineer, but a gadgeteer, brought him a real crude autopilot design. It was terrible, but he could sell it at the low end of the market, and it had its place for a li—short period of time. Well, I went over to see him once when I was living in

Dallas and working for the company in Houston to see if there was anything we might do for him. And he was trying to steer an airplane from a signal derived right from a compass combined with a simple little ray jar. [02:12:07] I made a note of that. Went back to hou—you know. Finally I moved to Houston when—shortly after I moved to Houston, Beechcraft had a requirement to run a drone from an incline jar, as they call it, with—combined with magnetic steering. So I figured out a solution to it. So we called Mitchell and said, "Hey, we've got a solution to your problem. We thought we might do a joint venture." Well, he flies down to Houston in his company airplane. And in the meantime I had incorporated this into the autopilot in our company's SN 310. I made the guts of it be oriented to this instead of the other signals that it would normally use. He gets in the airplane with us. He says, "Turn to north." That was a hard thing to do is turn to north. It turned to north, rolled out, he said, "I've seen enough." I mean, that was it. So instead of getting to pursue a joint venture, he decided he wanted me. So he stole me away from the other company, and that's how I got into the autopilot company. [02:13:12] And then I got my chance to design a modern, state-of-the-art autopilot. His company would've gone under in

a couple of years if I hadn't gone there to design for him a modern autopilot. That autopilot became the biggest autopilot seller in the United States.

SL: Well, do you . . .

JY: That Century III.

SL: Ge—did you retain the intellectual rights to that?

JY: Wh—no, I was his employee.

SL: You were just an employee.

JY: But we in turn—he and the general manager and I ended up buyin' the company from him on a note. Then we sold it a couple of years later. And that's when I moved my work to Arkansas. And I retained a—an employment situation with the new owner for a while and developed autopilot stuff up here in Springdale for the new owner of the company.

[02:14:04] SL: So is that basic system still deployed today?

JY: [*Laughs*] That wa—it is now fifty-some-odd years old. There are systems of that sort still flying around, but we been in the digital world for half of that length of time.

SL: Right.

JY: But there are—it flew very good. It flew as good as modern autopilots, but it was an analog autopilot. And it had to be in a container about this big by this big by that wide to dissipate the

heat that the old-fashioned transistors generated in driving the servo actuators. In the modern world, we don't have that problem. We use stepping motors, and it's a totally different world. [02:14:53] So even though quite a number of my old autopilots are still flying, they're obsolete, but they still fly good in airplanes where they've been for all these years.

SL: So just kind of go from one side of the autopilot electronics to the other side. I mean, I'm assuming that it's aware of its direction, aware of its speed, aware of its altitude, aware of whatever forces . . .

JY: Most of all it has the dynamic ability to fly the airplane smoothly and with stability—that's where—that's what it's all about. It flies in a straight line. You don't want it to be doin' this. And in pitch—you don't want it to be doin' that. You want to go like an arrow is shot. And that's a measure of a good autopilot.

[02:15:51] So I stayed with them long enough to design some very interesting new products for them. Several years I did. And then I—they quit building airplanes in the late [19]70s. Cessna's single-engine line of airplanes totally shut down. Nothing. So the company that by now are grown to five-hundred and some odd employees—that's a pretty good . . .

SL: That's a big . . .

JY: . . . size autopilot company.

SL: Yeah.

JY: Shrunk down to about thirty employees overnight.

SL: Wow.

JY: 'Cause they quit building airplanes, and our business was OEMs, you know, airplane manufacturers, not the aftermarket. They offered the company back to me if I'd just sign a piece of paper. They wan—they just wanted to go away and leave it. The company was—Ito Air was the name of the company. The Ito Corporation dates way back to the early days of—they started off building floats for sea planes. Then they got into sonar, and they've grown immensely in that field since then. But they wanted to get rid of it. They just wanted to walk off and leave it, and all I had to do was move back to Mineral Wells, which I didn't wanna do. They weren't manufacturing airplanes, and I didn't think the aftermarket could sustain us.

SL: Right.

[02:17:14] JY: But it did. It sustained another company of—our employees had—before that happened got across the field to start another company copying some of my designs, and they thrived on the aftermarket. They had—and they made a success of it, but they had a terrible autopilot. But they survived. Now

that's the story of autopilots. There's still a business here, the company that survived, but they're just more or less maintaining the . . .

SL: Their—what . . .

JY: . . . products that . . .

SL: . . . it's already out there. Yeah.

JY: . . . they built in the past. So I quit doing autopilot work in the late [19]70s, but up until then I was spending half of my time building airplanes anyway. And in 1979 we completed the airplane you see there. And . . .

[02:18:01] SL: So now when you say "we," is that you and your brother . . .

JY: Well, I had a helper or two.

SL: You did.

JY: Or—so I said we. I did, you know.

SL: But before we totally leave Texas, why didn't you wanna live in Mineral Springs?

JY: Mineral Wells.

SL: Mineral Wells.

JY: I didn't like the town. It was dirty, it was just—I just didn't care for it. No. It was not a climate I liked. That wa—Fort Worth was okay. The further west you go, the more desolate it gets.

SL: Yes.

JY: You go to Weatherford, the first town west of Fort Worth, that's okay, but by the time you make that next fifteen miles, it's startin' to be a little too desolate for me. I didn't like the—I like lots of green grass and trees. In fact, my first job out of school was with Hughes Aircraft in Tucson. I stayed there only a year 'cause I didn't like the desert. So . . .

[02:18:54] SL: That was fresh out of high school?

JY: What? That was out of the university.

SL: Ah, the university.

JY: Yeah.

SL; What did you do for Hughes?

JY: I designed contri—instrumentation systems for guided missiles. My second job was Phillips Petroleum. I wanted to get back in this part of the country. And there I developed instrumentation stuff for equipment that—I'm go—you know, have you ever heard of a mass spectrometer?

SL; Yes.

JY: Well, I was designing instrument sys—instrumentation to go with a mass spectrometer while I was over there. That was before I went back to the university to teach. And then I went to Collins Radio. And the rest you've already got. When I went to the

autopilot company and then came up here in [19]70—[19]69 is when I brought my work back here and had the hangar built across the str—of the field, where I am now, where I am still.

[02:19:58] SL: So are any of the designs that you developed, are they—are—have they been re—have they been adapted or repurposed to the digital world? I mean, it . . .

JY: No. I built airplanes for several years. Back in the late [19]90s, a digital programming genius kept coming by my facility wanting to do something in general aviation. This guy was absolutely brilliant. Finally one day, he came by with a solid-state rate gyro. Up until then I'd been puttin' his name on a stick-em pad and puttin' it on the wall so I wouldn't forget it.

SL: Right.

JY: I said, "We could do something interesting with this." And it was not long until we were developing an autopilot. So by the year [19]99 or early 2000, we incorporated and established TruTrak Autopilot. And it was the most popular autopilot of its day. And it was the best flying autopilot, and still is the best flying autopilot in the modern digital world that it serves. But he burned out about five or six years ago, and he didn't think United States would survive. He was one of those extremists . . .

SL: Right.

JY: . . . that didn't believe in taxes. Brilliant guy, but boy, I used to argue—friendly arguments with him.

SL: Brilliant but had blinders.

JY: "If you lived out on a country road and you needed a road grader, there's no money for it for anybody in private industry. How you gonna do"—"Well, I guess we're gonna get together and buy one." I said, "What about World War II? We had to do it." "Oh, we'd've done it on volunteers or gifts." I says, "Like hell we would've." [*Laughs*]

SL: Yeah. Right.

JY: We couldn't even do it by selling war bonds.

SL: Right.

JY: Without going heavily in debt. He was that kind of guy. He believed the United States was terminal. And so where do you think he is today? In Belize. He moved to Belize 'cause he didn't like payin' taxes, so now he's living happily in Belize. So. That . . .

SL: I've got a friend that is there.

[02:22:12] JY: We were—we had it so good in the first decade of this century that I kept saying to people, "It's too good to be true." And it was. Finally another company that was sort of a

competitor—they were into the world of displays, electronic displays like you see in modern panels, you know . . .

SL: Right.

JY: . . . video screens . . .

SL: LCDs and LEDs.

JY; All of that. Ve—but—little television pictures with your—what the airplane is doing shown, and it's a display about this big.

SL: Right.

JY: It'll show the artificial horizon . . .

SL: Yes.

JY: . . . and all of that.

SL: Yeah.

JY: And they were well financed so that they finally incorporated an autopilot, and their prices were very low. And they cut into our business immensely. Then another little company comes along to be in the low-cost display business, a company called Garmin.

SL: [*Laughs*] Yeah.

[02:23:06] JY: Okay. They developed this display to compete with this other company called Dynon. And we were the autopilot for the Garmin. Then Garmin, being greedy as they are, decided they'd build their own little actuators and have their own autopilot 'cause they're tryin' to destroy Dynon.

SL: Right.

JY: So with Garmin tryin' to destroy Dynon, Dynon already having virtually destroyed True Track, True Track is on thin ice right now.

SL: Right.

[02:23:35] JY: But the general manager offered me an opportunity to get out. I'm not the right person to run a company now. I was the right person to create it . . .

SL: Yeah.

JY: . . . and design it initially. It was a digital autopilot. But I would fly with the digital guy and say do this, do this, do that, and I would tell him what to do to make the airplane fly right, and it worked out great. And the—so we are—we can fly certain airplanes that no other autopilot today can fly. [02:23:06] Our most recent airplane that we did when I was still owner of the company—not at—75 percent owner was this big Russian biplane called an Antanov. It was an airplane the Russians built right after World War II because they were afraid the Chinese were gonna encroach their borders.

SL: Sure.

JY: And this is a big monster biplane. It's still parked down the street. And the—a company in Israel got a contract to build

autopilots for 110 of them. So we developed a special autopilot to fly. And I was the one that finally made it where it would, in fact, accomplish the maneuvers that had to be done. That was the last thing I ever did with autopilot development. That was in May a year ago, and now I came down with a cancer shortly after that. [02:24:56] And then after I'd had my cancer operation, the general manager came to me and said he might just buy me out. I sold it to him for about the amount that it would make in one good month back in its prime. But I needed to be free of it. I couldn't—there was just no place for me to be. A good analogy—when the Tysons were driving back to town from Hickory Creek.

SL: Yeah.

JY: And they cross the railroad track and were killed.

SL: Yep.

JY: Their wild young kid, Don, took over the company. He was the right person for the time.

SL; Right.

JY: Look what he did with it.

SL: Yeah.

JY: John Tyson, who started by hauling produce up to Kansas in a pickup truck . . .

SL: Right.

JY: . . . you know, he'd done wonders. But he was not oriented toward what happened later. So that's an example. I was to True Track as John Tyson was to the Tyson company. I was obsolete. It takes a young, digitally-oriented person not afraid to venture out. So I'm free of it. So we had to get to that point in life. And I been free of it since last fall.

[02:26:03] SL: So but those—that patent on your last—latest project, that's still . . .

JY: No. There was no patent on that. It was just solving the ability to fly one particular kind of airplane. There was a patentable device in it, but it wasn't worth pursuing. Most of the patents I've got were just a doy—just for the sake of having 'em, and I've got quite a few patents but we—I've never been able to cash in on one, really. I had one I should've cashed in on, but the patent attorney that wrote the claims didn't do a good job and I [*SL laughs*—I was the first one to build a very unique little—a direction selector to go on a air-driven gyro li—that we developed in Houston. Very unique device. And then shortly thereafter, years—or two years or so after, others began to copy it. I thought, "Well, I got a gotcha here." I read the claims. I thought, "No, this isn't gonna work." They weren't written as

they could've been written, so I just said the heck with it.

[02:27:07] So I've never really collected anything on any of my patents.

SL: Well, I would think that especially that latest work would apply to the popularity of drones now. It seems like . . .

JY: The modern airplanes?

SL: Uh-huh.

JY: You're really better off not to patent it. You're better off to just keep the technology to yourself 'cause this company Dynan was owned by a very wealthy guy, and he would—if he wanted to use somethin' you had, he'd challenge you. He says he could afford to fight the patent battle. You can't.

SL: Right.

JY: It didn't work.

SL: I understand that.

JY: So I'm free of the autopilot company. I've got enough to sustain me, I hope, until my days are over, which won't be very long.

[02:27:55] SL: Oh. Well, so do you do anything at all in your shop anymore? Do you . . .

JY: We have a machine shop that was there—I put it in. The machine's new when we built the hangar. It's being leased to the new owner of the autopilot company. They have access to that

machine shop, but I still have access to it. So I occasionally go in there and do things in the machine shop just for the enjoyment of doing it. I make things for people and friends, you know. My friend Dr. Pruitt is building a very complex kit of a scaled-down P-51. On several occasions I've solved some little problems for him and made him special pieces that he needed. And I enjoy that. I just do it for the fun of doin' it. I don't charge for it.

[02:28:51] SL: Yeah. Well, are there model clubs in the area that get together and fly their models or . . .

JY: I used to be part of that. But when I got into building real airplanes I got away from RC models. We used to fly RC models at my brother's airport that you made . . .

SL: Yeah.

JY: . . . reference to. And that was the model field . . .

SL: Gathering spot.

JY: . . . that we flew from.

SL: Yeah. Yeah.

JY: Then we moved up east of 45—of 265 up towards Springdale, and I still did a little. But then I was so heavily involved in building airplanes that I abandoned RC models.

SL: I've actually been out on that field while—when there were

models flying.

JY: The one up on 265. I used to fly my Piper Cub—see the yellow Cub sittin' over . . .

SL: Uh-huh.

JY: I [*laughs*] used to fly it in and out of that little field.

SL: [*Laughs*] Wow.

JY: It was pretty small.

SL: It's pretty small. Yeah.

JY: Yeah. I would do it occasionally. Maybe once or twice. That was not a good thing to be doin'. 'Cause there were some trees I had to get over to get outta there.

[02:30:01] SL; So can you just drop a plane wherever you wanna drop it?

JY: Well, if the owner of the property is okay with it, you can. So I said, well, the model club—it belonged to the city. If the city'd known I was doin' it, they'd say you can't do it.

SL: Right. [*Laughs*]

JY: But the model guys just loved it. Now they fly down here south of Highway 16—you know where the road starts to go north there's a traffic light, and you can go south from there on 15th street.

SL: Yes.

JY: They have a model field down there where the aluminum . . .

SL: Yeah.

JY: . . . wheel company is . . .

SL: Yeah.

JY: Superior? Is that—I don't know what they're called.

SL: Yeah, I know what you're talkin' about.

JY: It's right near there they have a model field. At their request once, they were having a gathering, and I flew the Cub in there for them at their request. [*SL laughs*] So yeah, that—I used to have a lot of fun flying that Cub around. I still have it by the way, and still fly it.

SL; Well, you mean this one over there or . . .

JY: No, I have one just like it.

SL: Oh, you do?

JY: I keep it over at Siloam Springs.

[02:31:13] SL: So are all three of these planes, the mystery plane and this Mulligan—are . . .

JY: And the Travel Air.

SL: And the Travel Air. Were those all racing planes?

JY: No.

SL: No?

JY: The—well the Travel Air was. . .

SL: A passenger.

JY: . . . electric biplane. Although the first women's air race in 1929 was won by a Travel Air biplane. But that's the state-of-the-art that existed in [19]29. And so the only two air racers would be the Mulligan and the Mystery Ship. And I did not build the Howard, but I did a lot of work on the Howard. It's partly mine, but it's a restoration.

SL; Okay.

JY: And then other airplanes of my creation are not here, but the ones that I have that are part of a trust that belo—they belong to is the Howard, the Cub in Siloam Springs, the Mystery Ship, and the Travel Air biplane. And then I have another airplane I built most recently back in [19]97 that looks a lot like this, only it's smaller and carries only two people. And it's an original design of mine. And it looks like something that should be in here, but it is not.

[02:32:50] SL; Well, do people buy the designs and build off of your design?

JY: I don't sell plane plans, no. No. I don't wanna get into—never wanted to be into that. I drew my own—all I had to build this airplane was a modeler's 3-view of it that was very accurate. So to build it, there were no drawings of that airplane. I had to

create all my structural drawings to build that airplane. And it's very accurate to the original airplane, dimensionally and detailing. It's very accurate to the original, as the red-and-black one is very accurate to the original. All the dimensions exteriorwise are the same.

[02:33:31] SL: So let's talk about the Mystery plane for a moment. How long did it take you to build that?

JY: It took only, in years, something less than three years. Two years and nine months, something like that. And I had just finished the biplane in [19]76, and I flew this red-and-black [*phone rings*] airplane in [19]79.

SL: Is that your phone?

JY: No, you shut mine off. It i—it's ringing.

SL: It is. I think you turned it . . .

TM: Hold on a second.

SL: Yeah, let's pause.

TM: Pause the light . . .

[Tape stopped]

[02:34:10] JY: Took about two years and nine months and probably about five thousand man hours, roughly. This one took also two years and nine months, but eight thousand man hours. My brother and I started it together. He and I worked together on it

for about six months. My eight-year-older-than-I brother. He was a little bit of a bully at times. [SL laughs] And I had some things I needed to get back at him at, but if you put two people together, one's gonna be dominant. He wasn't. [SL laughs] I was. He realized as we went to about six months—we made a huge amount of progress. We had it structurally sitting on the landing gear, the wings were structurally on it but not covered, the tail was structurally on it but not covered, and all of that in a little over six months. It took another two years to do it beyond that point. And in the meantime I hired a young man, a young guy about twenty years old, to be a helper. I had to explain to him what everything was, and he was very capable, and he helped me make parts. [02:35:15] So anyway, I had him and then my brother put some time in on it, and then we had a person who worked for my brother who had been building Stearman wings like that airplane there. In fact, he built the wings for that Stearman. He built quite a number of those. He was an old retired navy carpenter's mate. So I had him build these, but every day I'd have to go down and show him what to do 'cause these wings are so different he didn't know what to do. So I was using his hands and my mind. And then partly—when it came to putting the plywood skin on it—you can see it's got

compound curves in it.

SL: Yes.

JY: That blew him away. I had to do all that. [*SL laughs*] I did that, and he would stand there and—handing me things. So I did most of the work on this airplane.

[02:36:04] SL: Okay, so when you say something is structurally in place, just what makes up that structure. What . . .

JY: Well, the whole frame, if you'll look under the tail back there. See all the tubes . . .

SL: Yeah.

JY: . . . running?

SL: Uh-huh.

JY: The whole fuselage is tubular. You can see tubes up . . .

SL: Aluminum.

JY: . . . in the front. All the structure to this airplane goin' all the way back is a tubular truss, a tubular, steel truss.

SL: Steel, not aluminum?

JY: Steel.

SL: Steel.

JY: Yes. And so then outboard of that, you put the upper corner is a piece of wood with a milled curvature to it. The bottom is wooden stringers in formers, and the side's got a a stringer tube

goin' down the side, and it's all covered with Dacron and painted. [02:36:58] The front is all plywood. In fact—well, I can't take you over there. [*Laughs*]

SL: That's all right.

JY: It's all plywood skinned. Up to the firewall, then it's all sheet metal.

SL: Right. Well, that's interesting that—you know, you—I just never knew really what the infrastructure was beneath the skin. I never knew the skin was made out of Dacron, painted Dacron.

JY: No, the fabric was—yes.

SL: Yeah.

JY: Now this airplane—all the skin on the fuselage is plywood. That one is all fabric. And that was an art form in itself to bend the plywood around all those curves. That was a challenge.

SL: So was it—how thick is the plywood? Is it three quar . . .

JY: 3/32

SL: 3/32. So it's a little over—it's ha—it's not a quarter inch, it's . . .

JY: No, this—the wings up there are 3/32 also.

SL: And that's—you just want the rigidity of the layered wood, but it's gotta be lightweight so it . . .

[02:38:01] JY: For this kind of an airplane, yes, but for an airplane like the Stearman behind us, you want fabric 'cause you wanna

keep the weight down. This airplane has a very heavy wing loading, but it's got a lot of power.

SL: So in the instance of the Stearman, is that pretty much—I mean, is that the way planes began?

JY: No, no. You're way—planes began way, way, way, way back before that. There were very crude—by the time we got to 1929 and the Travel Air, which you've only seen a picture of till now—the World War II—I mean, World War I we had an old airplane trainer called a Jenny. They built lots of those to teach people to fly in. Then in combat, they had the World War I fighters like the Fokker D.VII, the Fokker D.VIII, the Spad on our side, the Nieuport, various airplanes on our side, and they were all biplanes. And there was a real proliferation of aviation technology during World War I. Then after the war, aviation kinda got in the doldrums through the [19]20s. They didn't make a whole lot of progress then. Then by the [19]30s they really started to make progress. They had built airliner—Boeing had built an early airliner all out of aluminum skin.

SL: Wow.

[02:39:29] JY: And then Douglas had built the DC-3 or the DC-2—do—one, two, and three. And the DC-3 became a widely used airliner, and a very widely used troop transport in World War II.

So the Stearman came along in the mid-[19]30s, and Boeing bought the rights to it and began manufacturing it in Wichita. And that is a highly tuned, very modern—that's the most modern biplane ever built. It was used only for a trainer. And anything beyond that would not be a biplane. But that Stearman, they built eleven thousand of those during World War II. So that's the end of the biplane era, there. And that's as far as the biplanes got. So.

SL; But they were made out of wood and . . .

JY: Tubular steel frame . . .

SL: Oh.

JY: . . . on the fuselage.

SL: Oh, is that right. Okay.

JY: It's got stringers that support the fabric made out of aluminum. It's covered with Dacron. The wings are covered with fabric, also, and that's pretty much it. It's got sheet metal covering up front.

[02:40:48] SL: It all appears to be so fragile.

JY: It's adequate in strength for what it has to do. When you're flying through the air, you need strength where you need it, and the strength has to be able to tolerate what it is supposed to. Now you put it out on the highway and try to encounter an

encounter with a BMW [*SL laughs*], the BMW would win.

SL: Yeah.

JY: Especially a big diesel truck would win. So it's strong for what it does. [*Helicopter noises*]

TM: Hey, Scott . . .

JY: Now we never . . .

TM: . . . let's stop for just a second.

JY: . . . talked about very significant thing. I guess it's not too important. But the ree—the significance of these two airplanes relates to what we call the golden age of air racing, have I mentioned that to you?

SL: Yeah. Just a moment. Let's let this guy go over.

TM: It's a helicopter landing. It could be a little bit. Let's take a break.

[Tape stopped]

[02:41:42] JY: Here's an amazing thing. This watch for thirty dollars [*SL laughs*], crystal control—it does so good that you'd have to wait several days or weeks to see it move one second. If you contracted with a facility to guarantee you a product like this, no tellin' what you'd have to pay for it.

SL: Right.

JY: But this crazy thing—every so often I'll zero it, but months'll go

by, and it'll still be within five seconds. It's amazing how accurate it is.

SL: It is amazing. You know . . .

JY: Hell of a lot better than a Rolex.

SL: [*Laughs*] At thirty bucks? Yeah.

JY: Yeah. T—I don't care what it—it's got a nice band. I don't . . .

SL: Yeah.

JY: . . . care what it looks like.

SL: Yeah.

JY: It's just that it works.

[02:42:31] SL: I forgot to ask you back when you were in Texas and you had the wind charger to power up your electricity there, did you ever build one of those crystal radios?

JY: Oh, no. I was too young. I was only in the second grade. That was way beyond the level of a second grader. But in answer to your question, I never did build any electronic device. In fact, my brother, Bill, the in-between brother, he had a very good friend who was one of those guys. A real gadgeteer, a real genius type. You know, they were highly regarded. And brother Bill said, when I said, "I'm gonna do electrical engineering," he says, "You can't do that. You didn't do electrical things as a kid." Well, that's not how it worked out. [*SL laughs*] I was

working for him in the wheel aligning shop. I was rebuilding the front end of a [19]41 Chevrolet that belonged to a professor in electrical engineering. He and I talked the entire day, and he convinced me that the engineering program was designed to start from scratch. I had not needed to have been an electrical gadgeteer in my youth. But my brother, he was convinced that if you hadn't done that, you're not gonna make it in electrical engineering. Sure glad I rebuilt that guy's front end.

[02:44:07] SL: Yeah. [*Laughter*] Yeah. Well, it takes a certain analytical mindset to do the engineering . . .

JY: Yeah.

SL: . . . field, I think. My son got his civil engineer degree from Lehigh and—he got his civil engineering degree from Lehigh up in Pennsylvania, but he also got an English degree at the same time, so he loved 'em both. He's an engineer that can write.

JY: Well, to write has to be based on your influx of ideas. You can't force writing on just anybody takin' English.

SL: Right.

[02:44:45] JY: Which brings me to my point. My mother, as I've already told you, was an English major, and I grew up in a home where the grammar was perfect or very good. Why do I need to take English? Diagramming sentences seems to be the dumbest

thing I ever [*SL laughs*] heard of.

SL: Lots of people would agree.

JY: And I hated English. I had—everybody takes freshman English, or used to when I went to the university, and I dreaded that. And first semester was mechanics of the sentences. Second was writing essays. I didn't have anything to write about. [*SL laughs*] You can't force creativity on a person. I had nothing to say. So I found that difficult. I guess [*laughs*—I made two Bs in my freshman year. One was English. And I didn't like memory work, so chemistry I made a B in it because there was too much memory work . . .

SL: Charts. Yeah.

JY: . . . and I wanted problem-solving work. So I did better in math than I did in chemistry.

[02:45:54] SL: Okay, so you start building these planes after you've left the gyro design work?

JY: Well, after I had cut back on my instrument—autopilot instrumentation work. I was still working for the company that had bought our company out by doing special designs, which I did for two or three years after we sold. At least two years. But then I would spend part of my time out at the hangar, as I said, building the first airplane, the biplane. I was employed by the

autopilot company while I was doing that in the same building. Sometimes I'd get confused on which side of the wall to be on. [02:46:44] Then I think I already said how the original designer of the Mystery Ship started to build another one with some elderly friends of his. And he died, and the project fell apart, and I became the owner of some—a few drawings and the hardware. I think we already said that. So since I was the owner of a Travel Air and interested in air racing, I decided to build the reproduction of the Travel Air Mystery Ship. And I think the story on that airplane is quite interesting. It was built by the Travel Air corporation, and I think I covered this, that built biplanes and airplanes like the one over there, early airplanes. But one of their engineers, as I said, designed this racer in the winter of [19]28 and [192]9. And Walter Beech, the head of the company, who would later—did Beechcraft—agreed to build it as a PR thing, and they would enter it in the pylon—unlimited pylon race at the National Air Races held in Cleveland, generally, on Labor Day weekend. Heretofore the unlimited pylon race had always been won by the army or the navy and their big, antiquated, high-powered biplanes. And I think I also said in passing that the Mystery Ship was built in a sealed-off part of the factory, so the press dubbed it the Mystery Ship. It

was started in May and completed for test flying in August.

That's pretty quick.

SL; That's very quick.

[02:48:27] JY: And it was delivered to Cleveland or flown to Cleveland to enter this race on Labor Day weekend, which it handsomely won. Then I said it was destroyed in 1931.

SL: By . . .

JY: An in-flight fire. It was doing some flying in proximity to the Cleveland airport when it caught fire, and the pilot was barely able to bail out before it was too low to bail out. And that was the end of the first Mystery Ship. So now I had this information and elected to build an exact reproduction of the first one because it's very significant to the history of aviation. It was the end of the biplane era that it helped bring about. It inspired Walter Beech's first product called the Staggerwing. If you put another wing right above where the cockpit is on that airplane, it would look like a Staggerwing, and so that's how—the Staggerwing was different from other biplanes in that the top wing is usually forward. They called it the Staggerwing because the top wing was rearward. And this airplane was—all you needed to do was draw a picture of a plane with a wing where the cockpit is, and you'd have a Staggerwing. So it had a lot to

do with the existence of Beech Aircraft, which is why we fly around in King Airs and such as that today and Barons and Beech and single-engine Beeches. [02:49:57] So the Mystery Ship was important. Having built one air racer, I was attracted to building another air racer, and it came to my attention that maybe I should look into building Mister Mulligan. Didn't take me long to decide, yes, I should build [*SL laughs*] a Mister Mulligan. It was the only air racer that won the cross-country race called a vintage race and the unlimited pylon race, again, called the Thompson Trophy race. It did so in 1935. And then I might've said that competing in the vintage race in 1936, it threw a blade clear out of its propeller.

SL: Wow.

JY: Which would make the engine so unbalanced it would probably leave the airplane. Because the engine mount was welded to the structure and because there were no shock mounts in it, somehow the engine stayed in the airplane, and they had a forced landing in the northwestern tip of New Mexico. The occupants were Benny Howard and his wife, and they were pinned in the wreckage. They happened to be found by an Indian who went—he was afraid to get near it, but he went to a construction crew nearby building a road, and they came and

extricated them from the airplane.

SL: Great story.

JY: The airplane was totally destroyed. And I may have said no drawings existed of it. Lots of pictures. So this is a very—and there was a very accurate three view drawing done by an amazing artist of the [19]30s. So I had all that information, and I could actually build an exact reproduction, and that's what this is. So these are two very important airplanes in the golden era of av—of racing. The two most important airplanes, by the way, the Mystery Ship and the Mister Mulligan. The two best-known airplanes.

[02:51:52] SL; So when the Mystery Ship debuted in Cleveland and beat the army and the navy's aircraft . . .

JY: Yes.

SL: . . . didn't the army and the navy want this plane?

JY: It was not built big enough to be a fighter. It's a single-place airplane. It's very small. A fighter had to be bigger. Other than that . . .

SL: In order to carry . . .

JY: Now I tell you what. You've all heard of Jimmy Doolittle.

SL: Yeah.

JY: The company had built three Mystery Ships. One for Shell Oil.

One for Texaco. The Texaco airplane is still hanging in the Museum of Science and Industry in Chicago. Doolittle did—and his crew did some mods to the airplane so the aileron control system. I don't know what they did, but it was wrong. [*SL laughs*] So Doolittle is doing a high-speed low pass at St. Louis. If you have flutter, like what brought the Lockheed Electra down, the control servos can get to vibrating, and when they do, things fly away. Both of the ailerons flew off the Mystery Ship.

SL: Ugh!

[02:53:08] JY: Now he had no bank control, but he's goin' real fast. So Doolittle pulled the airplane straight up, high enough to where he could bail out.

SL: And then just let it . . .

JY: That was one of his several near misses. He was also, at an earlier time, at Cleveland Air Races out practicing in a military biplane to do something, and the tra—the wing failed, and he bailed out of that. So he was a very fortunate man. He also [*airplane noises*] survived the trip to Japan in the B-25. So anyway, the significance of the Mystery Ship, back to Doolittle, he said it was one of the best flying airplanes he had ever flown. And later in life, he refle—he named the best airplanes, a group of his favorite airplanes, and he said the Mystery Ship, as you

see over there, was one of the best-flying airplanes he'd ever flown. That's why I talked about Doolittle again.

[02:54:15] SL: Yeah. So what are you up to n—oh, what about your wife now, your second wife, what—how did y'all meet?

JY: Hmm? How did we meet?

SL; How did you meet your second wife?

JY: Well, she was hanging round the Springdale airport and had been taking a few flying lessons. And someone brought her over to my hangar where I was building the Mystery Ship.

SL: Ah.

JY: She saw the Mystery Ship, and I—phrasing it as I would, anyone who could fondle something like that couldn't be bad. [*SL laughs*] You know, I think it had a lot to—she fell in love with the Mystery Ship, and I just came along . . .

SL: I see.

JY: . . . as a byproduct.

SL: Yeah.

JY: She didn't even know I was the head guy around there I looked so trashed out. [*SL laughs*] You know, I was wearin' old . . .

SL: Overalls and . . .

JY: What were the knit clothes you used to get, the . . .

SL: Yes. [*Airplane noises*]

JY: That kinda stuff. And or else a jumpsuit. I probably had a jumpsuit on. So that's how we got acquainted was she came to the hangar and saw me building this airplane, and she was really into airplanes so . . .

SL: Love at first sight on the airplane.

JY: That was—yeah, that was it. It was the airplane, not me. [*SL laughs*] That's a fact.

[02:55:38] SL: Well, maybe you were the icing on the cake.

JY: Indirectly, I couldn't be all bad to create something like that.

SL: That's right.

JY: That sort of thing.

SL: That's right.

JY: I got some benefit in the thinking.

SL; Well, you know, the times that I've gotten to visit with her, she seems totally familiar with aviation history.

JY: Yeah.

SL: I mean, it's just—I don't know if that's . . .

JY: Well, she is . . .

SL: . . . your influence or if . . .

JY: Yeah.

SL: . . . she already had that . . .

JY: Well, I used to go to fly-ins before she came into my life, and I'd

be kind of aloof, off to myself, thinking about things. She claims that she's responsible for the fact that I interact with people now, that [*SL laughs*] I say more. She says—course she never met a stranger. If my daughter calls me and I run out of words and she runs out of words, I hand Ada the phone, and they can talk for an hour.

[02:56:26] SL: [*Laughs*] So she taught you how to be socially correct, I guess.

JY: She tried.

SL: She tried. I think she's done a pretty good job.

JY: Well, eh. Up to a point. If I've got something—I don't interact all that well. If I've got something to describe, I thrive on describing technical things. I don't know. I used to give a lot of talks on autopilots. I traveled around the country to EAA . . .

SL: Yep.

JY: . . . gatherings and do that. I enjoyed that.

TM: Do you want some water? I see you lookin' at your water there.

[02:57:06] SL: So what do you think is the next big thing in aviation? Where do you see it heading? Where—what . . .

JY: Pilotless airplanes and things that fly. That's the next—and it's here, but it's—the technology is moving so fast it's unbelievable. It's just unreal. And I saw—where did I see this? I guess it was

on TV. It was on *60 Minutes*. This guy had this radio-controlled drone thing. We'll call it a drone. And it's sittin' right here.

He—and it's turned on. It's holding itself at a point. He gets ahold of it and walks about ten feet away and lets go, and it goes right back where it was. It remembers where it was.

There was an opening in the trees just barely big enough to have fly the thing through there. Initially he had to have flown the thing through there steering it manually, I guess. But now it remembers where it had flown through there, so it could fly back through there and miss the trees. It remembered the path that it had flown. They've got things happening right now that are unbelievable. And of course, here I was doing RC models back in the days when they were so crude. It's like comparing a Model T with a BMW now how far aviation has come. So that's where it's going. It's . . .

SL: Pilotless.

JY: . . . going into pilotless stuff. [02:58:52] And you combine that with how far photography has gone, and cameras have gone, and I don't know. Wha—we're—technology—it's hard to believe this. As we speak, technology is moving faster than it has ever moved. Yeah, you'd think it moved pretty fast in days gone by when we went from nothing to something.

SL: Right.

[02:59:29] JY: Like no airplane to an airplane. That wasn't big at all. If the Wright brothers hadn't flown, it would've only been a short period of time till everybody'd been flyin' anyway. They didn't make . . .

SL: Yeah, there were others that were . . .

JY: They didn't make it happen. If they didn't do it—if they hadn't done it.

SL: Someone else would.

JY: We're not gonna think it wouldn't've happened.

SL: Right.

[02:59:49] JY: So any field you take, I don't care if it's medicine, bypass surgery, that sort of stuff. They've even got things now, I even saw on *60 Minutes* or some program similar, where you can control the genes in an unborn. You can control about anything to the extent to that you could almost have a custom-built human being. The technology is there to do that. Unbelievable. And if it's that far this soon, think of where it'll go in the future. For example, if somebody had asked me fifty years ago, "How many years will it be till the technology that exists in 2014 does exist?" I'd say several hundred years. I never dreamed it could happen so rapidly. So all I can say in

simple terms—where do you go from here? You develop flying devices that don't need a human. They're better off without one.

[03:00:55] SL: Well, what about the 3D printers where you can print parts?

JY: That's understandable stuff. They go through a slice of something. They do—it's like a bird shittin' all over a piece of paper, you know.

SL: Yeah.

JY: And the next bird comes along, the next bird, till you got a tough pile of bird shit. Pardon me. [*Laughs*] I forgot I was bein' recorded.

SL: Nah, that's fine.

[03:01:16] JY: Okay. In other words, they leave a little slug of material here, digitally, then they come back through and leave another one. And they can create any kind of a shape they want. [*Airplane noises*] That's wonderful. What all they're gonna do with it, who knows. If they can build a structure that is very strong, then I can see, it would have more value than if they can only build patterns to be copied by molds and such. You know, they can make a mold that could be done in, say, wax, then they could break the mold away and s—I don't know

how they do that. They could build something that—you know, right now you create something physical, then you put wax in it, then you take the thing away.

SL: Right.

[03:02:04] JY: You could do that with 3D. And then the wax melts out, and you've got a strong part.

SL: Something in metal.

JY: It could have—it'll immediately have applications for stuff like that. But a 3D printer will never compete with tooled stuff that is molded by injection molding or whatever by the hundreds, you know.

SL: Right.

JY: It's—but it'll be the way you can get to that point. It's got its place.

[03:02:33] SL; Well, now, you know, when you're building the planes you've built—you talked about having to make parts. Did you have to . . .

JY: Yes.

SL: . . . make parts? So that's mechanical engineering, isn't it? I mean, to . . .

JY: Well, you design the parts that you're gonna make. That's mechanical engineering. There's a lot of mechanical engineering

went into this, or aeronautical engineering. Now when that's all done, now you're into fabrication. That's not engineering, that's fabrication.

SL: Right.

JY: All the compound-curve pieces on this airplane—I hammered those out of sheet aluminum. They're—see the little thing on the tail.

SL: Yeah.

JY: I don't think you can see it from there, but it's sheet aluminum. And you pound that out of a flat sheet. People been building custom car bodies for racers and special high-dollar cars for years. They'll take a flat sheet of aluminum, and they'll pound on it to get any shape they want. I've done a lot of that. I've still got a lot of very fancy sheet-metal equipment, power equipment, that forms sheet metal in my hangar up in Springdale. So I got into that extensively in building these airplanes. [03:03:52] Yeah, these airplanes don't show as much sheet metal. Whereas if you had a closer look—see the wheel pad?

SL: Yeah.

JY: And see the wheel fairing between the landing gear and the pad? That's all very complex compound-curve aluminum. Pound all

that out of a flat sheet. It's an art. It's a challenge. I just taught myself to do it. And I never did become what I consider an expert at it. I did it enough to be able to build airplanes.

That was a means to an end to have the fairings.

[03:04:32] SL: Well, so do you want to talk at all about your cancer at all? When did you find out that you had cancer?

JY: I'll give you the full account. I had just finished passing my flight physical at the end of May. And I was on special issuance, meaning that because of a cardiovascular occurrence—I never had a heart attack, but I had bypass surgery 'cause I knew I had trouble on the treadmill. And so I been on special issuance, meaning I have to see a cardiologist every year.

SL: And now is this just this past May, or a year ago.

JY: This—a year ago.

SL: Year ago.

JY: Year ago.

SL: Okay.

JY: 'Cause we have—it takes a year to . . .

SL: Yeah.

JY: . . . go through this.

SL: I know.

[03:05:24] JY: So in about the last part of June, almost exactly a

year ago, one day I was standing in my manufacturing facility, and my general manager was across the aisle, and he says, "You're jaundiced." And another individual walks up and says, "Yes, you're yellow." So I immediately got on the phone right then and there. That was on a Thursday morning, and got an appointment with Dr. Salman as quick as I could, which was Friday afternoon. They did a CAT scan. He did a blood test, and then they did a CAT scan. And he comes back at about four o'clock, into my presence, and says, "You've got pancreatic cancer."

SL: Mmm.

[03:06:10] JY: That's like sayin', "You've only got a few months to live."

SL: Yes.

JY: He says, "But it does not appear that it metastasized. So that means it may be operatable." I didn't know enough to even know anything. He says, "Do you know of a local surgeon?" I said, "Only if he does it every day. [*SL laughs*] This procedure." I'm not gonna get with somebody I don't know of.

SL: Yeah.

JY: So I had this friend in aviation who dated back to the mid-1980s, who had only a couple of three years ago married a

neurologist, doctor of neurology, in the Mayo Clinic. And so he would see if he could get me an appointment for Monday. She said, "No, but have him come up anyway." So I got in the company airplane with two of my employees, and on Sunday morning we flew to Rochester. I got a hotel room across the street. Sure enough, Monday morning, this lady comes to call me to show me around the facility. That's what they do with a new person.

SL; Right.

[03:07:16] JY: My neurologist acquaintance, who I'd gotten introduced to by then, and we were—we hit it off real well. She had close ties to one of their leading oncologists, who agreed to see me at the end of the day. They don't schedule anything past four o'clock. So at four o'clock, he saw me at the end of the day. Now it wasn't that easy. They aren't gonna just operate on any eighty-four-year-old. You've got to prove to them you're not only operable from what the CAT scan says, but you've gotta be strong enough and alert enough, and you've gotta show that you're enough together . . .

SL: Right.

JY: . . . or it's—they're not gonna waste a valuable procedure on you. Hate to put it that way, but . . .

SL: Well, yeah.

JY: . . . why operate on somebody that's hopeless anyway? That's the way it is. He says, "Tomorrow, I'll put you at four o'clock with a surgeon." So I likewise impressed him. And he was also into aviation. That helped.

SL: Ah. Yeah.

[03:08:15] JY: And he does the laparoscopic procedure. Are you familiar with that?

SL: Yeah.

JY: Okay. Very few surgeon even at Mayo's to do that. He says, "I'll operate on you tomorrow, Wednesday, at ten o'clock." So he did. Now I go back to my room. And I'm taking—they're taking a blood sugar test every morning, and I notice, hey, this is doin' pretty good. This is—you know, I wasn't eating anything, so I did—everything was fasting, but I thought, "I'm doin' better than I thought I'd do." I didn't think I'd have enough pancreas left to do any good.

SL; Right.

JY: So I was. So after several days in there, the only adverse affect was I couldn't taste anything. [03:09:09] Anyway, I got out of the hospital on Sunday.

SL: Right.

JY: And they picked me up two days later. We wanted to be sure that I was ready to leave town. And I got back and that was pretty quick from the day I was told I was jaundiced—I'd already been operated on within a week. And I went—I'm home. I'm ready to come home. My operation . . .

SL: That's really kind of a miracle.

JY: . . . was on Wednesday. And so let's see. I was out of the hospital almost by then. Anyway, I lost my sense of taste, and I couldn't swallow. So by the time I got where I could ingest a proper amount of liquid, I'd gone down to 160. I finally built it back up into the upper 170s, and now I'm kinda hangin' around 170. And that's a lot of ground to cover in that short of time. And my tests subsequent to chemo—the first one was scary. You do a CAT scan, a PET scan, and a blood test. The PET scan is the most sensitive to see if the cancer has relocated. And it indicated that it had relocated to the liver.

SL: Oh.

[03:10:25] JY: But the other two said no, it had not. So they decided—the radiologist said, "Well, I don't know what to make of this. We'll just do another test at the end of March." Which they did. And it showed that the PET scan reading was in error for some reason. So we did another. A test at the end of March,

which was okay. On April 3, I got the reading. It was done on a Thursday the thi—the next—the following Thursday was April 3. And the doctor—I could tell from the look on his face he had good news. So I was declared cancer free. But then he wanted to do another one in not just six months, but three months. That was last Thursday. This Thursday I get the results. So I'm not home free yet. We'll see. But . . .

[03:11:17] SL: But you did do chemo.

JY: What?

SL: Did you do chemotherapy or radi . . .

JY: That's what I'm saying. At the end of chemo . . .

SL: Ah.

JY: . . . immediately they did the test.

SL: Yeah.

JY: And I'm still suffering the ill effects of chemo, you know. I'm far from having my endurance back and my strength back and . . .

SL: Right.

JY: Everybody tells me I look good. I say, "Well, I look better than I feel." But I'm d—for what I've been through, I'm doing real good. And when they went in there, I was as active as a typical six y—sixty year old. I really was. But I thought was invincible. Well overnight I became un-invincible.

SL: Yeah.

JY: My whole value system changed immediately. [SL laughs] I mean, bam, like that. Things that were of interest to me were no longer. Like my grandson, the first thing he says, "You've got your Mullicoupe"—that's that airplane I told you I built that he broke and I rebuilt, but it's gotta be assembled. It's in his hangar. He said, "We'll get that together." I said, "Matthew, I don't care if I ever fly again. I got a different set of values right now." My big values were to be able to see that I provided for all those who are dependent on me. If my days are limited, I better be thinking about that. [03:12:34] So my total value system changed. I don't care even today to—I don't have access to the kind of airplane I really wanna fly, so it's not that exciting to me anymore. I don't know what to do with my life right now. I really don't. I feel like I'm almost in a nursing home because I just sit around most of the time and am bored, you know.

SL: Well, you don't have your strength back yet . . .

JY: Well, even . . .

SL: . . . so you've got to range—regain that.

JY: . . . that's not so much problem—I can do a—I can go to the machine shop and make things if I had things to make. My

endurance is limited. On the treadmill I used to go at two and a half miles an hour indefinitely. Now two and a half miles an hour on the treadmill with a one degree incline, I'm good for about fifteen minutes. I'm still short on endurance. And I—my cardiologist friend says, "Well, you will get your strength back up to a point." Even if you're a young person and you've been through this, you won't be as strong as you were before you had it. But you'll get close maybe. So that's the story of the last chapter. [*Laughs*]

[03:13:42] SL: Well, maybe I could interest you in fishing.

JY: No.

SL: [*Laughs*] No?

JY: Absolutely not. My dad was an avid fisherman. No—I could never fish. I didn't have the patience to do it. No. I couldn't fish. I like water. I like being around water. Yeah, I enjoyed my days when I could go out on the Buffalo and float the Buffalo, but that's been many years ago. Ada doesn't like water. [*Laughs*]

SL: Oh, is that right?

JY: Yeah.

SL; Well, that kinda puts a ?quiet use? on that. [03:14:17] Well, let's think for a second about this whole interview. Is there

anything else that you want to say about—let's say your mother. If you were going to describe your mother in a few sentences or a paragraph, what would you say about your mother?

JY: A very soft-spoken, quiet, very formal person who had good social interaction with a certain group, level of ladies. She had her friends in this organization she was involved with, P.E.O. or something like that. You've heard of that. And she was very reserved. She knitted ferociously. She loved to knit. She would do that as much as she could have a chance to do it. She liked to hear the opera every Saturday. I like opera, but not that much. *[Laughter]* But she was a very formal—not at all like me person. If she knew what her son had turned into, she'd . . .

SL: *[Laughs]* Oh.

JY: . . . not like it. I'm been—I don't know. *[Laughs]* Well, she'd have to worry about that. She always thought I could do no wrong. She had too high of regard for me, obviously, like mothers will. And she was an encourager. We had a wonderful relationship. Wonderful. She was the only person I guess I ever knew in my whole life with whom I would have never said a cross word. No. I respected her so much that, to my recollection, I never said anything cross to her in my whole life. I'm glad I didn't because she was deserving of the best she

could have. Does that pretty well cover that?

[03:16:26] SL: Yeah. I just remember you talkin' about her helping you with your cursive handwriting.

JY: Oh, she'd let me spread my toys, my erector set all over the front room. She was accused of stimulating my creativity. I forgot about that. She'd let me express myself with my little machines on the living room floor, and she would walk around them and—yes. She did that. Yeah, she wanted to encourage my creativity. I know that was another thing. That was important.

[03:16:56] SL: Well, yeah. Did she continue to help you with any more of your studies besides the . . .

JY: No, she was an English major. And I didn't burden her with my English—I—when I went to the university, I was on my own. I—and she was—no, there was nothing sh—I don't know how much she could've helped me, but she did help me in the second grade learning to write instead of print.

SL: Right.

JY: That was something I . . .

SL: Yeah.

JY: Very important that she did. Yeah, she did everything she was called upon to—could've been called upon to do. She also talked

my father into responding to my request for an Atom [*SL laughs*] when I was coming out of the ether. I'm sure she had something to do with that. [03:17:50] Yeah, she—now my father—I did not have a close relationship with him. His interests were different than mine. Every so often he'd decide we were gonna have some togetherness. Once he decided he should take me with him drivin' around in McAllen. Instead of mailing a letter, he would stop at each of his customers or whoever they were to talk to 'em. He'd leave me sittin' out in that 1939 Ford Coupe. That was real togetherness. I used to get—he only got by with doin' that once. On another occasion—he did take me fishing two times in his life, but I never took to it. So that didn't work. Then he had done the 220 low hurdles in college, and he was short to be doin' that. But you could be athletic and not be tall.

SL: Yeah.

JY: In that time. So he thought I should go out for track, and he had a stick, and he was out in the yard and showin'—doin' this, this, and this, and he was determined I was gonna run and jump over a hurdle. I didn't wanna run and jump over a hurdle. I knew—I had a friend who could run faster than I could, and he was pretty fast, and I was pretty fast, but I wasn't fast enough

to be the winner, so I wasn't gonna do it. And I told you about the tub race, or did I?

SL: Well, they tried—your brothers tried to convince you to get in the tub race.

JY: No, that was my grandfather and . . .

SL: Oh.

JY: . . . my father.

SL: Oh.

JY: In their business suits pointing at that tub, which I would've taken to myself and played with it the whole day. Those two gentlemen, businessmen, were gonna see that this kid was in the tub race. And I had an aversion to that sort of thing, which I still have today. And they did not win. [*SL laughs*] They never did get me in that tub.

[03:19:43] SL: Well, what about your brothers? Is there anything you wanna say about your brothers, kinda sum them up?

JY: Well, I got along with both of 'em just fine. My oldest brother would be a little bit of a bully at times. The other brother—he and I never had a cross word, I don't think. And he was the one—the academic one of the three, they thought. The oldest one was not. He was into things and machines and all that. He used to hang around the Ford garage and talk to the mechanics,

and they taught him a lot of things and he—that was just his world. He was—early upon in age being able to overhaul a car engine and all that stuff. So he was off in that world, and our paths didn't cross that much. And of course, eight years is a big difference in the . . .

SL: It's big.

JY: . . . ages of two people growing up. So I was closer to the other brother. We built models together and such as that. And apart—you know, other than that, we just had normal, good relations most of the time.

[03:21:11] SL; Well, is there anything we've not—that we've left out that you can thi . . .

JY: Well, if I was known for any one thing that was not True Track autopilots or building airplanes, I was pretty well known in the EAA for things I had accomplished. My big achievement in life was the autopilots—would've been the autopilots I created in the 1960s. That was the most significant thing I ever accomplished was to move into a situation where there was a void and have the vision to create a complete system from one end to the other all by myself. From the programmer that you see to the sensors within the DG 'cause I'd worked on gyros in Houston and knew a lot about them—and all the electronics, the servo actuators, all

of that I pretty much—well, the servo actuators, we did have some help on that. We bought some that I didn't do. That was good. So but I was the creator of this autopilot that in fact became very widely accepted. And there's still some of 'em flying today. [03:22:30] And then there was the next generation of that same concept, which—the first one was—we called the Century III. The next one was the Century IV, and it was a much more sophisticated autopilot that found its way up into the—thing like the King Air, the turboprops, and the corporate airplanes. The first one was meant for a single engine and light twin airplanes. But the second one found its way up into the more expensive grouping of airplanes. So that was my world. That's what I did.

[03:23:02] SL: Did any of that cross on up into commercial airline or . . .

JY: No. It was not intended to. It was intended to go up to the corporate level, things like the King Air, mainly, and other comparable airplanes. It'd fly bigger airplanes. I think we've—they've flown DC-3s with it, you know, and all that. No, the goal for that product was as I've described. Companies that were into the airlines were Collins Radio and Minneapolis-Honeywell, and they had scads of engineers. I was one engineer. Well, I had

some help. By the time I got to the Century IV, I had several engineers workin' on that. But companies like Collins and Honeywell, they could spend thousands and thousands and millions of dollars on developing autopilots. No, they were in a different world. My stuff all had to be affordable.

SL: Right.

JY: To the individual.

SL: Well, that's a trick.

JY: Now the Century IV into the King Airs, most of them were corporate owned by smaller corporations, you know. So but that's where they were intended to go, and that worked.

[03:24:28] SL: Well, I'm hoping that we've covered enough stuff here. I'm trying to think what we've missed. I think—is there anything else you wanna say about Fayetteville when you first got here. I mean, was there . . .

JY: [*Laughs*] I was so fortunate. We drove up School Street hill from Texas. My dad let me out of the car 'cause it was the day school started, and I walked over to the high school and enrolled.

SL: Wow.

JY: After only seven years—before because Texas had a seven-year system, but I still had been through junior high, so they

accepted me as a freshman. I was so fortunate to be able to live in a town like Fayetteville. What a neat little town it was. My dad bought a thirty-two-acre farm northeast of Fayetteville bordering on what's the north boundary of Fairview cemetery. You drive out 45 to the curve where you got on Old Wire Road, drive a couple miles north, and there was a little lane that led up to a late-eighteenth-century house, and that's where we lived.

[03:25:50] And of course I was able to have a horse or two and things like that, and we enjoyed that. And the house . . .

SL: Now how far up?

JY: Huh?

SL: How far up Old Missouri Road was it? Maybe a mile?

JY: Maybe just over a mile.

SL: And the lane's there . . .

JY: There was a lane . . .

SL: . . . on the right.

JY: . . . that—there's a lane that goes nowhere now. It's all grown over.

SL: Right.

JY: It led up about half a mile to that—or a quarter of a mile to that house. And our side yard where we had a garden—the fence on the south end of that was the fence for Fairview Cemetery.

That's where it was located. And [*laughs*] there were two palomino mares out there.

SL: Yeah.

JY: One of 'em was gorgeous. And it was like a dog. I'd walk out to the field, and it would come over to me, and I could ride it around without a saddle. There was only one problem. It was too valuable. I came home from school one day and my dad had sold it for \$200, and I was just terribly upset.

SL: Oh.

[03:26:58] JY: He didn't—I think—I couldn't've sold it from my son no matter what it would've cost, but he did. Then he took me clear out to Farmington and south from Farmington a couple of miles to a place where he bought me a horse. What a terrible horse. Every time it'd take a step, it'd fart. [*SL laughs*] And I had to ride it all the way back from there to north of . . .

SL: From Farmington to . . .

JY: Yeah.

SL: Wow.

JY: And I never did care about horses after that.

SL: Yeah.

JY: It was drudgery af—no, he ruined that for me. It's funny the little things you carry through life. [*Phone rings*]

SL: Uh! There's the phone. We can cut.

JY: I'll get rid of it.

TM: Kay, cut.

SL: Yeah.

JY: It's gone.

SL: It's gone?

TM: Okay. Keep rollin'.

SL: Okay. Well, yeah, let's go ahead and keep goin'.

TM: Yeah, keep rollin'.

[03:27:48] JY: Well, I don't—you know, I hate to keep throwin' all these crazy little things into the picture, but that's life.

SL: No, I want all these crazy little things. I'm kinda grasping at anything that we may have missed or anything that might come to your mind here before we wrap up 'cause we're really close to wrapping up.

JY: Well, the significant thing is—I've told you the most significant events that I can think of, and they all came together to make me what I turned out to be, I guess. And therefore, I say that I can't help what I became [SL laughs] starting with the sand pile. My genes were guiding my destiny. And I don't excuse myself for what I became. I just couldn't help it.

SL: Yeah, my dad would say you came by it honest. [Laughs]

JY: Well, I didn't deceive anybody in getting there . . .

SL: Right.

JY: . . . I can say that.

SL: Right.

JY: Yeah. Maybe I—that's true. That's correct, yeah.

SL: Well . . .

JY: It could've been worse. What if my genes had taken me in a totally different direction downward. Would I be making excuses for what I came? I don't know. At least I don't have to make excuses.

SL: No excuses. Remarkable life. Is there anything you wanna say about Kathy?

JY: Well . . .

SL: I know that's a hard one.

[03:29:09] JY: That's a tragedy. Kathy was a very brilliant young lady. We had a terrible home life in Mineral Wells in that my first wife became mentally ill. And that was difficult for Kathy. And I didn't have adequate control. I—you know, you can be around mental illness, and you're drawn into it, and I did not protect her adequately from it. So she suffered from some minor setbacks in what she might have accomplished in high school because we had a home—a house up on Sheryl Street in

Fayetteville, and maybe it'd take me a month after school started to get her down there. It was terrible. And Kathy needed a closer guidance from me. She should have gone into something like medicine like her daughter did because she was way beyond capable of that. But she majored in marketing, which she just picked out of the sky blue. She didn't really—and then that didn't work out, so she decided to become a nurse. So she cou—she gets her nursing degree. And then she became one of the prominent nurses at northwest regional hospital up by the veterans hospital. But she was too party oriented, and she got into drugs and one thing led to another, and so I don't know what happened to her position there, but apparently she did something to screw it up. [03:30:41] Then she got into nurse visiting. What do they call that? Where the registered nurse goes out and . . .

SL: Yeah. I n . . .

JY: . . . sees people. She got into that. But she quite often got into bad situations. And she destroyed herself, really. It was just a shame. Such a loss. But she did, in fact, die of a heart attack they say. And it's a real tragedy. It's harder to accept that than it was the death of my son. He was doin' what he liked to do. He excelled at what he liked to do. Unfortunately, he was in

what they call a dual air show act, two airplanes flying around. But they weren't coordinated. And a month before he got killed, I said, "It's not a matter of if there's gonna be a midair, it's a matter of when." I couldn't get him to stop doing it. But nevertheless, he did what he excelled to do, was compelled to do, so it's different. I don't have near the loss there, as close as I was to him. I was much closer to him than any of my kids, I guess. But that's how it turned out.

[03:32:02] SL: How old was he?

JY: About fifty-two or -three. Let's see. Somewhere right in there. I—let's see. He was born in [19]55. So he's gettin' close to sixty, late fifties. The autopsy said that he had a terrible heart condition.

SL: Oh.

JY: And he was afraid to go the FAA for them to learn about him, or they'd ground him.

SL: Yeah.

JY: So he was working with a special doctor in Tulsa to give him beta blockers—no, cholesterol-lowering drugs. But that wouldn't've been enough. Because I had a problem with blocked arteries, he figured he probably would, too, so he was getting those. But he had a serious heart problem that probably

would've taken him anyway if he never did anything about it, and he probably wouldn't've. I don't know. But we'll never know that.

[03:33:16] SL: Well, how old was Kathy when she passed?

JY: Sixty-two or -three. Let's see. Sixty-two, I think. But Kathy has, as I've already said, a very, very brilliant daughter, the endocrinologist who's gonna be working starting in August as the only endocrinologist in the system here.

SL: That's gotta be—I mean, that in itself speaks well of Kathy, I think.

JY: Yeah.

SL: I mean y—that just doesn't happen.

JY: No.

SL: She imparted something to that child.

JY: Yes.

SL: That . . .

JY: This girl was not the cuddly kind of granddaughter.

SL: Yeah.

[03:34:03] JY: We'd all—we'd had a little problem relating when she was young. And she knew from the time she was in grade school that she wanted to be a doctor.

SL: Oh.

JY: By the time she was in junior high, she was worried about her resume. [*SL laughs*] Can you imagine? She had it all figured out way off into the future from childhood. And even though we weren't that cuddly close like my other granddaughter, for example, Laura, Robin's daughter, I still—we were still close enough that I put her through—paid her tuition through college and medical school and all that. And she appreciates that.

[*Laughs*]

SL: Well, sure.

JY: So we're close.

SL: Well, Jim, there's one thing that we like to ask every interview that we do.

[03:35:03] TM: Hey, Scott, real quick, I've got somethin'. How bout just talking about the Air Museum here and the amount of things he has that are his . . .

SL: Oh, okay.

TM: . . . in this air museum.

JY: What?

SL: Yeah, we should talk a little bit about the air museum. You're on the board, right?

JY: Yes, I'm the only surviving member of the original board. In 1987 several of us got together. My brother at that time had a

whole bunch of antique airplanes, probably six or seven. And we decided to start the museum. We flew down to Little Rock in my twin-engine airplane and talked to the people down there. Their museum has since gone under. And we got some legal help and formed the museum, and I was part of it from the very first day, and I'm the only surviving person on the board today that was here through it all. Right now we're having terrible financial problems to the extent that our survival is really in doubt. They're working on a \$50,000 grant of money that would be coming from the Airport Commission. It would be included in their budget. But right now it's so bad that it may or may not make it. I just don't know. We have a full-time paid employee who's got to leave. He's gotta go. He's gonna stay here for three more months at half pay to hopefully to draw some events in. And then he's gone. And then we'll have to do it with volunteers and the \$50,000 on what the gate can bring in to pay the ladies up front. And I don't know whether it's gonna work or not.

[03:36:52] SL: Well, how did you gather the collection of aircraft that you have here? I mean, it's not all yours or your brothers.

JY: It all started out to be all mine. Let's see. I had the three airplanes I've described to you. I had a Cub that could've been

put in here. It's an antique. And my brother had several. He had a Travel Air biplane, a Travel Air cabin airplane. He had a Stearman. Between the two of us, we had at least seven airplanes, all pre-war antiques that we could supply to the museum. So that got us off to a good start. And it was on a busily traveled highway, so we got people coming in from off the road. Now we're on a road that's got virtually no traffic.

[Laughs]

[03:38:03] SL: Well, this—Drake Field used to be the only airport.

JY: What?

SL: Drake Field used to be the main airport . . .

JY: That's what I'm sayin'.

SL: . . . in Northwest Arkansas.

JY: We used to have Highway 71 to bring us revenue.

SL: Right.

JY: It's gone. We used to get grants from the city that we don't get now. Things are different. We started off with a paid employee shortly after we formed it, and he didn't cost us much. He was retired. So it worked for a while and worked pretty good. But only recently our expenses have gone up, and our attendance is down. And I question whether or not it'll survive. So we'll see. It's a shame because in those three airplanes out there—the

Howard, which is a derivation of Mister Mulligan—it is—it was, as I said, they took Mister Mulligan, and they did this and they did that, and it's a totally different airplane, but you can see it has a strong resemblance. So it's significant in the history of aviation. The Howard airplane company was started in 1936. When World War II came along, it got government contracts. This airplane over in the corner is a Howard trainer. And then Howards like the one over—you see there, were used as instrument flight trainers during the war, and quite a few of those were built. Then after the war, the Howard was an obsolete airplane. Now you're looking at modern, smaller airplanes with opposed engines like the Beechcraft Bonanza. So that was the end of Howard. But it was significant in the history of aviation.

[03:39:51] So we have the two most famous air racers of the golden age of air racing right here. In fact, the little red-and-black airplane used to be in the big EAA museum in Oshkosh. But I took it out for the purpose of making a movie. So I never put it back. [*Airplane noises*] And so it's been here ever since. I kinda like having it here where I can look at it. So we have some interesting displays, but you gotta be in an aviation-oriented community. That also helps. This is not an aviation-oriented community at all. So I have my doubts or questions

about how it's gonna all work out. Certainly my concerns.

[Tape stopped]

[03:40:45] TM: I would think that just . . .

JY: Hmm?

TM: Scott, about him just building these things from scratch.

JY: I couldn't hear what he said.

TM: I mean, that's a—that's an amazing thing.

SL: Oh, he's talking about—he's just talking about everything that it takes to build one of these. And . . .

JY: It takes a lot.

SL: . . . starting from scratch and following some plan.

JY: I've worked better starting from scratch. I could not build a kit and read somebody else's drawings and build an airplane. I couldn't do that. I have to be on my own from the get-go. I learned that about myself a long time ago.

SL: That's like you not wanting to do the calculations.

JY: Well, not exactly. I had to do calculations to a degree to build this airplane, but I wanted the freedom to start from nothing. In fact, the head of the electrical engineering department said of me once—he was writing a letter of reference for me, probably to Collins Radio—I don't know whether to take this as good or bad. But he says, "Works best in a free environment." He knew

that I was of that orientation about me. So I never questioned whether that was a compliment or [*SL laughs*]*—*you know, that means you're not a good team member, I guess. I don't know. He was the same guy that promoted me to being an assistant professor.

SL: Right.

JY: So he cared for me. But he said that. [*Laughs*]

SL: Well, he respected your mind.

JY: Hmm?

SL: He respected your mind and . . .

JY: Yeah.

SL: . . . and your work.

[03:42:14] JY: And I can't think of—I had a rather extensive relationship with the EAA for what that's worth. I was recognized as a builder of airplanes that they found significant somehow.

SL: That's the electrical engineers association of America? Or . . .

JY: No. EAA, Experimental Aircraft Association.

SL: Oh, Experimental Aircraft.

JY: I built these airplanes that I took to their event, and for that they—I got a lot of attention, and a lot of people learned of who I was and what I was.

SL: Well, I mean, did you—you were part of that organization? Were you ever an officer of that organization or . . .

JY: No, I didn't wanna be. I was voted into their antique aircraft hall of fame. I had that recognition. But no, I wasn't out looking for anything to do up there and all that. I probably could have. They're always lookin' for people. But no, that was not my thing. See. And of course, it was interesting. I was pretty well known at the aircraft—Experimental Aircraft Association. And Bobby comes along, and he's Jim Younkin's son. [*SL laughs*] And as time went by, it evolved around to where I'm Bobby Younkin's father.

SL: Oh my gosh.

[03:43:54] JY: He became the most known of the two. But he was very—he flew in all—every year he was invited to fly in their convention in July. And Matt Younkin today is still invited to be a pilot. And not many people get that much—of course it has to do with what Matt's flying.

SL: Right.

JY: He's flying a very unusual airplane, and he can do the night show. And he does a wonderful night show, so he doesn't have competition for that.

SL: So what is it about the plane that lets him do the night show?

JY: A lot of work done on the airplane to create all kinds of lighting and such as that. In fact, if you're curious enough, he will be doing a night show at Neosho this Saturday night.

SL: Is that right?

JY: In that big twin-engine airplane. So if you want to really see an air show act that's unusual, you need to see that.

SL: That's a real opportunity. I'll . . .

JY: Yeah, it—they start the affair somewhere around four or five in the afternoon, and he flies as soon as it's dark enough. He flies the night show. And he'll do a day show, I guess, before the night show. In a big twin-engine airplane.

[03:45:13] SL: Well, I may try and go see that.

JY: Yeah.

SL: Are y'all gonna go over there?

JY: Yeah, I probably will. There's a Beechcraft like he flies in that hangar over there, but I don't know whether it's even open or not.

SL: Yeah.

JY: But anyway, it's a big—round engines, big—well, it was built in 1943. You can see that it's quite a machine. It's big. It's not ever intended to do aerobatics, but it does.

SL: Yeah, that's, gosh, that's seventy years old.

JY: Can't think of—no, that pretty well says it all. I could say about three sentences from start to finish, all bop, bop, bop, bop, like that, you know.

SL: Yeah.

JY: [*Laughs*] Maybe not three sentences, but we covered a lot, you know.

SL: We have covered quite a bit.

JY: Went from university to industry. Kept lookin' for the right job. Finally found it. Went into autopilots. Moved to Arkansas. [*SL laughs*] Built airplanes. Did more autopilots. That's a [*laughter*] . . .

[03:46:38] SL: Well, now you're a survivor of the Pryor Center interview process.

JY: Hmm?

SL: You're now a survivor of the Pryor Center interview process.

JY: Yeah. Well, I guess we covered about everything that I can think of.

SL: Well, let's do this. I'm gonna ask a favor of you. We ask whoever we're interviewing, at the end of the interview . . .

JY: Yeah.

SL: . . . to look straight at the camera lens and say—in your case it would be, "I'm Jim Younkin, and I'm proud to be from Arkansas."

JY: I'm from Iowa.

SL: Well, you're from [JY laughs] Arkansas. [Laughs] Now when . . .

JY: How about I'm proud to be an Arkansan?

SL: Well, you can do that too. But mo—we try to get everybody to say . . .

JY: Oh, I'll say it.

SL: . . . proud from Arkansas. And I'm gonna let Trey, the camera operator, direct you. I'm gonna get out of this chair so you're not lookin' at me. I want you to look right there. And when you get done saying "from Arkansas," if you'll just keep looking at the camera for a [snaps] count or two, that'll help us with our editing. So I'm gonna let Trey direct you. He'll tell you when to go.

[03:47:46] JY: I can't say more?

SL: Yes, you can.

TM: Yes, you can.

SL: You can say whatever you wanna say.

TM: And go any time.

JY: I'm Jim Younkin, and I'm proud to be from Arkansas, and more than that for all the opportunities that have come my way because I am an Arkansan.

TM: Let's do that one more time, but keep looking at the camera.

JY: You want me to . . .

TM: Just keep lookin' at the camera. Say the same thing, but keep your . . .

JY: Okay.

TM: . . . eye contact here.

JY: Okay. My eyes right on the camera. I'm Jim Younkin, and I'm from Arkansas. More than that, I'm proud of all the opportunities that Arkansas has provided for me. I guess I looked away again, didn't I?

TM: Nope, that was way better. That was very good.

SL: Got it?

TM: Yep. We got it.

[End of interview 03:48:34]