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EDITED ORAL HISTORY TRANSCRIPT

WILLIAM A. "BILL" WYNNE
INTERVIEWED BY SANDRA JOHNSON
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JOHNSON: Today is June 3, 2014. This oral history session is being conducted with Bill Wynne at NASA's Glenn Research Center in Cleveland, Ohio as part of the NACA [National Advisory Committee for Aeronautics] Oral History Project, sponsored by the NASA Headquarters History Office. The interviewer is Sandra Johnson, assisted by Rebecca Wright. I want to thank you again for joining us today and driving out here to meet with us. We really appreciate it. I want to start by asking you a little bit about your background, and how you first learned about the NACA, and when you started working here.

WYNNE: I first heard about NACA through friends who were working here. I had a friend, a neighborhood kid, who was an engineer—Clint [E. Clinton] Wilcox—who had graduated from Case [Western Reserve University, Cleveland, Ohio]. Clint was working here, and then later on—it was after the war [World War II] that Mary Howard lived across the street, and I was pals with her brother, Bob [Howard]. Mary Howard was working here, too. She was a computer person, they used to read the monometer boards. You probably heard about those. They used to do that by hand and eye and do all the calculations. They were computers, but working before computers.

JOHNSON: They were human computers.

WYNNE: Yes, so that's how I heard about NACA. I came home from the war and I had this little dog—which became world-famous immediately, soon as we got back to the States—and I didn't know what to do, but I was hoping to go in something to do with the dog. My wife, Margie, and I got married during this period. We had been engaged before I went overseas, so we decided, well, we're going to get married. She had me put in an application at NACA, and she said to me, "Don't tell them anything about the dog, Bill. Don't show the scrapbook."

We had a competition going here. My book, which is *Yorkie Doodle Dandy*, is something that she contributed to, and the subtitle is *Or, The Other Woman was a Real Dog*. You can get the gist of what competition's going on here. I went out and I put the application in, and there was a fellow named Ray Labadie who happened to be the personnel man. I was filling out the application. I finished, and he said to me, "You have any hobbies?"

I said, "Well, yes."

He said, "Well, what is it?"

I said, "Well, I have a dog act."

He says, "Well, put it down." I hadn't filled in hobbies, so I put down that.

After I went to Hollywood [Los Angeles, California]—I was working dogs in motion pictures—I had my foot in the door at one point. Owen Crump, who was a big producer with Jack [Jacob L.] Warner of 420 military films on how to fly airplanes—everything was included in those 420 films. Jack Warner was a colonel and Owen was a lieutenant colonel, and they were in charge of this whole thing [First Motion Picture Unit]. Ronald [W.] Reagan was part of that, and they had all of these actors working these parts.

Owen saw my dog, and his wife said, "Why don't you put the dog in this picture?" He said, "It's too valuable to be in this picture. I'll put her in my next picture." We went to

Hollywood after we were married, and Margie didn't like it at all. We were jammed into a house with five families, one in each room, in a five-bedroom house.

Housing was terrible after World War II—you can't imagine. Everything was bad. There had been no production of washing machines, dryers, nothing was available. Cars took a year before they started coming out, and they were on the showrooms and some dealers were asking $200 under the table for the privilege of you getting on to the top of the list. There were all kinds of shenanigans going on.

Margie being unhappy, I told her to go home. I put her on a train and I said to her, "We'll make a deal. If I get a contract here in Hollywood, you'll come back, right?"

She said, "Right."

I said, "Now, if I don't have a contract and NACA comes through with a job offer, I'll come back." Right about January, it was the first part of January, my mother got a telegram for me to report to work here. She said, "Well, he's in California."

"Well, can he get here by next Monday?"

She said, "I don't know."

So we talked on the phone, and I said, "Yes, okay. I'll try to get back." I left on Tuesday and I drove like a madman and I arrived back on Saturday morning. Then on Monday I came and showed up to work.

In order to get back—we're going to jump a year ahead at this point to explain what happened. I get a call from Ray Labadie after I was working here about three months, and Ray said to me, "You know, Bill, we have a show that we put on here, we have a big production. We have a big chorus, we have dancers, we have a ventriloquist, we have all these different people. We go to nursing homes and things. Would you be a part of that?"

I said, “Sure.” I went out with them a few times, and one day we met in the hall and we were talking. He says, “You know, Bill, how you got hired, don’t you?”

I said, “No.”

He says, “Well, I had nine different aerial photographers that had more experience than you did, but I wanted your dog act.” That’s how I got hired at NACA.

JOHNSON: That’s funny.

WYNNE: Actually, when you get people with serious hobbies, usually they’re good workers because they’re into other things.

JOHNSON: Right. It’s dedication, too.

WYNNE: Yes, so you really get a good employee out of that. To go back, I came back [to Cleveland], and I was going to be in flight icing research. We had a [Consolidated] B-24 Liberator and a [North American] B-25 [Mitchell aircraft], and I didn’t know anything about it. I was being broken in by Dick [Richard] Holst, who was in the photo lab [laboratory], and Dick [Richard] Loomis. Dick and Holst had flown in the military. Holst, in fact, had bailed out over France because his plane iced up on the way back.

He was a photographer in a photo plane, in an [Douglas] A-20 [Havoc]. Dick had bailed out and he went through a group of trees, threw his arms up over his face, and landed on the seat of his pants, the parachute still suspended from the tree. Dick was going to break me in, and they didn’t want to fly in this because they said it was too hazardous and it wasn’t a condition of their

employment when they were hired. I come out and Dick goes on with me on the second day. We get caught in one terrific—everybody is grounded here at [Cleveland] Hopkins [International Airport], so we're going to go out and look for ice.

We go up, and we find ice everywhere. We go up over Traverse City, Michigan. I don't know whether we went to Canada at that point. You can't imagine how—you're flying in daylight and [it's like] you're flying at night. When you get into one of those clouds, everything is black. You cannot see anything. We had to take pictures of the antennas. They had antennas hooked from the wing to the tail, and they would pick up globs of ice like this [demonstrates], and then they would break off and they'd be spinners, and finally the antennas broke. We got kicked all over the plane. It was really a rough flight.

We took pictures, we landed at Traverse City, we ate up there, and then we came back and we're going to make a pass at Cleveland Hopkins. We come along and we look out and we're right alongside the [Cleveland] Bomber Plant. With that, Eb [William V.] Gough [Jr.], who was the Navy pilot—he has a story unto himself. Eb went with the FAA [Federal Aviation Administration] years later, but he was chief test pilot here at that time. Eb took the plane and we just took off. He gunned it up, we didn't set it down, we went to Columbus [Ohio]. We got into there, the hotel was all filled up with some sort of big conventions, all over town. They put us on cots in some sort of hallways to sleep for the night, and we came back to Cleveland by train.

JOHNSON: That was your introduction.

WYNNE: That was my introduction. The pilots had to let a weekend pass because the weather was so bad, they couldn't fly down. They finally went down and they brought the planes back six days later.

I covered those missions for a couple of years, and I did other photo work. As I say, we traveled around. It was a question of where they were going to put Tony [Anthony] Krisak and me. Tony was another one that was with me. There's a long story there, and it's complex so I'd rather not get into it, but he couldn't pass security after working there about five years. When the AEC [Atomic Energy Commission] moved in, we were going into security. To make it brief, the FBI [Federal Bureau of Investigation] showed him a picture, and they asked him, "Do you know who these people are in this picture?" There were two, and he says, "Yes, that's Joseph Stalin [dictator of the USSR] and that's my uncle." He says, "Well, your uncle was the president of the Communist Party of Czechoslovakia."

I don't know how Tony had ever passed because he was an OSS [Office of Strategic Services, World War II intelligence agency] man, and his hair was gray at 22 years old. He had been in an accident, driving a general at Aberdeen Proving Ground [U.S. Army facility, Maryland], and there was a huge explosion right then, and he had amnesia for quite a while. He was working here when I got here. He was already going in as an aerial photographer. He also rode planes with German officers. He could understand German, so he would listen in. He was a guard. That was part of his work.

All of a sudden, he has this clearance problem, and that wouldn't be resolved for a couple years. A cadet at [United States Naval Academy] Annapolis [Maryland], I believe, fought it and the Supreme Court said, "No, they can't keep him from having his job." Tony told them to take the job and shove it when they called him. He was so mad about it. That's a story of one of our

associates who flew flight icing research, and he flew it for three years. I flew it for about two; I got a broken eardrum and I was grounded. I still have the broken eardrum.

JOHNSON: Was that from flying?

WYNNE: From the flight icing research. You get up there with a cold, you can't clear your ears, and something might give, and it did. I can't hear as well out of it. I'm going to the VA [U.S. Department of Veterans Affairs] and see if they can do something for me on that ear. We flew for two years. At two points—I was on the B-24, and Tony was in the 25—we flew into conditions where we got 7 inches of ice in 70 seconds and lost 70 miles an hour on a stick setting.

We got down with it and we got photographs, so those photographs were used. There's a picture of Abe [Abraham] Silverstein holding a block of ice about this big [7 inches thick] that we took of the starter housing of the jet engine that we had slung under the 24. We had a jet engine—I think it was a Westinghouse 24C [also called Westinghouse J34] jet engine under that part—and they broke that off. Also, all the inside in the cell, the stator blades were there, and there were ice formations that looked like melted wax. All like a very peculiar set up.

I have to go into another story to continue that. During the Korean War, I was working a lot with the ice tunnel and the ice tunnel people—great guys. I would take pictures for them, and we were all part of this icing thing. Now there's two stories here. The jet engines had what they called—they put a retractable screen up around the inlet to keep birds and debris from getting into the jet engine. The National Guard in Pennsylvania, 25 of them took off one day, and out of that 25 planes, 7 of them either had explosions or the engines flamed out or had all kinds of

things due to ice. What they found was that those screens actually iced up to keep the airflow from going, and that's why the engines overheated. Some of them were flame outs, exploded, and so forth. What they did then, they made retractable battle screens. They could press a button and these screens would come out, so they wouldn't get battle debris into the engine inlets. That was during the Korean War.

Another thing that happened was they had problems with de-icing boots. It wasn't on the propeller, it would be on the wings—but they had problems with these. We were testing those de-icing boots. I went down to Wright Field [Wright-Patterson Air Force Base, Ohio] and I got some advice from the fellows down there that were into heavy research in the photo department, and we got a couple of gun cameras surplus from World War II. They were small and very set focus—they're kind of a simple camera—but they were self-contained and you could slip a film cartridge in. It'll hold about 50 feet.

They rigged up two of those with strobe hookups because the icing cloud—in any cloud, any moisture—the droplets are 100 [times their] diameter apart. It'd be like having a tunnel with golf balls hanging from strings. You got the picture, how that looks? That's what happens. As these drops get bigger, then they still are approximately 100 times their diameter apart. In order to photograph this thing—you're photographing through a cloud, and if you flash at a cloud straight on, you're going to get a big glare, and you're not going to get penetration. Using a strobe light at a 45 degree angle, we put this close up with a mirror about 6 inches away. I was able to photograph by using strobe lights that would go through these droplets, and get enough image so that we knew what was going on. They were able to make that correction for the de-icing boots in the Korean War.

I'm just giving you some of the things that icing ran into. We continued the program, and we had two types of ice. I don't know if you got any information on this at all from anybody, but there was anti-icing and there's de-icing. [For] de-icing, [Lewis A.] Rodert, from what I was able to gather, had hot air pipes like you would have in a furnace in the leading edges of the plane. We didn't have a way to get that kind of hot air, so we had a putt-putt that was a heater that supplied the hot air. You could brute force the ice off there.

But when that happened, we also got another problem, which was under heavy icing conditions. As you were melting the ice off, the big chunks—there was "runback ice," and it would get in the ailerons and the rudder. The things would get frozen in between. In one case, Gough and whoever was with him in the 24, they had to shake the stick as we were in a slow dive in order to get the controls to break loose. That icing actually got into the steering mechanism because of what they call runback ice. The de-icing equipment was really good, you could brute force it off. As I say, the conditions that we flew under, you just wouldn't believe. When we found ice, we just kept going back and forth, we kept making runs in order to accumulate data.

The ice tunnel—the guys in the hangar actually developed a rotating cylinder device that was a series of cylinders tapering down with discs. They could shove that up through the airplane roof, and then this thing would rotate, and they would pick up the amount of moisture in the cloud that they could measure. So they knew what kind of moisture they were flying into. They got really some great research on this particular project. That was part of the things we were involved in. You just missed Porter [J.] Perkins, he just passed away. He was 92. He was involved with icing all his career—50 years. I worked with Porter later on, another project that I'll have to tell you about.

After we got out of that type of program, the photo lab became very involved with a new program, the crash fire program. You've probably heard about that. We were getting planes—[Fairchild] C-82s [Packet] mostly. We did have a couple of [Curtiss] C-46s [Commando] and a couple of other planes, but the C-82s were twin-tailed cargo planes that were considered obsolete for the Korean War. They were a little desperate for the Korean War. Just after World War II—they might have been part of World War II; I never saw one in my experience over in the Pacific [South West Pacific Area, WWII]—they had a contract with all of these contractors down in Georgia, and these C-82s were just rotting in the fields. They just had them sitting around, and they had to get those in a flyable condition to get them here to Cleveland.

They came in here and they didn't have instruments, they didn't have radios. Their contract was to deliver the plane. Each pilot got so much to bring the plane in here. They would come and they would set this plane down, and they'd have to go out and tow them in sometimes. They just stalled out on the runway after they were coasting in on the taxiways. They finally had to take some apart, and they trucked them down to Ravenna [Ohio], where we set up a strip. At the landing strip there, they took the nose wheel off and they put a slipper—we called it a slipper—a clamp that goes around the rail, and goes down and guides the plane. That way they could pull the engines in the full power-back, and at the same time get the plane up to full speed for takeoff.

Then we ran it into a barrier. Say we got the plane up to 82 miles an hour, we had a barrier of dirt and railroad ties that sheared off the wheels. Then, they had 1-foot thick logs with 6-inch [long], 1-inch thick spikes. Those spikes would rip open the gas tanks, so that we were setting up a mechanism of crashing, like hitting trees and fences. That was part of the experiment that they did at the beginning.

JOHNSON: This was remote control, right? There wasn't anyone in those planes?

WYNNE: Nobody was in the plane. They just set it up and we had an instrument box that had all the instrumentation. Thermocouples everywhere, over every situation, to get the heat, all the locations. It's too bad you don't have a lot of time because this is very complex. We crashed a lot of planes—I think they crashed 57. I was gone for the last three or four years on that.

Among the things they did, the most unique was they created an inerting system. They found a way to take fire extinguishers and put them through either jet engines or reciprocating engines, so when that plane had an impact, in $^{1}/_{15th}$ of a second they cut off all the fuel sources and cooled down all the surfaces by this fire extinguisher. You've got to get the temperature down below 400 degrees [Fahrenheit] because that's the flash point for fuels. That's what they did, just so they could find other sources that we didn't know about that would cause [fires]. That's why they developed the inerting system, to cut out the usual ways you could get fire, to [find] the unusual ways we'd get the fires.

These guys really did a terrific job on this, but it didn't work out. When they finished the program, FAA didn't want to go with it. They were getting pressure from the airlines. The airlines didn't want to do it. It was going to take 40 pounds per engine, and that would be four engines. That's the weight of a person. Their excuse was it was baggage or a person they were going to have to give up for the weight. The real reason is economically, it's better off if you're dead. This is a realism in industry.

I'll go back. Ford [Motor Company] had trucks—they had a gas tank alongside the sides of their trucks. They lost about 162 people, but it was cheaper to pay off the insurance and cover

them than it was to change all of the Ford trucks. It becomes economics. The same way with airplane crashes. At that time, it'd be cheaper to pay off the insurance if they're dead rather than if they're alive and survived and got banged up and so forth. As far as I heard, United [Airlines, Inc.] was the only one that was willing to go this route, but the others didn't want to do it. It's a matter of fact answer.

JOHNSON: Just go back for a minute and talk about the icing. When you first started, you were talking about the film. The photography was still images? It wasn't film, moving film?

WYNNE: No, most of the icing was still pictures. We have very little footage, and it doesn't show much. It's just showing the plane flying through the air. With the still pictures, where you got the action, with the flames and all that, then motion picture was the only thing.

Then we had other problems which we had to overcome, and among them were all the cameras we bought. We bought three Mitchell [Camera Corporation] cameras, and this was really a funny thing because these were 16-millimeter [film], Hollywood-type motion picture cameras, but they had 35 [millimeter film] they used at the studios. Early television used to go 16 on this route. One of these cameras cost $4,000. At that time, I was only making about $3,500 a year. One of the engineers said, "$4,000? My God, you can buy a Cadillac [luxury vehicle] for that." Well you can't take a Cadillac and make pictures with it. This was a beautiful, wonderful working machine.

You saw my pictures that I sent you. I invented a camera timer for them because here's what happened. Those cameras we bought had irregular running motors. The Hollywood type of motor was synchronized to go 24 frames a second. Silent films were 16, that's why they're so

jumpy when you look at them. The motion pictures are 24, and television is 30 frames a second. The cameras were rated at 128 frames a second, and the first thing you know, the engineers are going crazy. The crash takes place and the flame comes out over here that shows on this camera, and it shows at a different time over in this camera, and at a different time over in all the cameras.

I designed a timer that would go to the front of the camera. I took a gun sight from World War II, $1.50 surplus at Pope's [Variety Wholesalers, Inc.], so I got three of them. John [L.] Pollack was an optical physicist. John designed it so that a Veeder-Root [Company] counter would be underneath and project up into infinity, and we could put that down in the grass just as the plane was going over. The plane would be on top of it, but the grass was where the timer was. The timer went from $^{1}/_{10\text{th}}$ of a second, to a second, 10 seconds, 100 seconds, 1,000 seconds, like that. The first one on the right reads tenths. [For example, 0001.0 second.]

That would be determining how fast that camera was going, and if it showed, say, 11 frames, it was going 110 frames a second before turnover. If you counted 12 frames, it was doing 120 frames a second. You'll have a curve that I enclosed in there, it covers 2 seconds. Those cameras were all running separately, and each one was dropping as much as 15 frames in $^{1}/_{10\text{th}}$ of a second. When the film was going around and it starts to go fast, the claw and the plunger is making each film—this camera, as I say, was a superb camera because it stopped every frame to give it a shot. They were sharp. [But when film rolls slowed down, there would be a jolt causing 15 frames a second drop in speed.]

That's what they needed, stuff to illustrate in the reports, to blow up these 16-millimeter frames. It was essential. We found out that all these variations were taking place in these cameras, so that's why we developed a timer, and that got into a lot of hassle. It took us a year to

get it. I gave it to an optical physicist and he took off on his own path and it didn't work. Everybody got sore over there, and they gave me Bill [William H.] Gowan [Jr.] to expedite everything. We got the machine shop, we built the dang things ourselves. We had to have Veeder-Root Company reverse the numbers into mirror images, something they never had done before, because we were projecting into a mirror and it's reversing. By putting mirror images in them, they straightened out the numbers so the engineers could read them. They were having trouble, looking upside down and backwards at these numbers.

All these were things that we had to overcome. After that, we put a flashbulb. When that plane made an impact, there was a photo flashbulb put up high, and all the cameras zeroed in on when that flashbulb went out. That zeroed each camera so they knew where everything happened, all the way around, and they were fine. It took a year and a half, two years, before we got to that point.

Then we're going to get to the [Piper J-3] Cubs. We were going to crash three Cubs. We got an animatronic dummy from Wright Field, I think it was a $45,000 dummy. Had an accelerometer in its head and an accelerometer in its chest. We were going to take a small little Piper Cub, and we're going to crash that into the hill. We had to turn it sideways because when a plane comes down in a spin, it's going to hit with the nose and the wing and the wheel at the same time. It's just the way it comes in. In order to simulate that, they had this barrier that was at a 45-degree angle so they hit simultaneously.

We'd use a 4,000-frames-a-second camera, which was a Fastec [Imaging Corporation, high-speed film camera], and not particularly sharp. That particular camera, 4,000 frames a second, in the balance of the color film of the period, like 200 [speed film]—if we pushed it another f [focal]-stop [aperture size] in processing, it was still not adequate to see the details.

They put a grid up, 4-inch grids. They had a dummy in the front which was a parachute-type dummy, very rigid fellow, but this animatronic dummy had the tensile strength in the arms and the legs and everything of human bones, so that's what made it so expensive. It was designed particularly for crashes.

As they slammed this into the hill, the first guy took the beating, but we decided the second one needed a shoulder harness to hold it back. I had an idea for a design to illuminate this thing. All the data's over in $^{4}/_{10th}$ of a second because you slam this thing into the hill, and then all your data's over within less than a half a second. In order to illuminate it, I had the idea that I told [G. Merritt] Preston, who was the head of the project. I had this idea of how we could make the lighting in there. He says, "Well, let's do it the next time." The first time, they got no data at all visually. They got data with their electronics, but they didn't get any visual data at all.

What I did was I set up, using focal-plane bulbs—which have a very long duration, $^{1}/_{10th}$ of a second. The other flashbulbs that we used that were standard at the time were about $^{1}/_{50th}$ of a second, and then we had a high-speed one which was $^{1}/_{200th}$ of a second, before strobes. In the old focal-plane shutters, they had to have a long one because there was a shutter with a slot that went up in front of the film. You had to illuminate that whole thing.

Scottie [Scott H.] Simpkinson, you can look him up online, was very much involved with the Cape [Canaveral, Florida] role. Four of these guys went down to the Cape. [Gerard J.] Pesman, Preston, Dugald [O. Black], Abe Silverstein of course. There were about four of them that went from the hangar down there. I was already gone, so I wouldn't have had a part of it.

I designed 24 positions where I overlapped the part of this thing, and I would shoot off 96 flashbulbs in 1 second. By using 4 positions of 24 each, when the pointer hit that one, four bulbs went off along eight lines. They just went off like this—bing, bing, bing, bing, bing, bing—

because they were stacked 24 to a section. One of the engineers says to me, "Ninety-six flashbulbs? My God, that's $25 worth of flashbulbs."

I said, "Yes, but you got a $40,000 dummy, not counting the plane in this." You kind of lose perspective. He's thinking of buying it out of his own pocket.

The plane would trigger this thing about 10 feet away. I sent you a picture with the plane in position. Scottie designed this thing where this comptometer was going around a full 320 degrees in 1 second, and as it was going around, when that was triggered by the plane, any one of those could start. It didn't matter which one it was because they were all going to work in rotation. In one second, we fired off all those flashbulbs and we got beautiful slow-motion pictures.

The point of having four was to make a shadowless light so they could see the movement against this grid they had in the background, so they could do the motion. It got the whole motion, and that was why we had to have the four positions, to give us shadowless light. Otherwise, if you took one flashbulb, it'd give you a shadow. You did two, you'd get two shadows. So I put in four, and their shadows are imperceptible, really, because they are all wiping each other out.

If you ever see the film on it, it's just beautiful the way it came out. Bam, the thing flies up in the air, and then in slow motion you can see what's happening. Two of these dummies—the dummy lost his head at least once. It's bouncing around in the plane, like on the impact, when the neck obviously wasn't strong enough.

JOHNSON: Where were the cameras mounted?

WYNNE: We had the cameras for this Cub right at a 45-degree angle. We'd have them just like that, shooting right here [demonstrates], because we had the whole part of the plane stripped away so you could watch the figures from a side view. We just didn't work with the way a plane was; we had to open up the plane to show them seated. One of the recommendations was shoulder harnesses. Apparently, they didn't use shoulder harnesses in those days yet. That was one of the things, plus there isn't much you can do because you've got to make the airplane fly and it has to be light enough. You're going to make it too strong, it's not going to fly, it's going to be too heavy.

Later, Porter Perkins—they wanted to determine radar, what you see on the radar screen in a way of a storm ahead. We had to measure the drop size in order to do that, and we had to be able to count drop size. Porter asked me if I could do this, so again, I'm in research—I'm not even working in a photo lab anymore hardly, only to develop my stuff that I'm working on. My boss, Frank Kish says, "Hey, Wynne, you were hired to work for the engineers and you got the engineers working for you."

Nobody was able to do this because college-wise, you got a bachelor's and you were just taking pictures like you do for a newspaper or magazine. Here, this means we're also technical. In photography, it was so technical they had never even had an assembled test when these guys were all hired. They hired you and paid you on your experience. There was no test that you could take. The engineers they could give a test, but they couldn't give a test in photography because it's so vast. You really found out how vast it was.

It turned out that I was doing the particular work—and you'll find that I was a lousy student in school. I was 20 years old when I got out of high school. I was in an orphanage, running the streets afterward. That's where I got all my inventiveness. I was running with

another fellow, a young kid, whose dad was a whacko inventor. He had a dirigible [airship, or zeppelin] he was going to put in on Lorain Avenue [Cleveland]. He built a hangar there, and people burned it down in the neighborhood—it's right in the middle of housing, [West] 122nd [Street] and Lorain.

It's probably still there—it's a six-family apartment. He made it out of brick and they blew it up one night, dynamited it. So after that, he made it into an apartment. My buddy was his son, and this kid was pretty inventive. He did a lot of things. The first time I ever saw photography, he was developing in a darkroom and I thought, "Oh jeez, this is too much work for me."

JOHNSON: Little did you know, right?

WYNNE: Yes. That's where a lot of the creativity that I had—plus you'll find that when I had this dog overseas, I was starting to train it and I built all the equipment that I had. I had her walking a tight-wire blindfolded; spell her name out of letters. I built a little scooter out of an orange crate. That's where a lot of the thinking goes.

JOHNSON: I was going to ask you, the fact that you were so inventive and you figured out how to do all this—when you first started, did they have any training for the photographers? You said they didn't take a test, but there was just on-the-job training?

WYNNE: Yes, the guys were training. They come in here, and they were specializing. Generally, about four or five of us were more general, we did everything. We did the small

cameras. We had guys—Freddie Lingelbach and Bill [William A.] Bowles mostly did 8 by 10 [inch] stuff. We did 8 by 10. Marty [Martin] Brown was doing 8 by 10. He was doing all the construction work. They all pretty much had their specialties, and then a few of us, Dick Holz and Dick Loomis and all—Dick was doing movies because he had been in movies for the Marine Corps, in the Marine Air Force.

We're learning and teaching off each other, and then we're trying to meet the needs. The needs were pretty advanced in some things, like the Schlieren photography [process for photographing flow of air and fluids] for the wind tunnels. They were already into that. That's a German thing. They used splitter glasses and knife edges to cut out all the extra rays that you're going to get. You know when you take a light bulb and it goes out, all the rays? They took knife edges and they just got down to one ray. That way you get extreme sharpness in what you're doing. That's what this Schlieren [process] did.

The Schlieren has a lot to do with the interferometer, which is what [Albert A.] Michelson developed to record the speed of light. He recorded the speed of light. What he did is he took a flash, straight ahead, but with mirrors. He took that same flash and he bounced it off this mirror and a mirror over here and a mirror over here and a mirror over here and brought it back, and they could see there was a difference in the time when the light arrived from the same flash. They thought light was instantaneous, but he found that there was a speed of light.

The Schlieren's a little bit derived from that, but only in the way that it was set up, not so much as for the purpose. The engineers were already into that, the optical engineers that I was working with, John B. Pollock, and them. We had to photograph a raindrop. Found out that a raindrop is very elusive. You take a light and you flash it at it—raindrops are a ball. They get to

a quarter-inch [in size] and they split up because it's air, the surface tension breaks. The surface tension holds them together into a little ball form.

To get that little rascal in a photo, you had to be pretty tricky. I found out that you had to surround the thing with light in order to get the ball. I used a bounce light in order to get the light on all sides. If you took one flash, you got a tiny blip of light. If you took a sidelight, you got a little crescent shaped blip. If you took another sidelight, you got another blip. I worked out photographing the raindrop in an aerial camera. I was using water and just dropping it down, and I would photograph it as it fell, trying to figure out the lighting system.

At that time, I didn't think anybody else was doing it, but later on a couple of engineers from a university somewhere filed that they were the first to photograph raindrops. I had already passed that point because I've got to get multiples, and I've got to get it in an airplane and fly through the storm. To get the drop was just part of what I was trying to do. I finally was able to get the raindrop. Now, in as much as they're 100 [times their] diameters apart and I've got a slot this big to keep them in focus, I find that I get one drop in 25 shots, so that's a tremendous expenditure of film. So I have to find out a way then to get multiple shots.

I used a dark field. I had them buy some black velvet, and purchasing went crazy, buying black velvet. I had the black velvet, and I got myself a studio because I'm controlling everything. I've got my lights bouncing around sideways, and using a dark field illumination I could get 100 shots off of one sheet of film using an aerial camera because the velvet was killing off the flash. It got to a point of saturation where it would start to fog, but you could still determine the other thing.

I figured we could do it with 50 shots. We'd get two drops that are measurable, and that's what we're really after. I worked on that program and I was getting allocated money,

about $4,000 at a crack. I'm writing my time off of this work number. Everybody had what number this is—the engineers, if the photographers did it, they used that number for their time. The money was taken out of that budget. I don't know how NASA works now, but I suppose it's about the same. That's the way we did it, and so three times I got the $4,000. Abe and Porter were okaying it, and we were making headway.

They transferred it to the hangar, and so they assigned Bill Swann to work with me. Bill was going backwards. He took strings and he had beads, and he was going to put this down in this slot and photograph—well, I already went through that. I already had the pictures. I didn't know what to do because it was going to slow it down. I had the photos, I had the whole system worked out, then we were going to have to build a piece to go into the airplane.

Bill stepped in, and about that time, I got the offer to go to the Cleveland *Plain Dealer* [newspaper]. They hired me because they knew of my work here. They ran a couple things on the crash fire program. We had the color [photography], and I also had sold them a couple of stories. I threw a camera over the high-level bridge in Cleveland called the "suicide camera," 120 feet of tow rope with a bungee cord. I had this camera taking pictures of what a suicide would see on the way down, and they bought it.

One day I went in there, and it was on Columbus Day. We were off on Columbus Day at that time. They said to me, "Hey Bill, would you consider working for the PD [*Plain Dealer*]?" I said, "Oh gee, a news photographer? I don't know."

He said, "Well, you wouldn't be—."

I said, "Nights?" I couldn't work nights—I had six, seven kids at that time—but I couldn't afford to stay here any longer. It was really in a bind because I was getting $4,400 a

year, and the *Plain Dealer* was offering me one-third more to start, and there was a contract underway which really got another $15 a week, and so I couldn't afford to stay.

I had my dog act, and I was carrying myself through those years. I had a television show. I'd take an hour annual leave and I'd run to the television station, put on a costume for a children's show, and would do my dog act. My dog did 42 weeks live and never repeated a trick. This is what I did, and the dog's getting older now, and I'm not able to do these things. I'm doing the theater, Saturday matinees, I'm doing different theaters, the kids' shows especially. Nightclubs, I did everything. I did Fourth of July fireworks for cities, like Bay Village and Cleveland Heights.

The dog's getting to be about 12 years old and I got to start figuring out something else. I couldn't really afford to stay. I used to say you had to be independently wealthy to work for NACA. The money really wasn't there. You're getting half of what industry gets, but it was such a great research place. People were fantastic. It was really great, but it's just, can you afford it? So I decided to take the job.

Burt Mulcahy, I told him I was going to be leaving. He said, "Gee, Bill." He figured it out, "it would take you six years to get what you're going to get, but what I want to do is I'm going to hold your job open for six months, and I'm not going to hire anybody. If you have an SOB to work with, you can come back. We'll be glad to take you back. I'm going to give you a blank application. Anytime you fill that application in, you can come back." That was what they could do. The problem is, at [NASA] Langley [Research Center, Hampton, Virginia] they had a fellow who was only a high school graduate. I was trying to find it in the book they've got. It's about that thick [demonstrates], the 75-year history [*Winds of Change: Expanding the Frontiers of Flight: Langley Research Center's 75 Years of Accomplishment 1917-1992]*.

I was trying to find it in that book. This guy was the one that really created the first proof of supersonic, and he did it by making a little wing alongside the airplane, about that far [6 inches], where he created the compression they needed. They actually clocked supersonic. When the plane went in to do a dive, the plane itself didn't achieve it, but when he put this thing alongside it, the force of compression did it. He got the supersonic, and they proved it at that point.

They went crazy at Langley trying to figure out how to get this guy a raise. Finally I guess they did it, and they got him classified as an engineer because he didn't have the background. At NASA, education's everything, you've got Ph.D.s a dime a dozen here. That was the problem, probably, with me. They couldn't figure how to do it, even though I was doing research on my own practically.

I have to tell you what happened to the camera. They kept working on it, and apparently they got it to fly. [Eb] Gough called me up and he says, "Well, we got that on the airplane, but we got long streaks instead of pictures."

I said, "Yes, that's right, Eb."

He said, "You mean, you knew that it was going to be long streaks? A raindrop was going to be 27 feet long?" I knew it because the strobe was too slow. He says to me, "You knew this?"

I said, "Yes, I knew that."

"What were you going to do?"

I said, "Well, you'd either have to build a machine, or buy one if they have it available." It's a budget thing, what are you going to do? Well, they dropped it. They dropped the project. Years later, I thought of a way that I could slow this thing down. Instead of having a millionth of

a second flash, which would be rather intensive considering I was using bounce light, I could slow it down 10 times. I could slow it down from a 27-feet smear, so it'd be 2.7 feet a second. How would I do that? I was going to change the angle.

In other words, when you have a man running in a track like this [side angle view], it takes 250th of a second to stop that. When you take the man and run him to you, it only takes $^{1}/_{25th}$ of a second. I was going to change the angle of taking the picture of the raindrop from this to this [demonstrates]. That would have put us in the range of being able to afford a decent flash system. But they didn't go that far, so they just let it go. I understand that they're still working on that idea. The idea was to fly the plane into a rainstorm and somebody else has a radar screen, and what do you see for density? Then, this is the drop size you have with what he's looking at. That was what that whole thing was about. But I had to leave it.

JOHNSON: You got to do what you got to do to feed the kids, right?

WYNNE: You got to do what you got to do. I'll tell you about some of the people—Abe had what's called Abe's Boys, did you ever hear of that? Abe had his favorites. They were all bright people, and they moved in the same type of circle that Abe did. He was in the scientific circle. He had Bruce Lundin, maybe Uwe [H.] von Glahn. Uwe was in the ice tunnel. I can't remember everybody, but Ben [Benjamin] Pinkel and Irv [J. Irving Pinkel], all these different people. They were favorites. He used to have a whole saying, he said, "An engineer never should get married. He should be married to the job." Abe got married, eventually. It was a lot of fun.

JOHNSON: It sounds like they allowed you to be so inventive, and they supported you financially when you were coming up with these things. It was more like a blank check if you needed to get the work done, "Here's the money."

WYNNE: Yes, they had to get it done. The crash fire program was failing because the data wasn't accurate, and then, using my timer, it was accurate.

I got to tell you another one, this is really important. They finished, I think it was called the Jet Propulsion [Static] Lab [Laboratory]. This is just before I left, and I left in November 1953. They had a meeting, and they hadn't run it yet. The Jet Propulsion Lab was going to circulate the air around, but instead of using just a wing or a plane, a physical body with Schlieren's and flying out air foils, they're going to run an engine in there. One of the engineers asked, "What would happen if we have a flame-out and we're circulating a combustible mixture around this tunnel"—which was going to be a sizable tunnel—"would we get a detonation or an explosion?"

Wow. I mean, you would kill people. In a volume that they're talking about, this tunnel would probably be 10 to 12 feet in diameter. Mel [Melvin] Gerstein, Dr. Mel, was in fuels and lubes [Fuels and Combustion Division], and he was in charge of this project. They borrowed a [U.S.] Bureau of Mines—a 300-foot casing, ¼-inch thick, 2 feet in diameter, and they're going to set it up with a right angle curve with an expansion tank about 20 feet long. So you're going from 2 feet—when you want to slow the wind down, you got an expansion tank before you exhaust it out. They're going to put a flare in there and shoot off a flare, and the instrumentation guys were going to put capsules with speed flash recorders.

In other words, there's a wire like this [demonstrates], and it measured the flame growing through there, the speed it's going through. These probes were about that long [6 inches], and they fit into this pipe that they were going to do this, at 10,000 feet altitude. Just as they're about to do it, Abe said, "You better get the photo lab in there."

Gerstein said, "We don't need it, it's all instrumented."

He says, "You better get them. You'd be surprised what those guys might come up with." We got called out, so I took my camera timer out there. We set up, and we ducked around one of those concrete pillars, and when that thing let go, when they hit that flare with this mixture—going down this pipe, you could have heard it up on Kamm's Corners [neighborhood on the west side of Cleveland], sounded like artillery shells going off. When they finished the run, it had taken a 2-foot disc, 400 pounds per square inch, blowout valve. They had little holes in it with aluminum, and it was 1-inch bolts. Those bolts were wrenched right off and that disc was on the ground. In one frame of the camera—I was using a Mitchell camera with my timer—one frame had the flame at both ends, that's 20 feet apart.

When the instrument guy said it was 320 feet a second, I said, "BS. It's much bigger than that." Oh, no. Well his probes were bent over; there was enough force to bend the probes over when it was going. I said, "I want you to cut a hole every 20 feet in that pipe, 1-inch."

He said, "Well, we can't do that. That belongs to the [U.S. Army] Corps of Engineers."

I said, "Well, they told you to do what you wanted with it. They just said that they weren't going to be within a mile of that place." I said, "I want those holes cut."

He said, "Well, how are you going to get the altitude pressure [10,000 feet] so it don't go down?"

"We'll put little sponges," I said. "Get some three or four-inch sponges and just set them on top there." They're hard sponges. I said, "They'll pull in, and then, when the pressure changes, they'll pop off."

Then we made another run. I clocked it, and we got up to 1,122 feet a second. That is—detonation is above the speed of sound, 750 feet a second at sea level. We're getting 1,120. A detonation is not repeatable. An explosion is—you can take so many sticks of dynamite or TNT [trinitrotoluene], and you know exactly what you're going to get. The atomic bomb is a detonation. It is not repeatable because it's so wild, and it's above the speed of sound. That changed everything. Mel goes over and tells Abe, "I can't believe those guys caught that, that fast."

"I told you," Abe said.

Mel told me this. He said, "Abe said, 'I told you.'"

That was a $6 million building, and at that time, that's a huge budget. They changed the configuration to two sections, one where they were going to work on the engine over here in preparation, and make their runs in this one. When that series of tests was done, they could shift over here and then put another engine in, of a different type, and they could set it up. That's what they did. I guess it's still being used that way. This is what, 50 years? That changed the configuration of the building and the way they handled it. That was my contribution, over and above just taking pictures.

JOHNSON: When you were hired in as a photographer, did you have any idea that you were going to be doing—to go in on your second day and be in this life-threatening situation of flying in that icing plane?

WYNNE: We had to eat. I got all these kids, I come from California, we're in desperation out there. We hadn't really gotten anything solid. I was getting $13 a day for working as a dog-handler in motion pictures. Your daily rate—and there's feast and famine in that business—but if I had a contract, I would have been like Rudd [Ruddell B.] Weatherwax with Lassie. He was making $1,000 a week when the dog worked, and $500 a week when he didn't, had a five-year contract. We're back making $50, $60 a week.

It gives you an idea what the proportions are, but I had the dog that could do it because she could do everything. Even now, I got three screenwriters competing to write a screenplay, who was going to get to do the screenplay. I signed with an agent and a lawyer. This picture, if it's done right, it's such a great little story, you wouldn't believe. A little, four-pound Yorkie [Yorkshire terrier] went through the war with me. She ate our food—it would kill a modern Yorkie in three months with pancreatic or kidney problems. We used to eat this G.I. [Government Issue] food in the tropics.

JOHNSON: How did you end up with a Yorkie in the tropics?

WYNNE: She was found in a foxhole in New Guinea by my buddy, and I bought her from a guy. He gave it in a motor pool for $6.44 American, ₤2 Australian, so he could get back in a poker game. We didn't know what we had—a Yorkie was so rare, there were only 65 pups then registered in the AKC [American Kennel Club] when I brought her home. She's the one that's popularized the breed. She has six memorials in the United States and one in Australia. There's

one right down here in [Cleveland] Metroparks, eight miles down the road. Everybody goes there because Smoky's in a little GI helmet.

JOHNSON: Yes, I've seen that picture. It's just such an unusual thing, to think of a Yorkie being in a foxhole.

WYNNE: We found that out at the end—you've got to read this book. Don't jump ahead because it's a surprise ending.

JOHNSON: Okay, I can't wait.

WYNNE: We don't do anything unless it's a surprise. This story is so amazing, and nobody was interested in World War II for 50 years after the war. We talked about it in the photo lab because everybody was a veteran at that time, except for the bosses. They had been here before, but everybody coming in were all vets [veterans], and we never talked much. We talked a little bit about it, here and there.

Everybody was sick of the war. Civilians were because they had rationing, two gallons of gas a week, four gallons if you worked semi-government work, and if you were all government, you got unlimited, what they called a C [ration] card. I don't know the ins and outs because I was over there, but everything came to a stop. Production-wise, food was rationed, you only got to get meat once a week. You had to go to the butcher shop and wait in lines. People were just so tired of it, they just didn't want to get into it. I had this neat story, just let it

go. And then the 50th anniversary came, and all these second, third-generation people want to know about World War II, and that stimulated the interest.

JOHNSON: That's great, I hope it works out. I was going to ask you, too—during the 1980s, you came back and worked for a while here?

WYNNE: Yes. I had retired from the PD about a year and a half, and I got a call, asked me if I'd like to work part-time. I think Ernie [D.] Walker, whom you're going to be interviewing, was the head of the photo department. That's how I came back. I came back for four years and worked 1,000 hours a year. We were limited, then. You lose one buck off every two from Social Security at that time. So I was off all winter. I didn't have to drive from Mansfield [Ohio] in the winter, and so it worked out real nice. Then, they wanted me to go to the next one in the fifth year, and I said, "No, I'm going to write my book," so I wrote. I took off and took a computer class.

JOHNSON: Figured out what to do, right?

WYNNE: I was about 74 years old, and I wrote the book.

JOHNSON: What did they want you to do when you came back?

WYNNE: I was doing the photo lab, photo work.

JOHNSON: Not as dangerous as before, I hope.

WYNNE: No, no, no. Just regular projects that they had, and I was able to do a couple public relations type [activities] because I'd been doing photography at the *Plain Dealer* for 31 years, and I knew public relations pretty well. So I was able to help them that way.

JOHNSON: You mentioned you were working so much with the engineers, not so much in the actual photo lab, but you developed your own film, your still and movie film? Or did you send it back to the lab?

WYNNE: We could develop—not in color, and we did color. Sometimes we did color in the photo lab for the crash fire program. We asked—Eastman Kodak [Company] and all these companies are all geared to commercial, and that's what they developed. They weren't into research, so we would come and ask them to do certain things. One, they had an aerial film that was beautiful, but 32 speed against 8, from Kodachrome [color film]. Thirty-two is quite a gain, that's two f-stops, and you either can speed up the camera or stop it down more.

We asked them to give us 300 rolls of Fastek-type—the sprocket holes have to be perfect—and run that at 4,000 frames a second. In a second and a half, you'll run through a roll of film. There's 4,000 frames to 100 feet. It would run about a second and a half, all the film's gone, because it's building up the speed, and then it's going to go to 4,000. That adds a half-second to it. We asked them to spool the aerial film onto 16-millimeter film, and then we were able to use that faster film in some of our experiments where we were crashing the planes. We were asking Kodak to do something that was not in their production at all.

JOHNSON: Were they willing to do that, those companies that you would have to ask?

WYNNE: If you bought enough—we had to buy 300 rolls.

JOHNSON: If you buy enough of anything, they're willing to work with you, right?

WYNNE: Yes, and you know, Agfa-Ansco [Corp.] was taken over by the United States in World War II. I think Uwe von Glahn, who worked in our ice tunnel, his father and he came over from Germany, and he was president of the Agfa Company here in the United States. I don't know what happened to him, but the government took over [the company], and then we used to get government directives to use some Agfa film because they already owned it and it would be cheaper, budget-wise.

We had problems. The engineers would take, say, 100 pictures on a run during the night. You've got to understand, the wind tunnel, when it ran, took as much power as the City of Columbus [Ohio]. In order to get the power, we ran 2 or 3 o'clock in the morning, and we'd get it from the Tennessee Valley [Authority]. We needed a power auxiliary—they couldn't supply it all here—to run that wind tunnel.

They were doing all these 100-sheet shots of 8 by 10. When they would develop them, we had a kid who was going to college, and he would just develop those film. Then Marty Brown would get it when the kid wasn't able to work. You take the film and you take it in the dark, and you take 100 sheets. We got Dektol, which is a paper developer, and we dissolved it 4:1, so that gives you 5 minutes to get that film. You get all the film in there, you got to get it

wet all over, and then you shuffle them. You can get through them twice, and on the second run, you start throwing them on to the shortstop, which stops the alkaline, which is developing it. The shortstop is an acid. It stops it, then it goes in the acid fixer, and that takes out the unexposed silver halides. It turns it to metallic silver when you're in the developer, the silver halides. It's like bananas in a gelatin. Blown up—it's a really good visual for you.

Eastman had a beautiful anti-curling backing, and when you take a sheet of film and you put a gelatin on it, it's going to warp. You got a celluloid here. Then, in order to counteract that, you put in anti-curling backing on it, of another gelatin, in a thinner layer, and that keeps the film flat. Agfa did not have that perfected, and the kid would be developing this film—it was going, and all of a sudden their films would start curling around his hand, and he's trying to get them off, and they're coming up out of the developer. They'd run all night long to get the data, and here the data is all getting messed up in the developer because of the dang anti-curling backing.

Eventually, Agfa made a swap. They had a beautiful dye-coupling process for color film, and Kodak always wanted that, so they made a swap. Kodak swapped the anti-curling backing formula for the color dye-coupler. These are things that you learn that happened.

JOHNSON: That's interesting. You mentioned going to Wright-Patterson at the beginning, with the icing, and talking to photographers there. Did you do that throughout your career here?

WYNNE: No, that was just the one-time deal. That was on a special thing because that was their project. That's the Air Force, and they were having problems with their planes in the Korean War. They were willing to help us with that. We had the tunnel, they didn't have the tunnel. We had the only ice tunnel.

JOHNSON: I wondered if you ever worked with other photographers, like you mentioned the Langley photographer, at the other NACA Centers?

WYNNE: No, I never worked with anybody else. We were all working independently. Ernie will probably tell you about Cearcy [D.] Miller. Have you heard of Cearcy Miller? He was the one that worked on knock in an engine. He actually photographed knock, and he would shoot a million frames a second. It took him 25 years, he worked on this thing for 25 years. A million frames, but only in 5 feet. He could take a section, and they photographed on a mirror the fuel coming across, and then the burning of it. Ernie will probably tell you about Cearcy because he was a good friend of his. I never knew Cearcy very well. Ernie did make friends with him, but I did not. Ernie, you'll find, he did some developing himself.

JOHNSON: It's just amazing to me, the contributions that photography made to these projects that most people don't have a clue.

WYNNE: My big thing is that because of this, there were a lot of shortcuts in photography that science never knew about, but there was a dislocation because it had no academic connections. The only academic connection they would have would be the invention of the strobe light at MIT [Massachusetts Institute of Technology, Cambridge]. A doctor [Harold E. "Doc" Edgerton] had three scientists that worked with him, and they came up with these big capacitors where they could shoot off a boom, and then it had to take a time to charge.

That was the only really scientific thing going on, the strobe lights, which they were able to commercialize on. Everybody, all the photographers, you use a little strobe in your little camera. All that stuff was from that development, but that was the only connection. I thought there were other things that we were doing that photography might have been the shortcut [to getting data], and they were going about instrumentation.

Everything was instrumentation. That's all you had to do, going to do it all on instruments. A lot of times it could be done visually. They had to have visuals for their reports. If you got a shockwave where the discs are suspended, when they run a rocket, did you ever see photos like that? There'll be a series of shockwaves, but that's visual. I'm sure there were other ways that were shortcuts that were never looked into because nobody really knew enough about it. As projects were thrown at me, I took that project on myself.

JOHNSON: Right, and as you said, Abe Silverstein knew what your group could do, and he would suggest that.

WYNNE: Yes, he said, "Those guys, you'd be surprised what they come up with." They got their solution in the second run, but they spent six months afterward designing instruments to clock detonations, flame speeds. It took them six months using my data to do it. They keep going back to the instruments, and there were shortcuts.

JOHNSON: It would have been so simple. Comparatively simple, anyway.

WYNNE: Yes, there's a place for everything. Am I running over time on you?

JOHNSON: No, you're fine. I was just going to ask you one more question, then I was going to see if Rebecca had anything for you. The question I have doesn't really apply from '47 to '53 so much. When you came back in the 80's, the technology in photography changed so much over time, and compared to now, of course, it's changed a lot.

WYNNE: It didn't change that much, yet. They hadn't gotten into digital yet.

JOHNSON: Digital kind of revolutionized everything.

WYNNE: Digital did revolutionize everything because it shortened everything. It can give you quick pictures, it's got fine-grain. I'm a black and white person. You'll find in my photography—I've got a whole history of photography. I was considered one of the top ones in the world, by the top man in the world, Kurt [S.] Safranski. Kurt Safranski, in 1934 had *Der Dame* magazine, and he used to do all kind of experimental work. He owned this magazine—no words, just pictures, juxtaposed to each other to show correlations. That was his idea.

When they started *Life* magazine, Kurt was hired as their first picture editor for 10 years. He discovered and brought over Alfred Eisenstaedt, who was one of the top ones in the world at that time. [W.] Eugene Smith, [Henri] Cartier-Bresson—he just had all these people lined up. I met him. I go to New York City and I get to meet Kurt. I bring my portfolio—don't know the guy from Adam—and I'm sitting in the office and he calls me in. He's kind of a chubby man, older, and he says, "Oh, you *vant* to be a photographer, eh?" I said, "Yes," so we sit down and he's turning the pictures.

I had a picture, a story that I did. A horse is crying at a funeral. Jim Matowitz had died, and he was the head of the Cleveland [Mounted] Police. They won three world championships as part of the Mounties. He hired all the men and he had all the horses for 32 years. He dies, so I'm going to the funeral. They're all in Saint John's Cathedral [Cathedral of St. John the Evangelist], and I'm looking around and I'm looking at the horses, and they looked like they were talking to each other. They were sighing, jumping up and down, so I thought, "Well, gee, I'll start taking pictures," and I got one with a tear coming down its face.

I wrote a little essay to go with it. Kurt Safranski's looking, he says [with a German accent], "*Vat*, your horses, *de* are crying. Ho, ho, ho ho." He starts laughing like that, "ho, ho, ho, ho." All the girls started to form around him in the office—this is in New York City—"Mr. Safranski, what are you laughing about? We've never heard you like this." "Oh, the man, he's a cartoonist with the camera," he said, "he shoots ironies." All through my portfolio, "Whew, you are going to be world-famous, every magazine going to *vant* you."

I'm on cloud nine. Here's a guy that discovered—he's telling me what I was, and I didn't even know myself. I do shoot these ironies because I ran the streets, and I recognize the situations the other photographers never recognize because they come through some sort of different background, and I come from running off the streets. I see things on the street they never even notice, and they're always ironies. They're myself in the situation. This guy recognized it, and I thought, "Oh, boy."

Then he wanted to hire me and put me on salary. He had Howard Chapnick—Howard was an accountant—become his new business partner. A typical accountant, he would say, "Well, gee, Kurt, I can't see where he's any better than the other 30 men we already got on salary." That kind of went out the window, but he says, "You send me the cartoons." I sent it to

him, and he never got them, but I had the thrill. I went home on cloud nine. Here was a guy that understood me. Then a year later I went up to Magnum [Photos], and they wanted to hire me. They had Henri Cartier-Bresson as a founder and Eugene Smith, and if you paid $1,000 you became a member. I'm sitting in the office, Inge Bondi from Sweden or somewhere, and she gets a phone call.

Photographer's calling from Chicago, he says, "How you doing?"

He said, "Well, I'm just about wrapped up, I should finish up by tomorrow."

She said, "Well, why don't you drop everything and go to New York? We have to have somebody up there do a day's work, can you do that?" I'm sitting over there, I got nine kids, and I'm thinking to myself, "No way." I turned down show business—Smoky, we really could have hit it big, but we wanted to stay local. So there again, that was another time. At the time, Magnum was the agency, so I knew where I could have been.

JOHNSON: You have to work with your circumstances.

WYNNE: Yes. I had a broken family, so I wasn't going to leave those kids. You can't hold a marriage together, gone six months at a time. The *National Geographic* [magazine] people do that. They go out six months, come back six months. You don't have a marriage. It can't last.

JOHNSON: No, you can't do that. It's like he said, if you're going to be an engineer, you need to be married to your job. The same thing with those type of photographers.

WYNNE: Yes, well, the engineer, you could be at your own location. That works, but the other ones I see a lot, they've just become tramps.

JOHNSON: I was going to see if Rebecca had any questions.

WRIGHT: I've just got two easy ones. When you were here at the Center, did you also have to take pictures of the dull and the mundane?

WYNNE: Yes. You might have two people getting an award over here at the Ad [Administration] Building.

JOHNSON: You did the everyday photography, too?

WYNNE: I didn't do too much of that, but they're doing a lot of that now. I even sent you a copy of the first issue of *The Frontier* [newsletter], volume 1, issue I, because I'm in there. They did a story on me. That's how I happened to be there.

Now you know why I left, too. We got that in, we got how I started. I don't know—you got a lot of stuff you didn't expect, I think.

JOHNSON: It's all good. Did you have another?

WRIGHT: Yes, one more. Did you have a favorite camera that you liked to use, your go-to camera?

WYNNE: I have a little Leica [C-2] that's got the cover off. I bought a body for $20. I used it at the *Plain Dealer* in my pocket, and I took a lot of my great pictures because it was with me. It had a 25-milllimeter lens, which is very rare to find. You have 20s and you 50s and 35s, but this was a 25, which is half of a 50, so you get a 6-foot person, 6 feet away. I didn't have to do much calculating with that. I just set the thing on shoot, and I shot a lot on the fly. I'd see things and I'd take a picture. My collection's at CSU [Cleveland State University]. I had 51 boxes, and we've been going through them for a couple of years. I'm trying to write another book and I got my whole family two weeks ago, and they all picked out the pictures they want. They're all going to CSU, and we have a contract where the family can get scans for 25 years, any ones they want.

JOHNSON: That's great, that's great that you have that.

WYNNE: I thought it should have a place to go because too many photographers, you never see their work. It disappears. I know Perry Craig gave his to the Cleveland Public Library, and a couple of the others. You got some little straggler stuff, but we have whole collections that nobody's getting. Andy Crafert, Dudley Brombach—I don't even know what happened with his and Dudley's collection. He was a photographer for about 45 years at the *Plain Dealer*.

This is history, it's all being recorded. You go back, and it's the changes of the city, anything. It's all historical. We thought we'd better get it over, so I'm going to do some themes with my photo essays. The horses crying at the funeral and the camera over a bridge and the hazards in the life of a worm. You got to get down pretty low, there.

JOHNSON: Yes, I would love to see those. That's great. I appreciate you coming today. We really appreciate you sharing your history, and is there anything we haven't talked about that you wanted to mention about the NACA?

WYNNE: No, I can't think of anything. We covered pretty well what I had gone through in my head. I talk more like a street kid—I hope I cleaned it up today.

WRIGHT: You did great.

JOHNSON: You did wonderful. We just thank you for coming. Thank you.

WYNNE: Okay, very good. Thank you so much for asking me.

[End of interview]