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Interview with Fred Kreusch

Fred Kreusch

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Today is March eighth 1967, right and I'm talking with Mr. Fred Kreusch...

Kreusch.

K-r-e...

...u-s-c-h.

K-r-e-u-s-c-h. You live at...

308 Cushing Avenue.

In Dayton, and Mr. Kreusch was an employee of the Wrights from 19...

'08 til 1912.

Okay. Well I guess we're recording alright. Why did you start; how did you meet them, to begin with? How did you start working for them?

Well, if you want a little history of that, why I was learning my trade as a machinist oh, out, to learn how a gas engine works. And I served my time there, and very much interested in different inventions that were coming up. So, I went to work at Stoddard Dayton when they first came in, in the automobile game. And that was in 1906, when they first started up, and...

Now did they, now were they, were they building automobiles?

They were building automobiles, yes. And from there, why in 1908, why the Wright Brothers were starting up first in the airplane, in a little shop down there, and they advertised for a machinist.

Now, how did they advertise, in the local papers?

In the local paper.

And you read the ad.

So I read the ad, went out there, and talked to them, and they interviewed me, Wilbur interviewed me, and he hired me.

What did he ask you?

Well, he asked me my experience, what I had done, and why I wanted to make a change. So I told him that I would like to see about the airplanes. See what, what was going on on them. At that time, they had three other fellows there,
a fellow by the name of Charlie Taylor, and Bob Elliot and I was the third
guy, and then they hired another fellow by the name of Tommie Russell. So they,
well, where they had the bicycle repair shop; they tore that out and they put
in three lathes, in there. To expand their shop. And before that, why they
just had one room in the back as a repair and there's where they did the work.
They had one old lathe there and a drill press, and a furnace. And of course
there wasn't any welding at that time, but it was all brazing. So they made
their sheet metal parts and everything in that, and they used to take and roll
out their cylinders in there in that one there. So when they got these three
other lathes, why then they started to make their parts for their engines.
Which was a four cylinder engine.

SB  Well, did they, did you just work on the engines then or did, did you help with
the construction of the plane?

FK  No, the construction of the airplane was done out at the old Speedwell auto-
mobile plant. Out where Moraine city is now. And they built it there. And
we built the engines there in the little bicycle shop. Of course at that time,
we didn't build much, but we worked on everything, machine parts, and sheet metal
parts and brazing and just about everything that was to be done. So we had
a little bit...

SB  Was, was Wilbur pretty much the manager at that time?

FK  Wilbur? Yes, he was, more the manager, and then of course Orville, he done
more of the designing and stuff like that.

SB  Oh, is that so?

FK  And then of course the other brother, Lorin Wright, he was the office man.
And we had built these engines, and when we built them, we didn't build very
many of them there because we were so small. But then they would take it out
to Speedwell there. And then from there, they would take it out to the dam,
where the Huffman Dam is now, and there's where they used to do their testing.
SB Out at Simms Station.
FK At Simms Station.
SB Well, did Wilbur actually work on the engines themselves? Or was he kind of
man who'd come in and get his hands dirty?
FK Oh, yes, he would come and do his hands, get his hands dirty, and he was in the
shop the biggest part of the time, of course they had an upstairs is where
they had their office, you see.
SB Oh.
FK And of course...Orville would come in, and look over things too, but Wilbur
was more of the one the mechanic end I would say of the...
SB Of the two.
FK Of the two. Yes.
SB Orville, you thought did more of the planning and the drafting?
FK Planning and the designing.
SB Who, who handled the business end of it? More do you think. Was it Wilbur
or Orville?
FK Well, I think they both went together.
SB Is that so? Were they, how were they to work for, were they nice to work for?
FK Very nice, very quiet, very quiet spoken people both of them. Quiet. But
Wilbur, he used to get right where you was doing and a lot of times, he'd ask
you how you're doing at this, and how you're doing that. I know at one time,
there, that we, I was the on the lathe and boring; I had to bore out the cylinder,
one of the cylinders that we had. At that time we didn't do any grinding with
a cylinder. We took it, and he had we, what we called burnishing it, that we
would have a it was a emery wheel like and we had a leather strap on that,
and we would put emery on this strap, and then put that in, and it kind of
burned the silver after we had it bored, you see. This would make the ends
real smooth. Of course we didn't do any grinding, at that time.
SB Was it hard to make those engines?
FK Well, yes, it was, because they were very complicated.

SB Really?

FK Yes, because, the, the cylinder was made out of cast iron, and then we took them and used an aluminum jacket to go over what we called the water jacket. And that had to be shrunk on with two steel rings. We had one ring at the bottom and one ring at the top. And to heat that, we had to take and heat up the cylinder; now that was after it was all burned and everything was ground; it was when we'd heat that up just a little hamster, and then we would put this aluminum jacket on them, and we'd make this steel ring; we had a kind of a an offset on each end of this water jacket, which was about a quarter inch wide, and these rings were a quarter inch wide, and they were steel. So we would make them red hot, and we would stick it in there real quick, up into that, and that would shrink real tight up against the cast iron cylinder, and then we'd of course, I, the engine had to be water proof, and we would test it then under water pressure. To see if there was any leakage. And if there was, why we had to rip that all off and put a new water jacket on, and also shrink another ring on it.

SB That sounds like you had, you had to kind of improvise as you went along too.

FK Oh, yes.

SB Did, you actually had to, did you have to weigh these engines, or or make sure they weren't too heavy?

FK No, we didn't have to weigh them.

SB Not at all?

FK No.

SB Worry about how how did you know that they'd have enough horsepower when you got through?

FK Well, we had to test that, after we had the engine, we took it out in the back yard and had it put together, you know. See there wasn't any carburetor on that engine, at all. Everything was forced feed through. And they had the water
pump on to pump the water into the cylinder to keep it cool. And, and the
cylinder, we had a manifold that came up and we had a metal strip in-between
the heads, and we would force this gas in there had as it forced it, it spread
it out, and made the ignition to the spark plugs, and that's where we got the...

SB Was this the engine that Taylor actually designed? For the plane?
FK Him and the Wright Brothers, both of them.
SB Oh, they did.
FK Oh, yes, they both had to do that.
SB Him and the plane.
FK Oh, yes.
SB What did...
FK See Charlie was just a handy man, around the old bicycle shop. He was just
a, he'd been with them, I guess, for years on repairing bicycles, you see?
And of course they were doing a lot of the experiments as you know that happened
in 1902. And he went down with them to Kitty Hawk and helped them on their
testing.

SB What did people think when you went to work, I mean your family, did they think
you were working for a bunch of screwballs?
FK Well, we did yes. And we never thought that it would ever come to what it
is today, you see. Because just like when I was on Dave Garroway's program
why he asked me he says, what did you think of the airplane in those days?
Well the only thing they would ever be used for, would be good for, would be
to go around and make exhibits and stuff like that, you see? But I had no
idea, but I knew they was going after something and doing something, and I was
going to stick with them.

SB How much did they pay you at that time?
FK I think I got fifty cents an hour.
SB Fifty cents an hour. How long, how long was the work day?
FK How long? We would go to work at seven o'clock in the morning. And we quit at five thirty.

SB Pretty long day. Six days? Five days a week?

FK Five days a week.

SB Five days a week.

FK Five days, and half; we worked a Saturday morning.

SB Oh, is that so. Were they selling any bicycles at all at that time?

FK No, they weren't, not when I was with them.

SB They were completely manufacturing the plane.

FK Manufacturing the airplane, the engines and the parts, you see? We done all the sheet metal parts and then they took them down to the assembling of the plane, at the old Speedwell plant out there. We always called it the old Speedwell plant.

SB Where was that?

FK That was out where the Inland is now, or not the Inland, but where the Moraine city is.

SB Oh.

FK Out there.

SB Where Frigidaire is now, I suppose. Would the the Wrights come every day same time?

FK Oh, yes. They was in there always at the same time.

SB What would you do for lunch? Did you go home?

FK No, we always carried our own lunch.

SB Take a sack. How about the brothers, did they bring their own lunch?

FK No, they went home. They lived there on Hawthorn Street you see? And it was only two squares away.

SB Would they ever bring their lunch and eat it with the men?

FK No, not that I remember.

SB In other words they would simply come to work and then go home for lunch,
Come back, and...

Did you ever see him other other than at the shop?

Did I see him at others?

Other, other than at, at work. Social things like that. Did you ever see him...

No, they didn't, they wasn't much in on social stuff that I know of.

I...

But, their sister, Katharine, she used to drop in every now and then. And Mr. Wright, before he passed away, he used to drop in once in a while.

What was he like?

Very nice.

You say very nice, was he friendly.

Very friendly, yes very friendly.

And Lorin also worked at the...

Well, yes Lorin was. He'd come down and look over the shop. But Lorin wasn't a mechanic or know nothing to do with the airplane.

Is that so?

They was just like helping him out I guess. He lived right in the neighborhood there too. He lived back on Fourth Street.

Did he do the, who did the paper work?

Lorin.

Lorin.

For analyzing.

But you felt that Wilbur was the one who was kind of the brains of the of the...

Yes, I think so too.

He seemed to be that way.

Do you know, where did they go to church?

I couldn't tell you. Where they went to church.

Did they ever talk about the airplane, when it, you know about the possibilities
of what, what they'd do with it. And all.

FK No, they never what, they never talked about it, them days whether they'd ever be flying passengers or anything like that. But I know the time that the first express that they took the baggage from Dayton at Rike's and delivered it in Columbus, which they thought was the big future at that time.

SB Oh, when was that?

FK That was in 19...let's see that was in 1911 I believe it was. Just can't recall you know. Because a lot of things in those days you didn't think it was going to amount to much, and you didn't take a whole lot of interest in it, would like to see it come from day to day, you see. How the things would come today.

SB Did you ever go out to Simms Station and watch them fly?

FK Oh, yes, oh yes. I would go out there. And they would transfer the plane at night you see. With a horse and a old hay wagon, that they would go out, they would leave at twelve o'clock out at Speedwell and drag it out at night, and I went out a lot of times with them at night.

SB Why then?

FK Because there was no street cars running or anything.

SB Oh.

FK No traffic. Get it out there.

SB This was just to avoid people.

FK Avoid people, yes.

SB Would the kids, the neighborhood kids come around and bother.

FK Oh yes the neighborhood kids from all around there would come in and especially when we were testing out in the back yard, running the engine in the back yard, they would, they wanted to see what was going on.

SB Oh, yes, I can imagine the boys always like to look at the motors. Compared to the interest in automobiles, did people think that this thing would ever amount to anything?

FK In automobiles?
SB Well, compared to the car, did people think that automobiles would be as prevalent as they are today.

FK Oh, no I don't think so, not in the automobile business.

SB I was trying to compare the the airplane with the automobile.

FK No.

SB They were impressed with automobiles?

FK No, they well no, they of course they had a an old air, I mean an old Franklin car that's what they had. An old Franklin water-cooled, cars.

SB They must have been impressed with that car, because everybody mentions it, you know, that I've talked to.

FK Yes.

SB That they must have liked it.

FK Oh, yes they liked their car.

SB Was there anything else that they liked to tinker with?

FK Not as I know of.

SB They seemed to have such a narrow range of interest; I was looking for something else, that they, that interested them, besides the business, and the car.

FK Well, I don't think there was much other, anything interesting because they was all wrapped up so much in the airplane and what it was going to do, because, as we progressed on to the airplane was when we first had to, to start them up from the skid you know, and have the weights to start the airplane up and then finally we put wheels on it, and also but they kept the skids on to the thing too, you see. As emergency.

SB Where did, why did they first put the wheels on. Do you remember?

FK They put that on around about 1909.

SB Do you remember the circumstances why they put the wheels on?

FK No, I just can't recall.

SB As I remember, I think Wilbur when he was in France, got the idea something in their correspondence, but I don't remember either why they, why they put
them on. Definitely. Did they ever talk politics?

FK Nope.

SB In the shop.

FK Never talked politics.

SB They were never interested about it?

FK There wasn't seemed to be interested.

SB How about local affairs? You know, there's always some local affair that captured everybody's interest for a while. I just wondered if they ever...

FK I don't think that they were ever interested in. Do you know the people in the city here thought they were crazy. And you know the city of Dayton didn't think anything of it, until they went over to France and came back. And then they made this big hullabaloo in 1910 the big parade and turn out was was quite a thing.

SB Did they ever venture an opinion on all that?

FK No, they never said anything.

SB Never said anything.

FK They were very closed-mouthed people.

SB Who did they have, who were their friends, that they would see? Would, did they other than the family? Do you remember anybody coming around to see them?

FK No, not that I recall.

SB Just Miss Katharine would come and...

FK Oh, Katharine and the Bishop would drop in. Of course then he died you know, I think he died in 1908 or something like that. I first started to work there right afterwards. I think I don't know just exactly, I can't recall just remember when.

SB Did did Katharine.

FK About the only ones that was really interested was the an old hardware man. That had his business just a couple doors from there. And he used to drop in quite a bit.
SB How about Mr. Huffman from the bank or Mr. Belman did they ever come around?
FK No, never came.
SB They used, he used them as references, I know. Yes, the hardware man, they
used him also, as a reference. Did anybody from, oh, any foreigners ever come
around the shop?
(telephone rings)
FK Excuse me...Can you turn it off?
SB Yes, I'll turn it off while we're, that's okay.
(break in tape)
SB What did we do wrong? There we go. Okay now we're recording again. When
did things really get going into high gear, for a while you said, how many?
FK Well eight or nine year, that I would say that after they made all this barn-
storming around through the country, kind of died out. And I left there in
1912 then, and and went to work out at the NCR; At that time, we didn't have
hardly anything to do. Of course when the war came along, why then's when they
really got going. But of course at that time, there was a different concern
that owned the Wrights but they was interested in that, because they had sold
their patents and everything to this New York concern, and they sent a fellow,
a fellow my the name of Russell down here from New York, and he took over,
when we had moved out to this new shop. Out where the Inland is now.
SB Then you went back with them after, I mean you went back with a new firm.
FK No, I didn't, yes I worked with them until 1912. And of course they were doing
a lot of barnstorming. And also doing a lot of training of different people
you know, see Bookins and Jack, and Ach, and Welsh, and Whelan and Hoxsey
and Parmelee, and let's see there was all these students you see. And then
they of course they trained the military, Foulois and Lahm and them. But that
was after I had left the place where they really done a lot of training. And then
of course the war came along, then when Dayton-Wright started up, out there.
Of course Conover, Bill Conover, he went from our place to, to the, he, he engines.
And but, he took and left and went with, with the Wrights at that time. Out there at Moraine city.

SB Do you remember when Wilbur died, were you working with them?
FK Oh, yes. I was.
SB Did, did, you remember, did you go to his funeral?
FK Oh, yes. I went to his funeral.
SB How did Orville, did you ever talk with Orville when you gave him your sympathy, do you remember what he said?
FK No, he was so shocked at the time. Because Wilbur wasn't sick very long with typhoid fever when he passed away.
SB Is that so?
FK And there wasn't much he could say, at that time.
SB Did you notice any change in him after Wilbur was gone?
FK Well, he took some interest but he didn't come out to the shop more because this man, Mr. Russell, was was the fellow really in charge of the place.
SB Is that so?
SB Mr. Russell was the boss then.
FK Oh, yes. He was the boss.
SB Now that was, was that after 19...?
FK That was around about 1910, somewhere.
SB About 1910. Well what. In other, oh, I see. By the time that Wilbur died, Orville was no longer active in the business anyway.
FK No...
SB Is that what you mean?
FK Yes, that's right.
SB Did you remember anything else about after, after Wilbur died, anything Orville said?
FK No, I don't. See that has been a long long time.
SB Oh, yes. I'm, I'm just fishing here.
FK Yes.

SB (chuckles) I'd like to establish so much of what's said about them, people lump them together. And they were two different people.

FK Yes, they were two different.

SB Yes, and that's what, what I'm really looking for is some of the basic differences between them. Was there any difference in their sense of humor, when would one laugh at a joke more than the other?

FK Well they would, they would laugh at jokes. And in talking to them I know at one time the answer that I thought was really funny. I was running a lathe there boring out one of these cylinders at the time, when I got to the end of the stroke of the lathe, I had to reverse the lathe to bring the thing back, and Wilbur was standing over me and looking at this thing here and as I come around I hit his head. And he says to me, he says well I says excuse...he says that's my fault, he said, I shouldn't have been so nosy.

SB Oh, (chuckles).

FK I says, well I don't have time to stop the lathe, I says, I had to throw this in reverse, and I didn't notice your head was. And I tickled him to death. He laughed about it. But it didn't hurt him. And I think that was quite funny at that time.

SB Yes, a blow on the head, he was. (laughter)

FK Well, you know. We had all over head belts you know. At that time, and you had to shift gear, to shift the belts, and when we got to the end of the stroke, boring of this cylinder, why we had to take and reverse it, and would bring it back. And then when we'd come out again, we would shove it the other way, so it would feed in you see.

SB Oh, I see. That must have been kind of difficult I would think. (laughter)

FK Yes.

SB What did they wear, when they came to work?

FK Regular business suits, street suits.
SB Is that so?
FK With their stiff hats.
SB Oh, the old derby hats.
FK Oh, the old derby hats.
SB Did they, oh, they walked back and forth?
FK Oh, yes they walked back and forth.
SB Did they ever talk about what they did on the weekends or anything like that?
FK No, they never said anything.
SB They didn't seem to have much interest in the ladies.
FK No they didn't have no interest in women, at that time.
SB (chuckles) Was there a woman secretary there?
FK Yes. She wasn't at the bicycle shop. But she was at the, out when we moved out to the new plant there was a woman. I forget what her name was.
SB Was that Miss Beck, does that ring any bells?
FK It either could be Mrs. Beck or, or Rinehart or whether this Rinehart was married to this woman afterwards or not, I forget. (unintelligible)
SB Did Carl Reinhardt you mean his his wife?
FK No. No.
SB No connection.
FK No connection at all.
SB Then you don't remember of any, either one of them ever dating, or anything?
FK No, I don't remember anything like that. That was their private life.
SB Were you married at the time.
FK Oh, no, I didn't get married till 1918.
SB Oh, you were just a young boy.
FK Yes, you're right there.
SB Um.
FK Well, see I'm close to on to eighty now.
SB You are?
FK Yes.
SB Oh, I didn't, I didn't realize that.
FK I'll be eighty in October.
SB Golly, well that you don't look it, let's put it that way.
FK Thank-you.
(laughter)
SB You seem to have enjoyed life. What did young people do for fun in those days, now this is before you had the automobile. What one in Dayton was the activity of the young people?
FK Well at that times dancing, playing cards, stuff like that.
SB Did you ever play cards at the shop?
FK No, we never did.
SB Was that, would they have frowned upon that do you think?
FK I don't think so, but we never did.
SB Did you ever see them mad?
FK Do what?
SB Did you ever see them angry, the two brothers?
FK No, I never seen them angry, but at one time, we were, we were out in the backyard there, testing an engine, and he had an old tachometer to test the speed of the engine you know. This tachometer is now out at the museum, in the museum there. That Wilbur says to me, I can't count this thing because he had to have his watch in one hand and this little tachometer just had numbers around it. That is he went around, and he'd have to count the revolutions on to that, and then you put them down. And he got so mad at that time, that is he showed his temper, he took it and he threwed it away. And he says, Fred, you go down to the tool, down to Patterson Tool Supply company and get another tachometer. So when he threwed it away, I says to him I says, can I have that? He says, I don't care what becomes of it. So we got through testing, I went down, rode
my bicycle down to Patterson Tool and Supply and bought the new tachometer and
brought it back to him and he started testing again. So I carried this
tachometer around oh, for years. So finally about four or five years ago, I
donated it to the museum.

SB Well that was nice of you.
FK Its out there now, in a case, right aside of the old plane.
SB Isn't that interesting. Did everybody call them Wilbur and Orville or were
they Mr. Wright?
FK Mr. Wright we always addressed.
SB Is that so?
FK Yes.
SB Was that just their nature or was that because anybody you worked for you called
Mr. at the time.
FK No, we kind of looked up to them.
SB Is that so?
FK Yes.
SB Why did you look up to them?
FK Well, I don't know. You'd always look up to any employer.
SB Well, I just wondered if there was something special about them. So many
people who worked with Kettering, but he seemed to be so much...
FK Boss Kettering.
SB Yes, Boss Kettering. He seemed to be so much one of the, one of the boys.
FK Yes, I know.
SB And, but people didn't seem to feel that way about the Wrights.
FK Yes.
SB I don't...

(break in tape)

(end of side one)

(start of side two)
SB I'm asking you because you knew them and I didn't.
FK Yes.
SB You see? And I just wondered in talking with people who worked, worked for both of them, what it was about them?
FK No, no. I know Boss Kettering; I knew him personally too. I remember when he started up, he was in that little building right there on Ludlow Street. Near Chaminade. Right across the way from Chaminade there.
SB Oh, is that so?
FK That's where he started up.
SB But there seemed to be a difference in their basic personalities.
FK Oh, yes, I think that Boss Kettering was the, done a lot of kidding and stuff like that where the Wrights never done much kidding, the Wright Brothers.
SB Oh, is that so?
FK Oh, yes.
SB They never did.
FK No, they didn't.
SB Were they fair? As far as employers? Did you feel that you had to, that they would, you know, give, pay a going wage?
FK Well, in fact they didn't have a whole lot of money you know. To start with. And I think that it wouldn't have been for the their sister Katharine, I don't don't know whether they ever would have succeeded, you know.
SB Well, the, their, I, I don't know.
FK Of course, they, they didn't start to really get big, until the war came along, and they had to pay them royalties on all their patents, you see?
SB Well, they actually collected quite a lot a money...
FK They did by royalties...
SB Yes, before...
FK But they didn't didn't, have that before. Because after that, why I mean before that, when they was still doing this barnstorming, why after that ended
why there wasn't much income to live with.

SB  Well, that's interesting. Who, who else came around there? Was there any
interest from foreigners did they ever come around to the shop?

FK  If they did, they went right upstairs to the office. They never...

SB  You never did see them.

FK  No, we never did see them.

SB  How about when, did they ever express any concern about people getting hurt
in a plane?

FK  No, they never did. No, I know the different ones that got killed that that,
on this barnstorming, that they never made any remarks about it. I know when
old Parmelee got killed at that time, he was going on an exhibit, and he was
to catch a train, and he left the old shop to go down there and he never did
return. Old, Phil Parmelee.

SB  It seemed like awful dangerous business. (chuckles)

FK  Oh, it was, it was dangerous business. The chances.

SB  The planes look so flimsy. And so...

FK  Well, don't you think that everything new is flimsy?

SB  You mean now?

FK  Well, I mean from the start of, from the automobile to the airplane.

SB  Well, yes. The, but they, didn't the airplane seemed to be more exotic, more
unusual...?

FK  Oh, yes. Sure it did. Sure.

SB  Did you have a desire to fly? When you were working on the planes?

FK  No, I never had a whole lot of desire. I went up several times, and I built
a glider, a fellow by the name of Bates and I, we'd go in a little glider,
but we used to fly up to them, and we had our place in the back of the Woodlawn
Cemetery. It was kind of a hill, and we'd go out on Saturday afternoons, and
monkey around with that thing. And work all week repairing it and smashing
it up, and...

SB  (laughter) Was, were they the type of people that you could ask for advice
on how to build your glider? Would they give it to you?

FK No, we never asked them.

SB You never asked? Why didn't you ask them?

FK Well, because that we had seen their old glider and we kind of copied that.

SB Oh, I see. Where was their old glider?

FK It was really restricted. Where was it? They had it out at the Speedwell plant out there.

SB Did they show any particular affection for it, or was it just a thrown away.

FK They knew that we were building this glider.

SB But they didn't offer to help?

FK No, oh, no, they didn't offer.

SB Why didn't they offer to help do you think? It was just their nature?

FK Just their nature.

SB It seems they're not too much interested in in other people. Okay, I want to ask you some of the. These pictures from the Dayton-Wright plant, well this was after the ownership...

FK Yes, ownership.

SB Was there any other, any other people who worked in the plant. Did everybody like them? Or did they...?

FK Oh, yes everybody seemed to like them.

SB They just, just didn't get close to them, I guess.

FK I think I was about as close to the Wright Brothers than Charlie Taylor or than any of them. Because you can see that, when they tore down the factory, the old bicycle shop and everything, I was invited as a guest. There.

SB Yes, I see that. How did they feel towards Charlie Taylor?

FK Oh, they thought Charlie was it.

SB Well, that's nice. Did they, did they ever slap anybody on the back or...

FK No. They would say a lot of times, well you're doing a good job.

SB But that was it?
FK That was it.
SB That was the extent of it. If a man had, oh say problems at home, and needed money, would, would they loan money do you think?
FK I doubt it, because they didn't have any.
SB Oh, I see. Well, this, this looks like they had at this time, there were quite a lot of people employed.
FK Oh, yes this was when we was out at the new place. Oh, yes.
SB Well they had...
FK They had fifteen out there.
SB Oh, the planes are still all built by hand though, aren't they?
FK Oh, yes.
SB Boy, oh boy.
FK Engine and everything bored still the same. Different parts.
SB It took a lot. How long did it take...
FK Of course then they took and...
SB ...to build one of these planes, from start to finish?
FK I would say, I didn't know much about the construction of the airplane, but the engine, I would say would take about a week. To build the engine. Because that was what I was more interested in was the engine, and parts. But as far as the construction of the airplane, why, I don't know much about it...
SB I just wondered, what...
FK Of course they were all made out of wood, you know, constructed. Huge propellers and everything, all that had to be cut down by hand.
SB Gosh, that was a little different today isn't it?
FK Oh, yes, it is.
SB And then you'd take the, they'd take the engines out and fix them in the back.
FK In the back. And then of course when we moved out to the other plant, well we made a regular testing, and had a building separate from the the main shop. And that was where we done all the testing, and then of course...then this Bill
Conover came in there, and he done the testing, we didn't do any other testing. But the biggest part of my time was in the shop then.

SB In working, in building the motors?
FK Building the motors.
SB Now this, this office was out on south, this was the south...
FK This was the office south of the new plant you see this plant here.
SB Did they build that plant or was that, did they...building.
FK They built that. No, they built that plant.
SB Had to get up in the morning to get out. Did you live on the West Side then?
FK I lived out on the West Side. Our old homestead was out on Albany Street, near the plant.
SB Oh, yes. That's where the freeway comes off now.
FK It's all torn down there, except my homestead is still there, and the back of the school house there, over at Cincinnati, I used to have a motorcycle them days, and I used to ride out to this plant there in them days.
SB Dayton looked a little different then, didn't it.
FK Oh, yes. It looked a little different.
SB What did the old Bishop wear when he came down. Did he ever fool with any of the motors, or did he...?
FK Oh, no, he never done anything.
SB Came in and made his appearance.
FK Just an appearance, and. See he didn't have very long to see that, any of this built.
SB Did he, did he, was he still preaching or had, I guess he had, he didn't have a church here did he?
FK No, he didn't.
SB He was more or less an official wasn't he? That's a very nice block.
FK Well I was always interested in new things, which you're seeing.
SB That came out in the, oh I see. That's a nice picture of you. Did, after,
after you finished working...

FK Now, this here, shows me starting on Dave Garroway's program, quite a while ago.

SB After you finished, working.

FK Now this is some of the questions that he asked.

SB Yes, after you finished working, did you ever see Mr. Wright after you were no longer employed?

FK Oh, yes. I used to go over and visit him there on Broadway, in his little place over on Broadway. I used to go over and visit him quite often.

SB Oh, was he glad to see you?

FK Oh, yes, always glad to see me.

SB Did he talk, want to talk over the old days, or...

FK The older days, and at one time, he came out to the field, every time he come out to the field, why see after in 1918, I went to work for Wright, the old McCook Field.

SB Oh, yes.

FK And he used to come out there, and at one time, you know he didn't do any flying for a long time after he was in that accident, you know. And this first Douglas airplane that came out there, why I was invited to the line to meet him, and we took a flight in that. And he says to me at that time, he says did you ever think that anything like this would happen? And I says, no Orville, I didn't.

SB What did he say?

FK What?

SB What did he say?

FK Well he says, he asked me whether I ever thought. So when we came down, I says well what did you think of it? Well, he says, that surely is great, and that was, and this is when I retired from the field.

SB Oh, I see.

FK They put these posters all over the...
SB  Well, that's nice. Gave you a good send off, didn't they?
FK  Yes, they really did. They really gave me a send off.
SB  Do you think if he had known that the plane was going to be used for war he
    would have felt differently.
FK  I think so.
SB  Did he ever express?
FK  No, he never did. Other than this stuff, when I retired, different things.
SB  Oh, that's cute. Wasn't that nice.
FK  This is, they had all the boys to sign...
SB  Oh, yes.
FK  Then I retired. And this is supposed to represent me in my office, and other
    than that, oh on one of these things, I don't know which one. There it is.
SB  (chuckles)
FK  There's the field, I don't know...
SB  If I had known, just this one. (chuckles) Well that was nice of them.
FK  Yes, they had one of the largest parties, going away party they had it out,
    at the Civilian Club. Out there. And there was over three hundred and fifty
    people there at that party.
SB  Well, is that so.
FK  There's the different ones. Telegrams I got from different people I knew.
SB  Well, that's very nice. Did Orville ever come out again? Did he come out to
    Wright...?
FK  Oh, he'd come out to the field quite often. I was...
SB  Why did he come out?
FK  He was invited as a guest to come out.
SB  Well, was he ever consulted or was it just honorary?
FK  I don't know, I don't know. See I went into radio. And I was in radio when
    they first started it. Radio and tele...
SB  You say radio, you mean with the...with the...
FK  Experimenting in radio.
SB With the planes?
FK In airplanes and stuff like that. Here, I went out to the field on radio there, we didn't have tubes in them, we were still using crystal sets.
SB Well, you mean radios to be used in airplanes?
FK In airplanes.
SB Oh, I see.
FK Airplanes.
SB They be in kind of a bad way without a radio on a plane nowadays.
FK I would say so. And a compass. And I done quite a bit of experimenting on radio, radio compasses, and radio beacons and you can tell on them, different things.
SB All these letters they certainly send you away with lots of appreciation.
FK They sure do.
SB Well that's nice. Do you think that Orville was pretty lonely after, after...
FK I think so. Yes, I do.
SB Did he ever express it?
FK No he never expressed himself.
SB Did he ever express in a personal opinion on anything other than his planes, do you remember?
FK No, I don't remember.
SB You just don't. Well this is very nice.
FK Those were different things that I worked on. When I retired they had all this stuff in magazines, and papers. This is rear control car that we built when we was downtown, and we ran it all downtown we controlled it, from moved out base in there.
SB I bet that created...
FK Yes.
SB A lot of to-do.
FK Well it did. That and. Then on the starters for flight, Stephens you know.
You don't. And this is a radio beacon and this thing here, this is a stratus reflect, Stephen then. I made the radio and the transmitter on that. I designed it and built it.

SB Is that so. When you talk.

FK For the Geographic Society.

SB When you talk with Orville would be, would he be interested in hearing about something like this?

FK Oh, yes. Cause he knew that I was into radio out there, and the things would be going along...

SB Did he ask you about it?

FK Oh, yes. Now this is the magazine that I got out for the Chevrolet people, and they wanted to know so they had me out at the field and they had to have published this magazine here; it's a true story.

SB 1909-1956.

FK And I have this magazine, they sent me a copy of that.

SB Well, that's nice. Why did they wear those hats on backwards, when they would fly?

FK Well that's what they first, they wore at that time. See that's the representative for the first uniform that they wore, the flyers wore.

SB Why did they wear that type of hat, though?

FK Close to their head, you see all the wind from the propellers and everything.

SB Oh, protection?

FK And had to have something that protected your hair.

SB Give you a head cold.

FK You've been out to the museum haven't you?

SB Yes. I just noticed that they always had those, those hats on backwards. And I wondered why?

FK Well that was all over the country.

SB Quite a difference isn't there?
FK There sure is.
SB How'd you mount...?
FK (unintelligible)
SB How did you mount that motor?
FK How did I.
SB What, yes, how did...
FK We mounted it on a rubber cushion.
SB And how did you keep it from flying off.
FK Oh, we had that all bolted down through the...
SB Through the...
FK We had strips of wood underneath that. And two by sixes ran these bolts going all the way through. And then we had, they were loose and we had a cut rubber that the engine was mounted onto.
SB Oh, I see. Would there be much vibration?
FK Oh, yes there would be.
SB Yes, I'm sure there would be. Was this the radiator?
FK That's the radiator.
SB Why, why, why did you put it up like that?
FK Upright to get the water down to the engine there, see, because we had to have this forced feed into the engine. The air to the water coolers.
SB And then this was the gas tank, is that it? Is this thing...
(break in tape)
FK Yes, that was the gas tank.
SB The gas tank. Now did you have to compensate for the weight of the, of...
FK To balance it.
SB To balance it over here.
(phone rings)
FK Oh, gosh.
SB You're just too popular.  (break in tape) (end of tape)
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