Transcript for

AUTOMOTIVE DESIGN ORAL HISTORY PROJECT

INTERVIEW WITH RHYS D. MILLER, 1986

Object ID 91.1.1673.58

Published in Hardcopy Format: circa 1986

Published in Electronic Format: August 2021

Benson Ford Research Center
The Henry Ford
20900 Oakwood Boulevard · Dearborn, MI 48124-5029 USA
research.center@thehenryford.org · www.thehenryford.org

NOTE TO READERS

This PDF-format version of the Rhys D. Miller interview transcript was created from digital images taken of the original bound hardcopy transcript held in collections at The Henry Ford.

The Automotive Design Oral History Project, Accession 91.1.1673, consists of over 120 interviews with designers and engineers conducted by David Crippen of The Henry Ford during the 1980s. For more information, please contact staff at the Benson Ford Research Center (research.center@thehenryford.org).

Staff of the Benson Ford Research Center
August 2021

DESIGN ORAL HISTORY PROJECT

MILLER, Rhys D.

1986

EDSEL B. FORD DESIGN HISTORY CENTER

Henry Ford Museum &
Greenfield Village

Q This is Dave Crippen of the Edsel Ford Design History Center of the Henry Ford Museum & Greenfield Village in Dearborn, Michigan, and this is May 15, 1986. Today we're in beautiful Orinda, California, just East of Oakland in the lovely hill country. We're speaking with Mr. Rhys D. Miller, a long-time automotive designer who has had experience with several automotive companies in Michigan and elsewhere. We've asked Mr. Miller to tell us about his career in automotive design, how he got started, what work experiences he had, [of] his associates along the way, and to give us a look at the early days of automotive design as well as in more recent years.

A As far back as I can remember, I've been interested in automobiles, and that probably stemmed from my dad who started out as a machinist and then became a race driver and, ultimately, an automobile dealer.

Q Where was that?

A This was in Montana. He started racing cars cross country. This is [in] the days when they'd take a Model T or a Hudson Super Six, take the fenders off and put a couple of bucket seats on it and take off across the country. And he was always an automobile enthusiast. I guess that's where I got my interest. He was always talking cars, and I started drawing cars when I was just a little kid. By the time I was five or six, I could name all the cars that passed our house, and my dad used to show me off to friends that way. He'd ask me to sit there and name all the cars that went by.

Q How big of a town was Lewistown in those days?

A We moved around in Montana a bit and then came out to Portland, Oregon. Lewistown, in 1914 when I was born, there, wasn't over ten thousand people, if that many.

Later on, my dad became an automobile dealer, and he had different automobile agencies in the 'Twenties. I can remember he had one called Jewett. Jewett and Paige together.

Q Was that in Portland?

A That was in Albany, Oregon. Prior to this, in 1920, when he was in Montana, he bought a Packard Twin Six. He didn't like the looks of it, so he redesigned it. He had a special top built for it and special fenders that had fender wells and side mounts. Then it also had two tires on the back with a big patent leather hat box in the center of the tires. Also on the sides of the car there were patent leather compartments that you could open up and store things. It was a beautiful automobile. It had special paint and a special leather interior.

Then in 1925, when he had the Jewett/Paige agency, he took a Paige 666 -- that was a model designation.

Q Was that for their motor, or was it just simply a...?

A I don't know what the designation really meant, but it had a very racy-looking body, even to begin with. Instead of the rear of the body tapering in at the bottom, it went out like a streamline -- not a boat-tail -- that went aft rather than forward at the bottom. So he designed and made up special fenders for it. It had long, sweeping, clamshell fenders on the front and the rear. It had wire wheels, fender wells and a beautiful blue paint job and a very light khaki beige canvas top. It was a phaeton.

Q Where did he get this body work done?

A There was a body shop in Portland that was about seventy-five miles from Albany. He knew the people, and he would go there and work with

them. He was a good sheet metal man and quite a mechanic. So he put this car together, and it was a real show car.

Q You remember driving in it?

A Oh yes, yes. That was the best looking car in Albany, Oregon, and everybody used to ogle it. Anyway, he was always a buyer and a seller, so he had it for a year or so, and then he traded it for an airplane.

Q What year was this?

A It was about 1925. I was about eleven years old.

Q Aviation was booming at that time?

A Yes. It it was just getting started. I think about that time we had the first airmail flights. I remember the Army had the first airmail deliveries. And Lindbergh came along in 1927.

Q He was flying airmail before that?

A That's right. Yes, he was flying airmail. And the barnstorming pilots used to come into Albany, Oregon, occasionally, with their biplanes. They were flying [Curtiss] Jennies. They were war surplus airplanes. I remember this one that came to town. There was a little patch of land outside of town where he could land, and he was taking people up. He was doing a few stunts over the town, and we had a river that went through town -- the Willamette River. I remember watching the plane, and he went down. I could see him go down toward the river. He was going to fly under the bridge. He had done this a couple of times before, and, when I saw him go down to go under the bridge, I didn't see him come up again. So another kid and I ran down to the river and, sure enough, there he was nose first in the sand bar in the river. He was hurt, but not seriously.

There was a lot of interest in airplanes around that time. Somebody in town had an airplane. My dad was very interested, and so he traded this Paige for the airplane. He proceeded to take flying lessons, then he finally got tired of that and sold the airplane. But he was quite a guy.

Q He must have been. What a great way to grow up.

A Yes. So I had the automobile influence for a long time. We moved from Albany, Oregon, to Los Angeles in 1928. Then my dad became a Willys-Knight dealer. He had the Willys-Knight and Whippet agency.

Q He was a good salesman? He was able to move from one place to another?

A Yes, he was quite a salesman. His agency was only about two blocks away from the Auburn/Cord agency on Western Avenue, and I remember when the L-29 Cord made its first appearance at that showroom in 1929, and my dad and I rushed down there to see it. Everybody was very excited about that car, which was a great looking car -- great design. So we actually had a ride in it. My dad couldn't be too enthusiastic about it because he'd have trouble with his Willys-Knight dealership, so he said, "Very nice car, but there's a few things wrong with it. Front drive is kind of shaky. When I shift gears, the front wheels chatter. I don't like that." And that was one of the drawbacks of the car.

All this time I was drawing automobiles, and all through high school I drew cars.

Q Where'd you go to high school there?

A Manual Arts High School in Los Angeles. It was on Vermont Street, and was very close to the present U.S.C. campus. And the Coliseum -- the

stadium that was built for the 1932 Olympics. Manual Arts was just a mile from there.

Q Where did you live?

A We lived very close to the school. I don't remember the name of the street. But I know I had an old Overland that was my high school car. An Overland Bluebird. I think it was a used car that my dad had taken in on a trade or something, so he gave it to me, and, at that time, kids were painting their cars up with a lot of slogans and [had] things painted all over them.

Q Called graffiti today.

A Graffiti, right. It didn't have a top on it. It was kind of a fun car, and I, of course, had a lot of things painted on it. My prize statement that I liked and wrote on the back of the car was "Mercedes Benz, but this doesn't." I thought I was quite a wit.

The Mercedes, at that time, was a very exotic car and very few people really knew about it. Not like today when it's so well known. Prior to the time I had the Bluebird, we lived in Hollywood, almost across the street from the Warner Brothers motion picture studio. It was on Bronson, I believe -- our apartment house. Just around the corner from Warner Brothers and on Sunset Boulevard, down about three or four blocks was the Mercedes-Benz showroom. It wasn't very large or very impressive, but they usually had two or three Mercedes in there. I was probably about fifteen, and I'd go down there and ogle them from the outside and, occasionally, get up enough nerve to go inside and take a better look. But those were the famous SS series which are just priceless today. There were supercharged SSK's also.

And, as I say, we lived on Bronson street, and, occasionally, one of them would come down the street. The salesman would be demonstrating one to a customer, and it would come roaring down Bronson, and they would hit the throttle, and the supercharger would cut in, and you could just feel the ground shake. It was that type of beautiful sports car. So that was quite thrilling to me.

Q Did you ever get up enough nerve to ask the salesman to give you a ride?

A No, no. I never did get that far. I think they were selling for about fifteen thousand dollars.

Q In those heady, stock market days, I suppose, people had...?

A Yes. That's '28/'29. There was money, of course, in Hollywood. The movie people had money, and that was the reason for the showroom right there in Hollywood. They bought quite a few of them.

Q Did you ever see Warner Brothers stars in the neighborhood?

A No. I'd see big limousines pull in there, occasionally. Our school was right next door to the studio. It was the junior high school that I went to.

Q What was the name of that?

A LeConte Junior High. Then I sold papers for awhile on Sunset Boulevard.

Q Los Angeles Times was it in those days, or what was it?

A Yes, I think it was the Times and the Evening Express. Anyway, I had two or three papers there. I sold them on the corner of Gardner Junction and Sunset Boulevard. I remember seeing Gary Cooper drive past in his Duesenberg Phaeton.

Q I've seen him pose in that.

A Yes. And one time he stopped and bought a couple of papers from me, which was quite a thrill.

Q Tanned, tall, and good-looking?

A Right. I was very impressed. So that was my junior high school days, and then we moved into Los Angeles, and I went to Manual Arts High School. I took mechanical drawing and architectural drawing. I thought that might help me in my automobile drawing, which it did. It gave me an appreciation of a line and a certain discipline. So, by that time, I was making pretty good line drawings -- side views of cars -- my own designs. Some way or other, I heard about Murphy Body Company in Pasadena, and so, occasionally, I would skip school and drive the old car over to....

Q The Overland?

A By this time, I think, I had a Dodge -- a four-cylinder Dodge touring car. No top, of course.

Q No top? Why?

A The top wore out, and I couldn't afford the [new] top. This was in the Depression, and my dad's business had gone down the drain, and it was tough going. Anyway, I would skip school, occasionally, and drive over to Pasadena and hang around Murphy Body Company, and they had, I recall, a little window in the front of the building -- like a little show window or showcase. It wasn't very big. but there'd usually be a drawing or a rendering of a....

Q [As in this photograph?]

A Yes. That's the building. But it seems to me that they would display a drawing or two in one of these windows along here on either

side of the entrance. He was a Hudson/Essex dealer or distributor, I guess.

Q Initially?

A Initially. See this Essex sign on the building here?

Q That was his main income while he made...?

A I guess so. That's how he started in the automobile business [by] being a dealer or distributor for Hudson/Essex.

Q How did you find out about Murphy?

A Probably from my dad. He probably mentioned it --told me about this place. So, I'd see these renderings -- the first I'd ever seen of anybody else drawing a car, aside from myself, because nobody in school drew cars. I would show these, occasionally, to some friends. They'd asked me, "What are you doing that for?" I'd tell them, "Well, someday I'm going to be an automobile designer." And they didn't know what that meant. They didn't even think about people designing cars. So there wasn't really that much interest in it.

One day I got up nerve enough to go inside the shop, and I met Frank Hershey. He doesn't remember this. I've talked about this years later, and he says, "I don't remember that." And I said, "It happened."

Q How old were you at the time?

A About sixteen, I guess. So he was there, and I got to talk to him, and he saw I was interested in cars. So he took me over and showed me a Duesenberg that had just been finished. It was sitting there -- a beautiful convertible sedan. He opened the door, and I got in and sat down behind the wheel. And I can remember being very impressed with the angle of the windshield because it was probably about a 45 degree slope

on the windshield which was quite extreme in those days because windshields were vertical or just slightly canted back -- maybe five degrees. I was very impressed with this because I could look out of the windshield and look up right at the sky because it practically came back over your head. It felt like that anyway.

But that was the only time that I was in the plant. I would get all enthused and then go back, of course, and draw a lot more cars -- inspired, I guess, is the word for it.

Q Do you remember what the setup was there at Murphy? You probably weren't as observant as you were in later years, but was Hershey the design manager?

A He was the one of the designers.

Q One of them?

A Yes. I think it was Frank Hershey and Phil Wright. In this article in Automobile Quarterly it gives a couple of other names there too. I think Everett Miller was one. I was never in the design room itself.

Q Oh, you never got into that?

A No. Just in the shop.

Q This must have been a fascinating introduction for you as an impressionable youngster?

A It was. I was just completely awed by it.

Q Do you think that cemented your desire to be an automotive designer?

A I think so, yes. It gave me some direction. I knew that people were doing this. They weren't just drawing cars for fun like I was.

They were making a living at it and, evidently, enjoying it and on such fine cars, too -- Duesenberg, Cord, Packard, and Lincolns and more.

Q Even during the Depression they were, at least, marginally successful -- Murphy?

A Yes. They lasted, I think, up until about 1932. Later on, in Detroit, the son of one of the men who worked in the Murphy shop became a very good friend. I didn't know [him] at the time.

Q Who was that?

A Walter Wengren. Walt died about fifteen years ago. We were the same age.

Q You were telling him about your near miss at the plant? That you had gotten a good glimpse of how a custom body shop works?

A Right. His dad was a woodworker and built the hard wood framing for the custom bodies. So, as I say, I was drawing cars all through school. After high school, I worked a year at Safeway stores and tried to save a little money to go to Detroit and take some samples to see if I could get a job.

Q You figured, at this point, that if you really wanted to succeed in this industry you had to go to Detroit?

A Yes. That seemed to be the only avenue to proceed.

Q Was your father still alive at this time?

A Yes.

Q Was he supportive of this?

A Oh, yes. He liked the idea.

Q He said, "You've really got to go <u>there</u>?"

A Right.

Q In those days there were no design centers like there are in California today?

A No. There was nothing. I didn't take any art classes -- any art training. I had mechanical drawing and architectural drawing.

Q Was the Art Center School operating in Los Angeles at that time?

A Yes. I believe it was. I don't know whether it was the same name, Art Center, or not.

Q John Foster talks about it starting out as a series of motor courts. They used all of them, apparently. The gentleman ["Tink" Adams] who started it bought these up. These were his classrooms, and that's how they started in Los Angeles.

A It seemed to me it had a different name, though. It wasn't Art Center. Maybe Los Angeles School of Art of something like that, and, I think, it was near West Lake Park, if it's the same one. It's the only one that I knew about anyway in the early 'Thirties.

I went there one time, and they had a course in commercial art. They had no automotive work or anything like that, but I had made a side view drawing on a Pierce-Arrow chassis, and I thought it was a pretty good-looking car, but I wanted it colored, and I didn't know how to render. So I went to this art school and asked them if there was somebody there that could color this for me. I forgot who I talked to now, but they said, "We have a student here who, I think, can do it." So, I said, "Well, fine." So I met this young fellow, and he said, "Yes, I'll try it. What color do you want it?" I said, "Green with a tan top." It was a convertible -- two door convertible. So he took the drawing and made the rendering. I went to get it a few days later, and it looked

very good. It wasn't as good as the Murphy renderings by a long way, but, at least, it had some color on it, and it was quite good looking to me. I gave him five dollars for doing it, and he thought it was a lot of money, and it was a lot of money because I was working after school in a restaurant washing dishes for five dollars a week. So that five dollars was my week's wages. But that was my first colored rendering.

Q And you kept that in your portfolio?

A No. I never used it in my portfolio because somebody else did the rendering. When I went to Detroit with samples, none of them were colored. They were all line drawings.

Q It gave you an idea of what could be done?

A Right. So, after high school I worked for a year and saved some money. Then another fellow and I took a camping trip. He had a Model A Ford, and we took a trip across [the country]. We started from L.A. and went to Chicago, camping out in our tent all the way.

Q What was your friend's name?

A His name was Dave Woods.

Q What's happened to him over the years?

A I don't know. We lost track. He was from Canada, and so, on this trip, we were going to Chicago, and this was 1933. The year of the World's Fair. I wanted to see the Fair, and we split up there. He was going on home to Canada -- Manitoba, I believe, he was from.

So we went up through Idaho, Glacier National Park, and Montana, and then over to Chicago. I saw the World's Fair which was very impressive, and I saw two cars that impressed me very much. One was in the General Motors display. It was the Cadillac Sixteen, and it was a

fastback -- the first fastback I'd ever seen. And it had the pontoon fenders, which were very new. Then there was the Pierce-Arrow. It was either the Silver or the Golden Arrow. I forget which now, but that was a very streamlined car that was done by Phil Wright, I believe, formerly of Murphy Body in Pasadena.

Q Did you see the Ford exhibit?

A Yes, I did, and it was very interesting.

Q In view of your later associations, did you see the Tjaarda experimental, rear-engine car in the Ford exhibit?

A Yes, and I'm glad you reminded me of that, because later on I'll tell you about John Tjaarda. I worked with John. Yes, that car, along with the Cadillac and the Pierce-Arrow, was quite an experience for me. The high points of the World's Fair.

Q Did you still have your Model A?

A That was Dave's car. We split up there, and then he went on to Canada. I took a bus then and went down to Detroit. I had brought with me three or four line drawings of cars.

Q Detroit must have been quite a surprise?

A Well, it was much bigger than I thought. When I was a kid, my dad would talk about Detroit, and I envisioned it as a town about the size of Albany, Oregon! So when I got there and saw what a big city it was, it was rather intimidating.

But I went to General Motors. I knew that they had a design department, and I took my drawings to them for an interview. I was interviewed by Howard O'Leary. To my surprise, he didn't throw me out, and he was very nice. He said, "Well, I think, you have some talent,"

which made me feel very good. He said, "We don't have an opening right now, but we might as time goes on here. Would you be interested in moving from California to Detroit if we did have an opening?" I said, "I certainly would." That was the object of my trip. He said, "Well, if we do...." I gave him my name and address, of course, and he said, "We'll be in touch with you if something turns up."

So I went back to Los Angeles then.

Q Oh, you did?

A Yes. This was just a trip. I hadn't planned on staying.

Q Did you go to any of the other automobile companies while you were there?

A No, I didn't. G.M. was the only one that I knew of that had a design department. I'm sure that Ford did, and I found out later that Briggs did some of their designs. But, at that time, G.M. was the only one that I knew.

Going back to Detroit, there were ads in the daily papers for people that could drive new cars from Detroit to Los Angeles. At that time, the dealers would come back and buy these cars and then save the shipping charges by having people drive them out. So that was for me, because I could drive, and I only had fifteen dollars left, anyway. There was no way to get back to L.A. on fifteen dollars. So I could get free transportation, and that was it. I figured that I could get by with fifteen dollars for food money 'till I got home. So we started out in this caravan.

Q How did it work?

A Well, this fellow was a used car dealer. They advertised 'em as nearly new cars in L.A. So he was a "nearly new" automobile dealer. As

it turned out, I had gone to high school with one of his sisters -- his younger sister. I knew her quite well.

Q That helped.

A Yes. So, anyway, he got this crew assembled, and it was a strange, motley crew. It was everything from kids like me to married people with children that were driving.

Q Who needed the transportation?

A Yes.

Q No pay I suspect?

A No, not a cent.

Q How about food?

A No, no food money.

Q You slept in the cars?

A Slept in the cars.

Q You drove all night?

A Drive as hard and fast as you could. If you ran out of food money, you just ran out.

Q He was rather hard hearted?

A Yes. He drove the lead car, and there must have been about twelve cars in the caravan, and they were all Chrysler products. There were Plymouths, and Dodges, and DeSotos.

Q What did you drive?

A We would change off cars, occasionally, and, I think, I started with a Plymouth, and it ended up I drove them all. I think there was a Chrysler, too. I think he had a Chrysler that he was driving. Jerry Lynch was his name.

Q It even sounds like a used car dealer!

A Right, and he was! In fact, later on, after I'd come to Detroit and worked there, Jerry Lynch was in business -- had opened a used car shop on Woodward Avenue. As a matter of fact, I bought a car from him one time.

Q It wasn't the same one?

A Jerry Lynch -- same guy.

Q That's where I've heard the name.

A He was quite a dealer in used cars in Detroit for a long time. Jerry Lynch on Woodward Avenue. Do you remember that name?

Q Yes.

A Well, that's the guy.

Q That's why I had instant recognition when you said it.

A A very, very tough character.

Q Hard to get on with but fair?

A Fairly fair.

Q He didn't try to euchre you out of the deal? You'd got to Los Angeles?

A No. As I said, there were about twelve cars starting out, and someplace in -- shall I go on with this kind of thing here?

Q Oh, yes. This is real Americana.

A Someplace in Oklahoma, we were on a detour, and it was dirt roads. He told us to keep in line, and nose-to-tail all the way through, and don't get separated, and try not to let other cars in between the caravan. It was in the middle of summer and very hot -- July -- and we were someplace on this God-forsaken detour -- clouds of dust just coming up. You could hardly see at all.

Q There was no stopping for water or anything like that?

A No, not very often. Most of these cars -- we were driving a car and towing a car.

Q You [each] had to tow one? A real caravan?

A Yes. So there might have been more than twelve cars in it, but you'd drive and tow a car. So there were a couple of characters that were always horsing around. They were fellows in their middle twenties.

Q To relieve the boredom?

A Yes. They would take chances. They would pass other people in the caravan and, generally, take chances and would smart-mouth everybody. They were just a couple of smart asses. So, we were on this detour and [with] clouds of dust coming up. You had to have the windows open because there was no air-conditioning and all this dust [was] coming in, and we were black. Anyway, these guys decided that they were going to pass somebody in the caravan, and they whipped out to pass, and there was a car coming the other way, and with all the clouds of dust they couldn't see -- a head-on collision.

Q How did Lynch ever get out of that?

A Well, we didn't there for awhile, and, of course, the police got there some way or another -- state troopers -- and the whole caravan was impounded at the next town until they decided how this would come out because people were injured in the car that they hit. And these two guys -- these two clowns -- were not injured badly. One got a broken nose -- I think that was about the extent of it -- but the people in the other car were more seriously injured. But nobody was killed.

Q Was Lynch insured at this point?

A God knows. I really don't know. Probably not. Anyway, they pulled us into some kind of a campgrounds.

Q Primitive campgrounds?

A Yes. Primitive campgrounds where a bunch of Okies were camping. This was really the Dust Bowl. It looked like "The Grapes of Wrath." So, they pulled us into this terrible place, and there was a big, stagnant-looking lake there, and it was hot as hell, so everybody wanted to strip off and get in this water and take a bath. This was about three days out of Detroit. Nobody had had a bath or a shower, sleeping in the cars.

Q And all that horrible dust?

A So we stripped down, and jumped in the lake, and were in there quite awhile. Finally, some man came running down the roadway waving his arms and shouting, "Out of the water. Get out of the water!" We said, "Why?" "Water moccasins are in there. This place is alive with water moccasins!"

Q One of the most poisonous snakes in the Southwest.

A That's right. So we got the hell out of there in a hurry.

Q Nobody got bit?

A No, no. So that was the end of our swimming. But, we were there about three days before they'd let us go on. Jerry finally got the okay to go. I was trying to stretch this fifteen dollars for food. But I did manage to get into town one night and go to a movie. That was a ten cent movie. In those days it didn't cost you very much. You could see a pretty good movie for a dime. But, anyway, that was the first episode. So then we continued on, and I've forgotten now how many days it took us

to make this trip, and Jerry would try to get us to drive as long we could each day because he wanted to get back to L.A., and so did everybody else. But everybody was getting pretty exhausted by this time. So we stopped one afternoon -- we'd just gotten into California, I believe, and some of the people were exhausted. They wanted to stay there that night and rest.

Q Were you on Route 66?

A I think it was, yes. So we took a vote, and most of us wanted to go on, and so we went about another seventy-five miles or so, and we stopped again. Then everybody was really tired, and the consensus was that everybody wanted to stop, but Jerry said no. We were this close -- we were only about a hundred miles out then. We were on the east side of Riverside, I believe. So he said, "No. We're this close. Let's go on." By this time it was dark. So we said, "Okay." Everybody piled back in the cars, and we started out again. I was having a hard time keeping awake. I know everybody else was. It must have been ten/eleven o'clock at night, and we came down this long hill, and there was a sharp turn to the right, and a big orange orchard was down below. We were following this duo -- it was a man and his wife, I believe, and they were in this car ahead of us towing another car, and I was right behind them. I was driving, and somebody else was riding with me. As we went down this hill, we saw the cars making the turn, and the taillights of this car ahead of us just went right straight on. They didn't make the turn, and all we saw was a big cloud of dust and smoke come up from the orange grove.

Q Was it an incline?

A Yes, there was a drop off, and they went down, maybe, fifteen/twenty feet off the road into this big orange orchard. Two more cars totaled. The people were hurt. They were bleeding, and it was a mess. That late at night, everybody was just exhausted, anyway, and then to have this happen. To top it off, the same two clowns that were in the previous accident were sleeping in the car being towed. These poor people were just out of it, so we piled them into our car and drove finally into L.A. and took them into the hospital.

Q You left the totaled cars in the orange grove?

A Yes.

Q You'd lost four by this time?

A Four cars were lost by this time.

Q Lynch must have been beside himself.

A He was jumping up and down. The air was blue. We eventually got the cars down to Jerry's place of business. Then I was able to get a streetcar home. With the streetcar and walking, I finally got home about one o'clock in the morning. Very glad to get home, indeed.

Q Incredible. And those caravans went out every day from Detroit in those days?

A Yes. They always ran these ads in the paper: "Free transportation for drivers." That was quite an experience. Then I got a job at the Safeway stores, and I worked for Safeway for about a year, saving another bit of money to make another assault on Detroit.

Q No word from General Motors during this time?

A No, I didn't hear a word. Nothing from Howard O'Leary. So, anyway, I made up my samples, and about a year later got a ride back to Detroit with a family. They had advertised for people.

Q Trade drivers and share expenses?

A Share expenses, yes. A man and his wife and a little boy. He had a 1930 Hudson. A pretty nice car. So we started out, and it was in the Fall of 1933. They had all their luggage, and I had a couple of suitcases. They had a trunk and trunk rack on the back of the car. My suitcase was strapped on top of the trunk, and we even had some things on top of the car. I had a suitcase on top of the car and one on the back of the trunk, strapped on. He had some kind of a little rack on the top. So we started out, and, on this trip, we stopped at little auto courts along the way. We got as far as Provo, Utah, and were going over a very rough, washboard-like, unpaved road, and, somehow, my suitcase on the back of the car with my sample drawings in it got lost -- bounced off.

Q You didn't realize it was gone?

A No, no. Not until that night [when] we were a couple of hundred miles beyond. I looked back there, and my suitcase was gone. The strap broke.

Q It just wasn't feasible to go back and find it, as far as they were concerned?

A No, no. They couldn't go back. I couldn't ask them to do that. So I had one suitcase. Luckily, I had some clothes in that. So, we finally got to Detroit. I rented a room in a rooming house and decided to make some samples. It was the only thing I could do. They were gone. So I went down and got some drawing material and set up a little desk and made some more samples.

Q Where was the rooming house? Do you remember?

A Well, actually they were the mother and brother and sisters of a fellow I had met in California, and he said, "Well, you're going back

there. I think my mother has an extra room. Why don't you stay with them?" I said, "Fine," so I stayed with them. One of the brothers was a budding lawyer, and he had a little office space downtown in the Penobscot Building. I had this little desk I was trying to work on at the home. He said, "There's an empty office next to me -- a lot of empty offices! There's a desk in there. Why don't you bring your stuff down there, and you can work in there." So, I said, "Great." Every morning I would go on the streetcar with him down to the Penobscot, and I'd stay all day and work on these drawings.

Q You're still living on your savings?

A Yes, right. So I finally finished these things, and I included -- one car, one design, and it was a side view. A very streamlined car, as I remember. And then a front three-quarter perspective and a rear three-quarter perspective. And these were the first perspectives I'd ever attempted. And, amazingly, they turned out pretty good -- pretty accurate looking. But this car was quite World's Fairish. It had a single fin running down the center of the back. Of course, it had a fastback....

Q It had a dorsal fin?

A A dorsal fin, yes. And it had the Cadillac Sixteen pontoon-type fenders, although my version was a little different. The radiator had a forward lean to it. I had it jutting forward. And instead of the grille, the openings were vertical, and they were stamped out of the sheet metal. There were three chrome fins, something like the later Cord, only these fins were higher, and they ran around the nose of the car. Buehrig's great '36/'37's Cords had the fins, but they were down lower with a bald nose.

Q Coffin nose?

A Yes, coffin nose. These were at the top running around. So, I took these line drawings -- they weren't colored -- to General Motors, and, once again, I saw Howard O'Leary. This was early 1934, January or February.

Q He remembered you?

A He remember me, and he said that he liked these new drawings even better than the ones before, and he said he thought they would have something for me. He said that he would call me within a couple of weeks. A couple of weeks went by, and he did call me and told me that he was sorry but they just couldn't take anybody else on at that time.

So somehow or other, I learned about Briggs Manufacturing Co. It was over on Mack Avenue. They were building Ford and Chrysler bodies. I think mostly Ford. So I went over there and took the same samples and met John Tjaarda. They had a small design department there. John Tjaarda and Ralph Roberts shared an office. It was a big office in the center of the building. On each side was a design room. John Tjaarda had his design section on one side. Ralph Roberts had his design staff on the other side, and they did mostly interiors and custom LeBaron work. Tjaarda was exterior.

Q Was Tjaarda chief designer at Briggs, or was Roberts?

A Well, they were both chiefs. Evidently, Ralph Roberts had come over to Briggs from his LeBaron operation in New York after Dietrich and Ralph Roberts split up. Ralph Roberts got the LeBaron operation, and Chrysler took over LeBaron with Roberts heading up a small design section in Briggs. As I say, they did some custom work. I remember seeing

complete custom bodies under the name of LeBaron, and then, interiors. The interiors were for Ford and Chrysler, as I recall.

Phil Wright was working for Ralph Roberts now. There was Phil Wright and about three or four other designers. Walt Wengren -- the fellow I mentioned previously -- was one of the apprentice designers, and he had started to work there for Roberts two or three weeks before I came to Briggs.

I took my samples to John Tjaarda, and he liked them and said, "Well, I think we can use you here. We'll start you out as an apprentice designer." I said, "That's great." He said, "We can pay you fifteen dollars a week." I said, "That's wonderful." So I started there working with -- actually there was only one other designer, and his name was Clarence Karstadt -- a very talented guy. His background was with Tiffany in New York. He started out as a jewelry designer. He did very small sketches. He'd start with a pencil and then do watercolor. He was a great watercolor renderer. He did these marvelous little watercolor sketches. But he was the only one in this office when I started there, so it was just him and me. It was, I believe, about March, 1934.

John Tjaarda and Ralph Roberts shared a common large office -- a very plush office -- in the center of this group, and on one side was Tjaarda's design, which was Clarence Karstadt and me -- this apprentice designer, and on the other side was the interior and custom studio under Ralph Roberts, and that's where Phil Wright worked. Another fellow that worked there at that time was Bob Koto. You probably know Bob Koto.

Q Yes. He worked for Phil Wright and Ralph Roberts?

A He worked <u>with</u> Phil Wright <u>for</u> Ralph Roberts. Roberts was chief of that section, and Tjaarda was chief of our operation. Our duties, as I

remember, at that time, were making suggestions for Ford Motor Company for front end designs -- front ends and hubcaps and details like that.

Q Do you remember some of the Fords that you worked on?

A Yes. I think it was the '36 Ford. The '35's had been done, and they were working on the '36's. Above the design studios was a large showroom, and that's where the full-size prototypes were shown --shown to Ford management.

Q This was on Mack Avenue?

A Yes. It was right next to the Continental Motors plant, but I don't know the [cross] street. We drove in off of Mack Avenue, and Continental Motors was here, and Briggs was here, and there was a parking lot here in front of the Briggs office building, which had four floors, and we were next to the top floor. The showroom was on the fourth floor right in the front of the building.

In our studio, we had one clay modeler. He was a German fellow. I lived across town near Linwood Avenue. His name was John Boch, and he lived near me, and he had a car. I would take the streetcar over in the morning from where I lived to Briggs, and then John would drop me off at night on his way home across town. He did full-size clay models.

We had a big paint oven that you could drive a full-size car into, and that's where we heated the clay. Me being a junior designer, one of my duties was to get this clay out of the crates they were shipped in. It was regular brown modeling clay. It smelled like hell. It smelled like sulfur. You couldn't get the smell off of your hands. But we'd unload it, put on it on a big dolly, and then wheel it into this paint oven, turn on the lights, and, when it got soft enough, we'd go in there

and have to drag this dolly out. In the summertime, being on the top floor and no air-conditioning, it was kind of warm! Walt Wengren was the other junior designer on the other side, so he and I would go in and get these carts of clay and wheel them out and then use spatulas because the clay was so hot, and we'd clay up these big wooden, full-size mockups.

Q This was the work that the apprentices did?

A Right. We'd throw the clay on these full-size bucks.

Q Working for Boch at that time? Was he a pretty tough taskmaster?

A No, no. He was a real nice guy. Older fellow, and he always smoked a pipe. This pipe was continually in his mouth -- working or driving, and probably even sleeping, but a very nice guy. I was able to do a little clay modeling then -- helping him -- so I learned a bit about how to set a clay buck up for modeling and got familiar with modeling tools. Then I was doing sketch work with Clarence Karstadt on front end ideas for Ford.

Q You worked on that famous 1936 front end?

A Well, I don't know where that good '36 front end came from, but I don't think it came out of Briggs. I'm not sure. I don't remember working on it.

Q Bob Gregorie was then beginning to head up a styling studio at Ford?

A It might have come from Gregorie. I just don't know where -- it was a good-looking front end. The whole '36 car was a good-looking automobile.

I remember doing a design on a full-size wood buck that we had there that was just in the rough, and John Tjaarda asked me to sketch out

a shape of a grille on that. I remember doing that, and it looked something like the Auto Union -- the one I sketched. I remember it was an oval top, and then it came out into the catwalk a little bit. Tjaarda liked that idea, but it never got anyplace. I don't know what happened to it, but we never produced it.

Q The Auto Union, that was a German...?

A Yes. That was a German race car. I believe it evolved into the Audi. It used the four interlocking circles -- rings. I don't remember much more about our operation there other than I remember twice while I was there Henry Ford and Edsel Ford came over to view some work that had been done.

Q You just had a glimpse of them. I take it you didn't have a chance to meet them.

A No, no. I was hovering around the clay room someplace, but I saw them come in. John Tjaarda and Ralph Roberts were showing them this full-size model that had been done. This was in '35.

Q Tell us about Ralph Roberts. He's quite a legendary figure.

A He was a very nice guy and a very sharp guy -- a very natty dresser. So was John Tjaarda. They were classy gentlemen, and I was very impressed with both of them. They always wore French cuffs, cuff links, and good-looking suits.

Q If they took their coats off, they wore vests?

A John Tjaarda wore colored vests. I remember him wearing kind of a red plaid vest and a yellow and black plaid vest -- things like that.

John Tjaarda had done the Sterkenberg car, of course, [with] the teardrop shape and the rear engine.

Q He had done that in his native Holland?

A I believe so.

Q And later in the United States. This was very much an influence on [his thinking], wasn't it, in terms of his teardrop design?

A I think that's how he happened to be at Briggs on the strength of that design, and, in fact, there was interest in Ford Motor Company at that time in a rear-engine car, and that's what he was working on. Somewhere along the line before I got there, he had made up a model. It was an all-metal model of a rear engine car. It looked very much like the Sterkenberg, and that was there in the design department.

Q Oh, that was still there?

A It was still there, and....

Q The one that had been in the [Ford] World's Fair exhibit?

A Yes.

Q We have photographs of it, and I've often wondered just what happened to it. So Tjaarda took it back to Briggs after the World's Fair?

A Evidently, yes.

Q What color was it? We only have black and white. Do you remember the color?

A I just don't remember, but it seems to me it was light gray or silver. There was a young chap there that really impressed me at the time. He was hired by Tjaarda and had made a model of a Sterkenberg in metal. He had worked, I think, at General Motors for awhile, too, and had made a scale model of a 1932 Cadillac sedan. I don't know what scale it was, but it must have been about two feet long I'd say, and it was exact detail. Every rivet in the frame and everything was there. The motor was there complete and all in metal. All the glass in the windows

-- the remote control handles were on the doors, and you could wind the windows up and down. It was a Cadillac Sixteen just scaled right down in minute detail.

Q What was his name?

A I've been trying to remember his name for a long time, and I can't. He was a red headed fellow, he was sickly, and he died shortly after that. I don't think he was over twenty-five. He must have had tuberculosis or something. He was working there when I started.

Q This was a hobby he had?

A No, it wasn't a hobby. That was his thing. That's what he did. He made metal models.

Q For Briggs?

A For Briggs, and he did the Sterkenberg model. And he'd done this Cadillac Sixteen model for General Motors. But he had the model there [at Briggs], and I don't know how he happened to have it if he did it for General Motors. I think it was his, and he used it for a sample of his work. It was a fantastic piece of work. I'll always remember it. He was there a couple of months while I was there, and then he was gone, and I heard that he had died.

There was him, and then, as I mentioned, Bob Koto was working for Ralph Roberts, and Bob worked in three dimensions. He did very little sketching, but worked directly in quarter-size clay models.

Q He was a modeler?

A Yes. And did great-looking models. His designs, and each one of 'em had it -- it was the first time I'd ever seen it used -- was the eyebrow around the wheel openings -- the flange eyebrow. Cars up to that

time had a metal bead running around the openings or it was rolled under. The edge was rolled in, but Bob was doing designs with this little eyebrow, which I thought looked very good and has been used ever since, and it's still being used.

Q Bob never really got credit for that?

A No, I don't think so. Well, maybe he did, but I don't ever remember anybody giving him credit for it. Oh, and Ralph Roberts had a beautiful automobile. It was a 1932 Chrysler Imperial Phaeton, and it was his design. It was a LeBaron body. It had chrome disc wheels -- conical-shaped chrome disc wheels and two tires on the back. It had a small trunk on the back and then these two rakish-looking spare tires on the back, and this thing was a block long, and he used to park it right down in front of the building in the executive parking area. I could look out and see him pulling in and out of the parking lot with this gorgeous Chrysler. It was really too much.

Q It must have been. Did you say it was red?

A I don't think it was red. It was a darker color, but I can't remember what color it was. It might have been a dark maroon, but that was very impressive. I don't remember what kind of a car Tjaarda drove, but they were the kingpins around there. I stayed at Briggs not quite a year.

When I had interviewed with O'Leary, he told me to call him from time to time. He didn't have anything right then, but to call occasionally and keep in touch with him. So I did. I called him. I had a little working experience by this time and told him what I had been doing, and he said, "I'd be interested in talking to you again." So I

took the same samples over again, and he hired me. And, in the meantime, I had put watercolor on my samples. I had rendered them, because I'd seen Karstadt, the way he worked, and I could do a pretty fair watercolor workout, so I colored them up -- the line drawings. O'Leary hired me for a hundred and twenty-five dollars a month, which was a big jump up from the sixty I was getting at Briggs.

So I told John Tjaarda about my offer. He said, "That's fair enough. You'd better take it. We can't give that to you here." So I went to work for G.M., and I worked for Frank Hershey in the Pontiac [studio] for a little while.

Q In 1935, did you say, "Frank, don't you remember me? You showing me that lovely car [at Murphy]?" What did he say?

A I didn't mention it to him then. I kept a pretty low profile.

Q Tell us about the Art and Colour section at that time. What were your impressions of it as you first came in?

A I was impressed by it, of course, and I had met Harley Earl when I was hired.

Q Another impressive character.

A Yes, really. The Art and Colour wasn't very big at the time. In fact, it was just, as I recall, like one, huge room, and the studios were separated by blackboards.

Q Acted as partitions.

A Yes. They weren't partitioned off, and they weren't separate rooms -- the studios -- but they had these full-size blackboards that the designs were drawn up on. In each studio you usually have a scale model and a full-size model that is being continually worked on, and then you

have the sketch tables that the designers worked on around the perimeter of the area. And then these blackboards went around enclosing each one on four sides.

Q Was this was on Second Avenue?

A Yes. It was in the original G.M. Building. The pressure was pretty stiff there on the young designers. There was a big turnover, and I don't know whether it was G.M. policy, whether it was Harley Earl's policy or whose it was, but nobody seemed to last very long. There were a few guys that had been there quite awhile like Frank Hershey and some of the key men -- the heads of the studios -- but the guys that were doing -- the sketch designers came and went with kind of a frightening regularity. So, I started to work for Frank [Hershey] in the Pontiac studio. And I was only there a short while, and then I was transferred into the Chevrolet studio, and I don't remember who was in charge of Chevrolet, but I think it was a man by the name of Andrate.

Q What sort of work did they have you do?

A I spent my full time at General Motors working on hubcaps and louvers.

Q Detail work?

A Yes, and just reams of this stuff, and that's what everybody else seemed to be doing, too. You didn't get a chance really to work -- at least at my level -- on front ends or total concept of cars. They'd say, "Hey, we need some louvers for this car. We need some hubcaps or bumper guard suggestions." And you just wouldn't make a dozen, you'd make dozens!

Q Each slightly different?

A Right. So, there was quite a bit of pressure. Your desks were fairly close together, and the fellow working next to you would get a call about quarter to five some afternoon, and Harley Earl or Howard O'Leary would want to see him. And, so, he would leave, and that's the last you'd ever see him. You'd come in the next day, and his desk would be all clean, and he wouldn't be there any more. So it was a little shaky for me. I didn't feel too comfortable there.

I had worked there, maybe, six or eight months, and I got a call from Bill Flajole. Bill had worked with me at Briggs, and he was another apprentice designer. I'd forgotten that he had worked for John Tjaarda. He worked mostly in the clay department. He didn't do any sketching up front, but he'd worked with John Boch in the clay department. Bill had made a move from Briggs and gone to Chrysler, and Chrysler, at that time, was just forming a design department. They had had a small design department right along, but they wanted to enlarge it and split it up. They wanted an exterior department, and they wanted an interior department. And they had hired Ray Dietrich of Dietrich Body, Inc. to head up the exterior design department.

Q What had he been doing since the breakup of LeBaron? Freelancing?

A He was hired shortly after the breakup of Dietrich, Inc. Dietrich went out of business about 1932. They had separated from LeBaron, I think, in 1925.

He had his own [design] plant in Detroit and [had designed] some beautiful cars and was very successful up until about 1932, and, like a lot of people, [was] wiped out by the Depression and the lack of market for expensive custom bodies. So he had, at that time, been offered a job

at Chrysler by Walter P. Chrysler whom he had known through the custom body business. He was also teaching body layout drafting in the little engineering school at Chrysler.

Q Chrysler Institute.

A Chrysler Institute, right. So it was in the latter part of 1935 when Bill asked me if I'd be interested in making a change to Chrysler, and I said, "Yes, I would." So I went over and was interviewed by Ray Dietrich and took the same samples along -- my original samples.

Q You got a lot of mileage out of those.

A I sure did.

Q What was Dietrich like? Was he pleasant?

A Very pleasant guy. A down-to-earth, regular guy. I mean, he never appeared to be the big executive. He was one of the boys. He liked to tell a joke and liked to hear a joke. As I said, it was split up into two sections: it was the exterior/interior. There was a hallway running down the middle of the engineering building, and on one side was exterior and the other side was interior. And on one end of the building was the clay modeling department and the body layout. At the other end of the engineering building was the showroom where the design prototypes were shown.

Q Was this the main Chrysler plant?

A This was the Highland Park engineering building on Oakland Avenue, and this was the top floor, which is the sixth floor.

Q [Was Dietrich] easy to work for?

A Oh, yes. And Ray was very knowledgeable. He could critique something intelligently. And he was a great line man. He'd go in the

body layout and coach the fellows there in making full-size drawings. He had a beautiful sense of line and proportion. I started there in 1935, and in 1940 Walter Chrysler died at the age of about sixty-five. Then not too long after that, Ray left the company.

Q Moving back a bit to ask a question that just occurred to me. With your movements between Briggs and Chrysler, did any of the Airflow episode come within your purview? Did you hear any talk about it?

A No. We didn't have anything to do with it -- at least the exterior department at Briggs. I believe Briggs did a little of the interior design work on the Airflow. But the Airflow was done primarily at Chrysler engineering. It was an engineer's car. [Fred] Zeder and Skelton/Breer designed that automobile. Very little styling went into that car, as is pretty evident. But the interior, I believe, Briggs did do some work on that, and the interior was the best part of the Airflow. The interiors showed some very progressive work.

Q How about the redo, the ones that came along after the original Airflow flopped, and both DeSoto and Chrysler had a redesigned Airflow that carried it into the late 'Thirties. Did [you do] any of that work at Chrysler?

A Yes. The original Airflow was '34, and then in '35, the Chrysler Airflow gained a little nose-out because people objected to the waterfall on the front -- the big, blunt waterfall grille. They wanted to see some hood out there, so '35 had a little projection out there of a hood and a little suggestion of the design of the '35 -- the regular Chrysler -- the Airstream, I think they called the '35 body -- which was reverting back to the narrower type of body which was all the fashion then because of

the success of the 1934 LaSalle. The LaSalle set the pace -- the styling pace -- for several years with their good-looking '34 design, they had that narrow radiator, narrow grille. They streamlined the headlights supported by struts off of the radiator shell. The pontoon fenders. Chrysler went in this direction in '35 immediately after they saw the '34. That was all done before I arrived on the scene. I started in the Fall of 1935 at Chrysler.

One of the things that was tempting for me to leave G.M., too, was the money. I got two hundred dollars a month at Chrysler, so in a little over a year I jumped from sixty dollars to two hundred, which was pretty good for a kid of twenty-one. It was good money in those days. So I felt very happy about being at Chrysler, and, as I say, I liked Ray Dietrich, and I liked the company, and I liked all the people I worked with.

Q You had a pretty good little group here. Can you name some of them?

A Herb Weisinger was the key man of the exterior design. He had been there the longest of any of the designers. I think he started with Chrysler in 1928/'29. Then there was Buzz Grisinger. Buzz had started there about 1932. Max Wasserman. Max was formerly an architect, and he had done some architectural work for the Chrysler Corporation. In architecture, there wasn't much doing in the Depression, so he was able to get a job at Chrysler in the design department, and that was his background. Then Bill Flajole was there from....

Q The one who'd asked you to come over?

A Right. Had made the move from Briggs. Then there was another man there that was an engineer. He did more engineering type work in our

department. That was Gus Sompe. There was Ed Sheard who had worked for Amos Northup at Hupmobile, and he was an Englishman, a very nice guy, and had....

Q What was his specialty?

A He worked on total concepts like the rest of us. That was the difference between Chrysler and G.M. At General Motors, they were a little more specialized at the time. The designers there, as far as I knew, did very little total concept where you did the whole car. You were doing mostly detail work.

Usually the key man of the department at G.M. or Harley Earl would set the general style of the car, and one of the older designers would usually do the front end which was the face of the car. Harley always called it the face of the car, which was the most important aspect of the car to him -- the identification of the car.

Q Instant recognition?

A Yes, right. So much of the emphasis was put on the front end. Just a few of the designers got an opportunity to really work on front ends as such. Guys like myself, which were new in the business, were put on the dog stuff. So that's why I appreciated the approach. At Chrysler, we were able to sit down and make drawings of whole cars -- front ends, side views, and the rear, and the whole thing, and work in perspective, and work with color. Any way you wanted to work, you could work. The only drawback with Chrysler was the fact that they had been burned badly by the Airflow which management thought was the future type design. It wasn't the fact that it was so much in the future, it was just the way it was done. It was poorly executed. It had no style. It

was a very good car. A wonderfully-engineered car. Management began to think that you just couldn't do radical things because the public didn't want radical things.

Q They became very conservative.

A They became very conservative. They jumped back and said, "Well, let's follow G.M. Whatever G.M. does, we'll do it like that, only a little bit different." So that's what we had to fight. We had some very progressive designers in our department, and we turned out some really good-looking things, but it was never looked upon with favor by management. They didn't want to do anything unless they had seen it done before by somebody else, and it had been successful --"Okay, let's follow that line, and we're all right. Just change it slightly."

Q And, of course, the engineering department was dominant?

A Engineering dominated, and they looked upon styling as a necessary evil. They knew they had to have us, but they didn't like us.

Q They wished they could hire you six months out of the year?

A Yes. And if we wanted to do something that was advantageous to style, they'd say, "Oh, you can't do it. It just isn't feasible engineering-wise." For example, we had to stay with the butterfly-type hood for a long time because there were overhead structures on the assembly line that would interfere with open alligator hoods on cars coming down the line. It was things like this that shackled us to a great extent.

But it was a good company to work for. There weren't many other places to go [to] at that time. There was General Motors, of course, and Ford was just getting started in their design effort, and nobody seemed

to know too much about Ford at the time. You just didn't hear much about them. Usually, guys would come over from G.M. to Chrysler to look for a job, and you'd hear things: "What's going on over there?" You knew people over there. You had friends -- people that you knew. At Ford everything was pretty secretive. You didn't know much what was going on.

Q Low profile. I think Gregorie says that he had a very small staff. That's the way Edsel liked it, and he resisted overtures from both John Tjaarda and Walter Dorwin Teague to join the staff. He said, "I have a small, lean staff, and that's the way I like it." So Gregorie, of course, collaborated with Tjaarda and [Briggs] on various assignments.

A Yes. They did some nice things, too. The '32 Ford was a nice car. The '33, which was a new body. The '34. Good-looking stuff. Then came the new body on the '35's, and the '36 was a knockout. Then, in '37, it kind of fell off. But then the 1938 Zephyr came out, and it knocked everybody's ears off.

Q The alligator hood started there?

A Yes. They didn't have those overhead obstructions, evidently, at Ford.

Q Dietrich is building quite a crew here. I'm impressed with the names of the people you worked with earlier and then later. In terms of their later successes, it must have been great for you?

A It was. It was a good crew.

Q Who was Don Mortrude? What was his specialty?

A He came from Seattle, Washington, and worked at General Motors when I worked there, and he was one of the fellows that disappeared through

the quarter-to-five revolving door. And then he went over to Chrysler, and he arrived at Chrysler just before I was hired. So we arrived about the same time. He was a very good designer. His real love was boats.

Q That was Gregorie's initial love, too.

A Oh, is that right -- boats? He and Don would have gotten along very well. Don worked with us there until about 1937. I think we started in '35. And then he went to Nash. He did the '39 Nash, and that had the very narrow horizontal grille. That was a typical Don Mortrude design. He did that at Chrysler. One of the first things he did at Chrysler was that design, and just about everything he did after that looked like that. He finally sold it to Nash. But that turned out real well. He went to work at Nash and for George Walker. George Walker got the Nash account at that time.

Q In the late 'Thirties?

A Right. As a consultant designer, and Mortrude worked for George Walker.

Q Ted Pietsch. Tell us about Ted. Is he still around?

A Yes. He lives near Seattle, Washington.

Q You probably see him occasionally.

A No. I haven't seen Ted for -- it must be forty years. We were good friends when he worked at Chrysler with us.

Q What was his strong point?

A I'm trying to remember how he came into the department. It must have been about 1939 or '40. I think it was just after Ray Dietrich. It must have been '40. Anyway, Ted had been working for Mr. Herreshoff, who was an executive engineer in Chrysler at the time, and he had a project

-- a small car project -- that Zeder, Skelton and Breer had given him and said, "Go ahead and see what you can do on a small car." It had nothing to do with Chrysler styling. We didn't have anything to do with it, but he hired Ted to do illustrations.

He [Herreshoff] comes from the Herreshoff boat family in New England who had been building sailboats for a hundred years or more. Herreshoff boats, I believe, are still made. They're still a famous boat company. Then the project tapered off a bit, and Ted wanted to get into the styling department. Bob Cadwalder hired him, and he worked there with us from 1940 -- he left there in '45. An excellent designer. He's a great guy.

Q What about Gil Spear? Can you tell us about him?

A Gil started about the same time. It must have been about 1940. He came from General Motors. I believe he came about the same time as Tom Bannister. They were both General Motors designers that got caught in the revolving door and came over to Chrysler. Gil was an excellent designer and illustrator. Came from an artistic family. His father was a well-known artist and illustrator in New York for years and years -- Gil Spear, Sr. -- and did a lot of automotive advertising illustrations.

Q You and he became friendly?

A Yes. When I left Chrysler, Gil stayed at Chrysler until about '42 or '43 when he went to Ford Motor Company and was responsible for the '49 Lincoln and Mercury designs. Those two years were typical of Gil's work. They were recognizable to me as being Gil Spear's design.

Q There were others that you mentioned: Herb Newport.

A I didn't know too much about Herb Newport. He came to Chrysler about '41. I didn't know his background at the time, and he never talked

about it, but I read in an article not too long ago that he was involved in the classic era of custom body design with a body company in New York.

Q Dietrich would have known him about that time?

A Yes, I imagine he would. But I'm not sure whether Dietrich hired him because Dietrich left in '40, and Herb came in either '40 or '41. Bob Cadwalder took over after Ray Dietrich left as head of the department, and Bob was an engineering type. He came from the body development drafting section of Chrysler.

Q What about John Chika?

A John Chika came from General Motors, too. He was a very interesting guy. He came over from Czechoslovakia with his father in the early 'Thirties and was a stage designer and illustrator. He did set paintings. Then he came to Detroit and worked at General Motors styling in the Pontiac studio.

Q What was his specialty?

A He was an illustrator. Did a lot of illustration work and design work as well. He stayed with Chrysler until about 1946 when Bob Cadwalder changed jobs -- went from Chrysler to Kaiser Motors at Willow Run in Ypsilanti. Bob took John Chika with him as head of the Kaiser design studio.

Q What about Jon Hauser? What was his background? Where did he come from?

A He came from General Motors. We had a very good General Motors club there.

Q You mentioned you had a small interior design department under Henry King. Tell us about that at Chrysler in the later 'Thirties.

A Yes. It had about eight or nine people in it, normally. They worked strictly on interiors, instrument panels. seat designs and interior hardware.

Q Who was Henry King?

A Henry had been with Chrysler a long time, I believe. Probably as long as Herb Weisinger and worked in paint colors before he took over the interior design department.

Q So he was a natural to head that up? He had had paint and fabric experience?

A That's right, yes. Very talented man. He lives in Florida now. He's retired.

Q You were outlining some of the various designs you worked on at Chrysler. You listed several years and what lines and what types.

A Yes. Shortly after I went to Chrysler in 1935, I made a sketch -- and, to my amazement, it was practically snatched out of my hands and put into full-size wood mockup. It was just from my sketch. It was the 1937 Chrysler design. It was the front end. I had no control over it at all during its development, and it wasn't a very good interpretation of what I had in mind, but, at least, it was my design, and it made me feel quite good having just started with the company and having a design accepted like that. It was on the Chrysler Six line -- the Royal line, on the Imperial line, and also on the Airflow.

Q What distinguished the design from the others of the day?

A It was a little different than most of the things that were going on. It had a rather low, horizontal grille. The radiator shell leaned forward slightly which no one else was doing. It had wraparound hood

louvers that were die cast that started almost at the center of the nose of the car and then wrapped around the sides of the hood to the hood break where the body starts. There was nothing else like it on the road which was nice.

Q It was well received.

A Yes. Then the following year I was able to get the '38 DeSoto front end.

Q What was distinctive about that?

A It was another one that was designed as a forward-leaning radiator shell, only more than the Chrysler -- more exaggerated lean. The full-size mockup was really very nice. It had a die cast, wrap-around grille. The headlights were mounted in the catwalks in the fenders. The actual production car, again, after it got through the engineering department had lost a lot of its character.

The 1940 Dodge was my front end design. Not very distinctive but just average. Then the '41 Dodge is, again, my design. It was one of the first cars, if not the first car, I believe, to have the headlights worked into the grille. The grille started at the center of the car and swept up out to the ends of the fenders and included the headlights.

Q Those were fairly satisfying years for you?

A Yes. Plus, during my years at Chrysler, I did a lot of detail designs like bumpers, bumper guards, and radiator ornaments.

Q Which, by this time, you were inured to, having suffered through that at General Motors?

A Oh, yes. So it was quite satisfying because in that business you can go a long time without having anything accepted on a car, not even a hubcap, and that gets a little discouraging.

Q World War II comes along, and you're caught up in it?

A I was at Chrysler during most of the war. During the war we worked on war projects. We did instruction manuals for tanks, and armored vehicles, ambulances and things like that, so many of the styling department were exempt [from the draft].

Q You were in essential war work?

A Yes. I was deferred up until 1944, and I decided I wanted to see a bit of what was going on in the war, so I volunteered to the Merchant Marine.

Q What better way to see the North Atlantic Naval operations.

A Yes. So I got into the Merchant Marine over protests of the company. They didn't know why I wanted to go, and after I got in, I wondered the same thing! I did spend almost a year in the Merchant Marine, and then after one of my trips back to the States, I applied for release from the Merchant Marine and was told I couldn't get it, and I was in for the duration. But then Chrysler appealed for me. They wanted to give me my job back and said that I was an essential worker, and through their appeal to the draft board, I was reinstated again with the deferment and was released from the Merchant Marine. Then I went back with Chrysler.

Q By this time, who was heading up design back then?

A Bob Cadwalder was still there. I stayed there until about the end of 1945 and then went out to Los Angeles where I wanted to try my hand at industrial design. I wanted to get away from automobiles for a little while and went to Los Angeles with a bunch of samples, appliances, stoves, radios, etc.

Q What did you gravitate towards?

A I tried the two existing industrial design offices in Los Angeles: Walter Dorwin Teague and Raymond Loewy, and neither of them had openings, so I did some freelance work for a little while for an advertising agency, and I did a couple of designs for a tractor company. Then I landed a job at Lockheed Aircraft Corporation in Burbank, and I set up a one-man design department that later grew to three. We did airplane interiors for the Navy and Army brass -- executive airplanes -- and then worked on projected jet airline interiors and even worked on a presidential airplane -- Lockheed Constellation -- which was a story in itself.

Q Let's hear about it.

A They came to me with this project -- Lockheed management. They wanted an interior for a Constellation airplane to be used by Mr. [Thomas E.] Dewey when he was elected. This was in 1948.

Q This is the famous slender fuselage, three-tailed....

A Right. It had the bent fuselage and the three verticals.... The Connie, they called it.

Q In anticipation of Dewey becoming president?

A Yes. And I don't know who was paying for the airplane, but it was probably somebody in the Pentagon along with Lockheed. They were probably going to grease the ways a little bit.

Q Or hedge their bets?

A Yeah, because....

Q It looked like Truman was on the way out?

A Well, they thought he was. He was president. He had taken over when Franklin D. died, so he was just kind of a lame duck president, and they thought he would be defeated -- that Dewey would get the election.

So they wanted to have this airplane nice and new and all ready to go for "President" Dewey -- have it down on the runway when he was elected to say: "See what we've done for you, Mr. Dewey, and how about some Lockheed contracts?" Anyway, as everybody knows, it backfired, and Truman beat [Dewey] very roundly at the polls, and the airplane was already in Washington at the airport.

Q It was all fitted out and ready to go?

A Oh, yes. But what happened was as I got halfway through the project [with the] two fellows who were working with me, one of the men in management came to me and said that they were going to have to take the job to Raymond Loewy in New York. That this was to be a very classy airplane, and they wanted to have Raymond Loewy's name attached to it. They said they were satisfied with the way the interior was going, but they wanted the Loewy name.

Q You were telling us about the Constellation at Lockheed. The Lockheed experience must have been fascinating for you. All sorts of interior work in airplanes which gave you the background for your present occupation.

A Yes, it did. It was very interesting, although it wasn't automobiles, which was my first love.

Q But you were telling us about the abortive.... The "presidential" Constellation.

A Oh, the Constellation for Dewey was taken over by the Loewy group and finished up with the Loewy nameplate on it.

Q Why was that done?

A The Lockheed management wanted the prestige of a famous designer's name on the airplane, so it carried just that much more weight with

President Dewey. Lockheed had lost a lot of their war work at that time, and they wanted more work. They are one of the biggest defense contractors in the country now. So this was one of their early attempts at buttering up the powers that be.

Q Almost everybody in the country thought that Tom Dewey was going to be elected.

A Oh, yes. The newspapers had the headlines all printed, "Dewey wins by a landslide," and all that. Anyway, old Harry came out fat and happy, and the airplane was already delivered to the Washington, D.C. airport and all ready for Dewey's approval. One of the first things that Harry did was to see this airplane on the tarmac and wanted to know who the hell's airplane that was -- who it was for.

Q Who had the chore of telling him?

A I don't know how it ever came out. We just got a little feedback at Lockheed, but not very much. It was hushed up very -- I don't even know what ever happened to the airplane.

Q Oh, he didn't use it?

A Oh, no. In fact, and we got this from one of the people that was there in engineering, that he said, "I'm not going to set foot in the airplane," and he never did. He said, "I'm going to use the Independence. It's good enough for me. I don't need a fancy airplane."

Q What happened to the Dewey Constellation?

A I never found out.

Q Wasn't it brought back to California?

A It probably was brought back and the interior ripped out and sold to an airline or something, but it was a very embarrassing thing for Lockheed, and they wanted to forget it just as soon as possible.

Q That story hasn't been told by too many people?

A No, not really. I thought it was kind of an interesting story.

Q It certainly is. It was typical of Harry Truman. Who did the Independence?

A I don't know.

Q It wasn't Lockheed then?

A No. That was a Douglas airplane.

Q I think Lockheed lost out for several years after that?

A Douglas and Lockheed were big competitors for years. They were trying to get the government business, and this was going to be their foot in the door -- this beautiful airplane for Mr. Dewey all ready to go and with Mr. Loewy's nameplate.

Q That's fascinating. How come you left Lockheed?

A I'd worked there until 1950, and then Bill Flajole, my old friend at Briggs and Chrysler, in the meantime, had been freelancing design in Detroit and had landed a consulting contract with George Mason at Nash Motors. This was after Don Mortrude was there.

Q Had Mortrude left?

A Mortrude had left. Walker was out, and Ed Anderson, I believe, was in charge there then from G.M.

Q Was George Romney with them at this time?

A And George Romney was second in command, and that's who we dealt with, basically. But, Bill had landed this consulting job with them, and he called me and wanted to know if I would like to come back and work with him on the project.

A So I said, "Sure. It sounds good." It was more money than I was making at Lockheed, and it was automobiles again, which I wanted, and I

wanted to get back to Detroit. So I left sunny California and went back to Detroit.

Q What was the deal then with Bill Flajole and his consultancy with Nash Motors?

A We worked on the Nash Metropolitan -- that little car.

Q Tell us about that. That's a fascinating episode?

A Yes.

Q How did it come about?

A They had some tie in with English Motors, and they had a small engine they wanted to use. Mason had this idea about a small car. He thought it was a timely thing, and so....

Q There hadn't been too many small cars?

A No.

Q Crosley, the Henry J.?

A Yes. And none of them successful because people at that time didn't want small cars. Gasoline was twenty cents a gallon. Who the hell needed a small car?

Q He had a motor from Britain, and [then] did you and Bill Flajole come up with the Metropolitan design?

A Yes.

Q It was a fascinating little car. A tasteful design.

A Yes, it was a cute little design.

Q It's becoming a [minor] classic. A lot of people liked them and now collect them.

A Yes. It's pretty bulbous now when you look at it, but it had some good features on it: low hood -- very dropped hood -- and nice pontoon

fenders going all the way through, and a nice little oval grille and bumper combination. I worked on all that.

Q How many did they make? How many years was it in production?

A I don't remember now. Maybe five years. I'm not quite sure.

Q And it sold reasonably well?

A Not too bad. It wasn't a disaster. We worked on the big Nash. Pininfarina was also a consultant at that time to Nash.

Q The famous Italian designer?

A This is one that he worked on. It was a '52. We worked for Nash at the same time. Both had a showing of our cars at the same time. His was really pretty bad. Ours was not that good, but they took ours, and then gave it to hime to "re-work." The car turned out to be too bulbous again. He didn't know how to design regular American family cars. He could design a car that was forty-eight or fifty inches high. But when it came to doing a car that has to carry a family around and, maybe, a milk can or two, he was out of his depth. So he really didn't contribute anything, but when the car came out, it was designed by Pininfarina and even had his name on it, but it was mostly a Flajole and Miller car. But we weren't very proud of it. It wasn't very good. Too many cooks.

Q What was the setup at Nash in those days? George Mason was still the patriarch of the company, but he had this ambitious young assistant who he'd worked with during the war. His name was....

A George Romney.

Q George really ran things?

A Yes. He was the spark plug. Mason was a good old-time automobile man, and he was a good executive, but he left the day-to-day operations

mostly to George Romney. Mason came over to our office to see designs several times, but it was mostly George Romney and his engineer that came over.

Q The Flajole/Miller office was nearby?

A Yes. It was on Schaefer Road.

Q And, of course, the Nash/Kelvinator building, which is still there, was over on....

A Plymouth Road.

Q And it's still there. The AMC headquarters [1986].

A Yes. My old friend Dick Teague was vice-president of design there, and he just retired.

Q But the '52 didn't turn out too well, and then the collaboration with Pininfarina was less than felicitous, but you pressed on?

A We still had the contract. We were still working on future designs. But some of the things were adapted like a couple of front ends. The hood design where the hood is lower than the fenders and this type of thing. A drop in the belt line -- this feature was carried over. I worked with Bill there until about '53 -- 1950 to 1953.

Q A harmonious relationship?

A Oh, yes.

Q Nice guy?

A Yes, we got along very well.

Q But working on that type of design, when you were somewhat removed from the final product, was that a bit frustrating at times?

A You mean as a consultant rather than in-house?

Q Yes.

A Oh, yes. You didn't feel -- well, it has its advantages and disadvantages. The advantage is that you are away from the corporate headquarters. You don't have the guy breathing down your neck all the time telling you how he wants it. You get it ready, and then you show it to him, which is nice. On the other hand, you don't feel as much of a part of it because they can cut you off at any time. You don't have any real tie to the company like you do if you're on a salary there.

Q You were on a retainer basis? How does that work? Were you paid by the job?

A No. There was a yearly retainer and then an hourly rate.

Q Actual work done?

A Work that you do on different projects for them.

Q Did you have anyone else in the office besides you two?

A Yes. There were at different times. There was one or two other designers, and then there was a clay modeler, and I did clay modeling as well as design. Everybody does something. They all pitch in and do whatever is needed.

Q Did you have the facilities right there, or did you rent a facility elsewhere for making prototypes?

A We made clay models and plaster models there. We had no metal facilities. We did design work and model work. Then I got a call one day from Gordon Buehrig.

Q Had you met him and worked with him earlier in your career?

A Not really. I had never known Gordon very well, but we know of each other. I guess that's how it is.

Q Your reputations had...?

A Evidently, because one time just before I went to California when I was working at Chrysler -- this must have been in late '45 -- Gordon called me, and he was working in South Bend for Raymond Loewy at the time, and he said, "Loewy is looking for somebody to go to England to take over the English design office there in London."

Q Loewy's design office?

A Yes. Loewy was doing a couple of cars. Sunbeam was one, and Morris Minor was the other. They were looking for somebody to go over there and head that up. There was one fellow that was over there, a former G.M. man, but he was coming home. Gordon said, "I've recommended you." How he got my name, I don't know. I don't remember ever meeting him. He said, "They will pay your way and the expenses down to New York for the interview." So, I went, and I met Raymond Loewy there in the New York office, and they outlined the job. The fellow that was coming back from England at the time was there in the office that day, and I can't remember his name now. I didn't know him, but I knew of him. Anyway, we went out and had lunch together after my interview with Loewy, and then he told me about the tough situation in London. He said, "You can't get any place to live, the food is expensive, the clothes are expensive, everything is...."

Q Right after the war?

A Yes. And he said, "It's terrible."

Q Who would that have been?

A It's right on the tip of my tongue.

Q Did he later go on to somewhere else? Did he stay in the automobile line?

A I don't know whatever happened to him. What was his name? He was one of the key men at G.M. Frank Hershey would probably know who he is. Anyway, he was in Loewy's office, I think, over there for about a year.

Q London was practically a bombed-out city?

A Yes. So, that didn't sound very good to me. The man who interviewed me, Mr. Barnhardt, was Loewy's right-hand man. I called him the next day, and I said I didn't think that I would be interested. I had already planned to go to California -- Los Angeles. They eventually found somebody to go.

Getting back to Gordon Buehrig, he said, "Well, I recommended you for that job," but I don't think I'd ever met him at that time. Then he called me on this job. Johnny Reinhart was setting up this separate design staff to do the Continental Mark II. It was going to be a separate division of Ford. So we met for lunch at Cliff Bell's. Do you remember Cliff Bell's over on Six Mile Road?

Q The Cliff Bell's I knew was downtown off Grand [Circus Park].

A They had one downtown and one on Six Mile Road.

Q Good restaurants.

A Oh, yes. We met at the one on Six Mile Road because my apartment was practically around the corner in Sherman woods. Anyway, they outlined it, and it sounded great. It was going to be a prestige car, and it was going to cost ten thousand dollars, which was an astronomical price for a car in those days. This was in the latter part of '52, early '53.

Q They'd gotten the go-ahead by then?

A Oh, yes. They were ready to set this thing up. They were going to have their own production line and be a separate entity, and it sounded

marvelous. So would I be interested on a consulting basis? They were going to have three other outside consultants. There was going to be four total. Vince Gardner was going to be one. Ford (no relation), an industrial design company in downtown Detroit, was going to be another one, and then George Walker. We could make one proposal if we wanted to, or we could make three, but no more than three, and they had to be a certain size. They gave us this grid to work on, and the perspectives all had to be the same: front three-quarter, rear three-quarter, side view. They all had to be rendered in blue. They wanted all the same colors, all the same views, so that nobody could outclass somebody else in the way of rendering and trick up a rendering with a real exotic view or something. And then they had their own styling section. So there was going to be four outsiders and their own in-house design group. We were to get ten thousand dollars for this presentation.

I thought this would be a good opportunity to set up my own design office and have Ford as a client, not too bad. So I called Buzz Grisinger, and he was at Kaiser Fraser at the time. In fact, they were just kind of winding up. He'd just done the '54 -- Buzz designed the front end on the '54 Kaiser. They were just winding that up, and Kaiser was getting kind of shaky, so I said, "How about us going in partnership in setting up an industrial design office? We've got a Ford contract here we can start off with." So he thought about it for a couple of days, and he said, "Well, it sounds good to me." So he quit Kaiser, and we opened a little office out in Pleasant Ridge right on Woodward Ave.

It was a good-looking little office. It was like a store front, but it was new, and it had a big, plate glass window in the front, so I'm

kind of leading up to something here. We had a nice reception area and then a conference room, and in the back was a workshop and clay modeling facilities. We started on the Continental project and submitted two designs. During a period of maybe four months, Harley Copp, the chief engineer of this new Continental division and William Clay Ford, came to our office to get a preview. They came over a couple of times, and one time they drove over in a Mercedes convertible that William Clay had -- the big one. We went out for a spin in that. Another time they had driven over in a Lincoln, and, as I said, this was a storefront building, it was new, and it had this big, plate glass window in front, and they hadn't put the complete sidewalk in yet. It only came so far. It was just a little one right in front of the door, and it was angle parking, and cars would come up, and they'd come almost into that plate glass window because there was no curb there. There was plenty of room to park, but they'd nose up pretty close. So there was Harley Copp, Ford, Buzz and me. We were sitting in the reception area right in front of this window, and they were just getting ready to leave -- we were just talking there, and this new Cadillac convertible comes roaring up, and it comes right up and does the same thing that a lot of other cars had done. It kind of annoyed me that people would get up so close to that window. So this Cadillac swished up there, and stopped in front of this window. I looked out and said, "Some of these fool drivers. Somebody's going to come right through that plate glass window one of these days." And William Ford said, "Oh, I'm sorry. That's for me."

Q A Cadillac?

A And it was some friend of his picking him up there. They were going up skiing. He excused himself and went out and talked to his

friend, and then he left shortly after that. But I felt like a fool myself because I had to shoot my mouth off when it was somebody picking him up.

Q Interesting that Copp and [Ford] were interested in your design. You must have come close in the competition?

A Well, I don't know how close we came. When everybody had completed their presentations and submitted them, they chose the one that was done in their own studio under Johnny Reinhart.

Q We have a large notebook in the archives showing all the competing designs.

A Oh, is that right?

Q Some of your sketches must be there. When I get back, I'll check and see.

A I made a little model downstairs of one of them, and it's just the side view. It's a twelfth scale plaque type. It just shows the side of the car all in relief.

Q Very interesting design.

A I'll bring that model up, and you can take a look at it.

Q Mr. Miller is showing me a -- how would you describe it?

A It's a plaque type model. It's a scale model, but it doesn't have the full width of the car.

Q This was one of the competing designs for the 1956 Mark II, right? And from what I can see and from what I've seen of the others, this may well have been right up there in the finals.

A I hope it was. I didn't see the other competing designs.

Q As I remember seeing them from material that we have at the

archives, this, I think, was the closest to the one design, in terms of acceptability of the final design.

A Well, that was a fun project. We enjoyed it. I just made this for my own amusement after the project was finished. This model was not in the presentation, because you couldn't present models. They just wanted drawings.

Q When did you find out that you hadn't gotten it? Who let you know?

A I think it was Harley Copp. Yes, he was our contact over there.

Q What did he say?

A I don't remember now. I think it was probably in the form of a letter.

Q Were you somewhat disappointed? You thought it was a good design.

A Oh, yes.

Q It would have been a good account.

A Oh, yes, it would have. We submitted two designs, and they were both for their times nice-looking cars. But shortly after that the chief engineer of Kaiser Motors called Buzz and wanted to know if we'd be interested in doing some consulting work for Kaiser, so we took that on. They were thinking about bringing out a new Kaiser car for '56 or '57, I don't remember which, and then they wanted a rework or facelift on the Kaiser Willys car. They had just taken over Willys. So we went to work for them after this Continental project, and that lasted for about a year. We did a lot of drawings, and Buzz and I worked out at Willow Run in a design studio that was set up for us.

Q Can you tell us a bit about how this assignment came about? Who approached you on the Kaiser Fraser consultancy?

A George Harbert, chief engineer of Kaiser.

Q And he was the one who recommended you?

A He knew Buzz from the time that Buzz had worked at Kaiser. At the same time, Dutch Darrin was working there as a consultant. He had a studio just the other side of a partition from us where he and his crew were working, also, on this new Willys facelift for the front and rear end. By this time, they had given up on the Kaiser. They figured that the Kaiser was not going to be, and we stopped work on that, but we were working on the Willys, and Dutch Darrin and Duncan MacCrea were working on their version. Duncan died, unfortunately, just last year. Nice guy, great designer and long time friend.

So both of us made a full-size presentation on the facelifting job. Then they decided that they didn't have the money to go ahead with the full scale facelifting, and they wanted to throttle back and just do a little bit on the '54 Willys. Just a molding change and a taillight change, something like that. So we didn't do any more work on the project. They had Darrin do that. It turned out to be the '55 Willys, and they did a side molding treatment, and a taillight treatment.

So nothing much came of that whole project, but we were working on both the Kaiser and the Willys project for about a year.

Q Lucrative contract?

A Yes. It worked out very well. About the time that was winding down, I got a call from Frank Hershey who was chief stylist for Ford Division at that time.

Q Now, when was the last time you had contact with him?

A Not since the G.M. days.

Q About twenty years. You got a call from him. What did he say?

A He said that he would like to have me come out to Dearborn. He had a proposition to talk to me about. I thought it was another consulting job.

Q Had you seen him over the years?

A No, no. Hadn't seen him or talked to him.

Q Incredible. You're probably too modest to say so, but, obviously, you've impressed these people during your career with your talents, and they remember you.

A In that business, you get to be known around. Everybody knows everybody else pretty much. Even if you don't know 'em, you know their names, and you hear what they're doing here and there. He probably heard that we were working on the Continental thing, and he knew that was over. Here's a guy that's loose at this time. Anyway, he was looking for somebody to be manager of the Thunderbird studio. So I went out, and we talked about it, and he laid the whole thing out. The styling section was expanding at that time, and they were looking for the right kind of people for these different jobs and would I be interested in this. I said, "Yes, I would." It sounded good to me, but I was in business and had a partner, and I didn't want to jump out of that without consulting my partner.

Q He must have known Buzz, also? At least by reputation.

A Probably he did. So I said, "I'll have to let you know in a couple days." So I went back, and Buzz and I talked it over, and Buzz said, "This is a good opportunity. Go ahead. Why don't you go, and when you get out there, maybe, there will be something for me there, too." So he

said, "Take it," because we weren't doing much at the time. It was the end of the Kaiser thing, and we were doing a little overflow work from Sundberg and Ferrar -- another industrial design shop. So I started at Ford Motor Company on the Thunderbird.

Q Now who was involved in the Thunderbird studio at that time? Who were your cohorts?

A John Middlestead was my assistant manager. I had two. After I got there, we were retitled. You weren't manager any more, you were executive status because you were on the same level as an executive engineer. They were trying to balance the styling and engineering. Under this executive stylist there were two managers. There was a manager for exterior and a manager for interior design.

Q And which was...?

A Middlestead was exterior, and I can't remember the interior.... As a matter of fact, that didn't happen until I got into Ford advanced design. While I was in Thunderbird -- I'll have to backtrack a bit here. I went into Thunderbird as manager, and we didn't have any exterior or interior, and I didn't have any assistant managers. We didn't have a studio proper. The '55 Thunderbird had just kind of evolved, and Frank Hershey was involved in that, and it was kind of a stepchild. They didn't know what the hell to do with it. "G.M. has a Corvette. We've got to have something. We'll hang on to this and build a few of 'em, and see what happens." But they didn't attach too much importance to it.

They were in a crash program for the '56. The '56 had to be designed. We started next to the wash rack downstairs in the building

because we didn't have a studio yet. There was no space for us, and they were just expanding all over the place. The original T-Bird had been designed in the Ford car studio. So I had about, maybe, six or seven fellows -- designers -- working for me and about three clay modelers and a full-size car down there that we were reworking for '56. Tore the back end and the front end off. That's when we put on the rear bumper with the exhaust in it and the spare tire. Had to get the tire out of the trunk because we were getting a lot of complaints from the field that people couldn't get the golf clubs in the deck. Spare tire had to come out, so we had to come up with that workout, which we did in an awful hurry. That and a new interior design, which one of the fellows that worked for me did. What was his name? Jimmy Quinlan!

Q He's remained in interiors all these years.

A Well, that's where he started out in the wash rack down there with me. I hired him, and he did that interior for the '56 Bird.

Q Who decided on the porthole?

A The portholes, I don't know, because that was already being kicked around at that time. Even on the '55, they were figuring on putting them in.

Q Someone said Louis Crusoe?

A Maybe. We worked out all kinds of windows in that thing: portholes, and rectangular windows, and windows that followed the top line. Went through dozens of workouts, but it ended up as a porthole.

Q Was Bill Boyer working with you on that?

A Bill wasn't on that, no. He was working for Bill Wagner at the time. Truck. Anyway, we did the '56 in a big hurry, and then they had

to have the '57. [On the] '57 we could change the rear end sheet metal. We put the tire back inside again. We ripped off the rear end, added ten inches to the overhand, new deck, bumper and fins and did some work on the front grille. And that was '57, which turned out to be a pretty successful car.

Q Even better than the original?

A Yes, yes. The collectors like it better.

Q The idea of enclosing the rear tire and putting a classy emblem on it was great.

A It worked out pretty well. Then we started on the four-place. Management wanted a four-place, which I objected to.

Q Their first mistake.

A I tried to talk 'em out of that. If they had to have a four-place, they had the tooling for the two-place, keep the two-place. Give people a choice. "Oh, no. It's got to be one or the other. We can't afford two cars." They made a mistake, I think.

At that time, we moved upstairs into the main floor section of the building. Set up this T-Bird studio, and about that time they said, "Well, we want you take over Ford advanced car." I was just getting interested in the T-Bird -- getting started. They were always changing -- playing musical chairs. Okay, so I took over the Ford advanced car, and then that's when they changed the titles -- executive stylist -- and you had two managers under you and a bigger crew.

Q Was that Bordinat doing all that juggling -- trying to get parity with the engineering department? Or was it George Walker?

A I guess it was George Walker. Bordinat was an executive stylist for Lincoln-Mercury at the time. So, we started on the four-place

T-Bird. Then they switched me into the Ford advanced car, and we started work on advanced cars, and about six months of that and constant shows. We had weekly shows that would just drive you out of your mind.

Q Most people have complained about that compulsive habit of Ford throwing everything into Thursday to get ready for Friday. And lots of overtime.

A Oh, overtime! I worked six days, seven days a week. I don't know of anytime I worked five days when I was there. And nights on top of it. When we worked we used to eat over at the restaurant in the Dearborn Inn.

Q Yes, right. It's still there.

A And have wonderful lobster tails, and I think it was about a dollar and a quarter or something like that with drawn butter and everything. I had a tab over there and was eating there every night.

I got a call one day from Tom Bannister at Chrysler. Tom was chief stylist for Chrysler and DeSoto. He wanted to know if I'd want to make a change, and I was just about over-timed out about this time.

Q Had you brought Buzz over in the interim?

A Oh, yes. After I got into T-Bird, then Frank wanted to know if my partner would want to come over to Ford. So I called Buzz, and Buzz came out and talked to Frank, and Frank hired him. While I was in the basement working on the T-Birds, Buzz was hired. They didn't have a spot for him yet, so he would come down there and sit in my studio and watch us work, and this went on for, I don't know, about a month. They didn't have a spot for him, but they hired him. At that time they were out to hire every good designer they could find, and Buzz was a very good one.

Finally they came up with a spot for him, and it was Mercury. I think it was Mercury advanced cars. I had Ford advanced cars by this

time. So he stayed on -- you know Buzz's story. It turned out very, very well for him.

In the meantime, Tom Bannister had called me from Chrysler, so he set up an appointment. I went over to see [Virgil] Exner, and I was hired by Exner to do a small car project. They wanted to bring out a small car.

Q I have not heard this before. What kind of small car were they thinking of at Chrysler?

A About a hundred to a hundred and five inch wheelbase car -- right in there. Nobody else was working on it, so, I guess, they decided there was some place in the market for it.

Q And this was in 1956?

A Yes. I started on that, and Herb Weissinger then had come back to Chrysler, in the meantime. He'd been at Kaiser-Frazer -- he and Buzz. Herb and I had this small car project -- kind of co-managers -- full partners on it. We had a crew -- designers and modelers. I worked on that project. I don't how many months, but it was into the latter part of '56. In the meantime, Frank Hershey had left Ford and had taken a job with Kaiser Aluminum and was setting up an industrial design department for Kaiser Aluminum. Reynolds Aluminum had a similar situation.

Q I take it the small car design project had died -- at least while you were there?

A It was still going when I left.

Q Did anything ever come of it?

A Nothing ever came of it, no.

Q Tell us about [Virgil] Exner. What kind of personality did he have? What kind of drive did he have?

A He was a real automobile man. He did some good things, and he did some strange things.

Q What were some of each?

A Well, I think, all Chrysler cars in 1957 -- that was the year of the pronounced fins. Those were all good-looking cars for their day. I think, maybe, the best looking cars on the road, and Ex was responsible for those. He headed up that whole drive for that particular type of car. The whole line was very good. Ford was very good that year. They had the fins too. Everybody was going fin crazy, but the Chrysler line was very good. Then after that, for some reason or other, it started to go down hill, and I don't know what happened. Ex's taste or direction or whatever it was, but it got weird. They got into some real strange things. The '59 and '60, in particular, and then their sales began to fall off, and, I think, that's what caused his departure at Chrysler. He stayed until about 1962.

Q What kind of a person was he? Was he a nice guy?

A Oh, yes. He was a wonderful fellow.

Q Did he live up to his reputation?

A Yes, he had a lot of talent.

Q What were some strange things?

A Like the '59 and '60 cars that he put out. Real weird shapes on the Dodge and the Plymouth. Everything overdone -- over-life size. Huge headlamp bezels and strange looking sculptured sides of the cars.

Q Was this viewed as a retrogression at the time?

A Yes. It was an odd period in automobile design. I kind of lost interest in automobile design about that time because it was getting so

overdone. It seemed to be the trend for all the car companies. Ford, when I was there, wanted the wild stuff, too. The designs got to be cartoons. The trend seemed to be be as wild as you can be. It got to the point they didn't look like automobiles. They looked like funny paper cartoons. Huge wings, and fins, and bombs, and that kind of stuff. I just got to the point where I didn't have any interest in this stuff any more. So when I got this call from Frank Hershey that he was setting up a design department in Oakland, California, and it was an opportunity to get back to California, it sounded good to me because I'd get away from these funny cars that they were doing in the late 'Fifties. I guess I just ran out of gas. I didn't agree with the philosophy of design at that time. Too much. Everything was overdone.

So I came out here to Oakland and started to work with Frank, and we set up a nice industrial design department. Good group of guys. All very talented. Most of them Art Center boys. I had automotive and transportation. I worked on making automotive presentations to Detroit, making up designs and brochures and presenting them to the different styling departments. Frank and I would go back and make these pitches to Ford and Chrysler, trying to emphasize aluminum -- to get more usage of aluminum in cars.

Then I worked a lot in the boat industry in the same way, trying to promote aluminum usage in the marine industry. I also did a lot of mobile home promotion.

Q Did the industrial design department go anywhere?

A Well, it did for awhile. We started in 1956, and I left there in '63, so I was there about seven years. It was very interesting. We

worked with Kaiser customers, and we were well received. But then there was recession in the business, and Kaiser had to cut back and started cutting back on staff. We had a staff of about ten people at one time, and they cut it almost in half. So I left there in '63, and Frank stayed on a couple more years, I guess, and then he left. The department just kind of dwindled away, and it ended up with one man. He stayed right from the beginning from '56 until just about three years ago when he retired.

Q Who's that?

A Jim Dong, the first man Frank hired for the department in early '56.

Q They were branching out in all directions in terms of consumer transportation?

A Yes. And, at the same time, John Reinhart was doing the same thing for U.S. Steel. John had left Ford and was heading up the U.S. Steel department just like the Kaiser department, and he had Syd Meade working for him doing U.S. Steel's promotion brochures.

Q Futuristic cars.

A Yes.

Q Syd Meade is still around Los Angeles.

A I guess he is, yes. He's quite a guy. A tremendous talent.

Q Tell us about the Kaiser Aluminum Chemical Corporation. This incredible array of consumer products that you worked on. Some of the details of what they were putting out in those days.

A When I went with Kaiser in '57, they had twenty-three companies. They were into automobiles, aluminum, steel, cement, packaging, aluminum foil division, shipping, you name it.

Q The remnants of the elder Kaiser's empire?

A Yes. They even had an electronic division and a real estate division.

Q You mentioned mobile homes.

A Yes, but they weren't manufacturing mobile homes. They were supplying material to mobile home manufacturers.

Q Was Henry J. still involved with the running of the company?

A Yes. He died, I think, about 1970.

Q Having dealt off his automobile companies?

A They still had Willys when he died. They sold off Willys to American Motors later.

Q The Jeep part of that?

A Yes. They discontinued the automobile line. When they left Detroit -- when they left Willow Run in '55, they sent the dies down to South America -- to Argentina.

Q And manufactured them for years down there.

A Manufactured the Kaiser Carabella for about five years, and then, I guess, the dies wore out. The system wore out. The political situation down there changed, so they discontinued operations there, too, and that got them out of the passenger car business. They were left then with the Jeep, and then they sold Jeep to American Motors. But it's still a big company, and I enjoyed my years with them. It was fun, and it was something different. It gave me a chance to get away from doing automobiles completely. I did just enough of automobile promotional work for Detroit, which kept me in it, but, still, I wasn't involved in everyday production design. So I enjoyed it. I continued to be involved with

Kaiser as a client after setting up our own design office. We had our office until about 1970/'71.

Q You mentioned our office. By this time, Buzz is no longer with you. Who was?

A I formed this office with two fellows that I had worked with at Kaiser: Grabe Smith and Ed Chan.

Q How did the partnership come about?

A Well, Grabe Smith -- when I worked with him at Kaiser -- was in charge of container and packaging for Kaiser design, and Ed Chan worked for him, but it was all under Frank Hershey, and I was Frank Hershey's assistant manager. When we left Kaiser, we formed our own office.

Q Frank got around, too?

A Yes. Frank left Kaiser about 1965.

Q You decided [to set up your own office] during the explosion in industrial design?

A Yes. There was a bit more activity in industrial design at that time. Then I had the Kaiser account. I took that with me. It entailed promotional design work for their automotive sales office in Detroit. Grabe and Ed concentrated on packaging design, and they took Kaiser packaging with them. So we were doing practically the same thing we were doing working for Kaiser, only we had our own office.

Q Where was that?

A In Oakland, Jack London Square.

Q Oakland has been, traditionally, the West Coast headquarters of the Kaiser?

A Headquarters for Kaiser, right.

Q The cement plants were around here?

A Yes. His Permanente plant is down here -- down the peninsula. The steel was in Fontana, California.

Q The aluminum?

A Aluminum -- they have plants all over the country. There were six or eights plants around.

Q I wonder why it came off in the Bay area. Was there a conscious decision to come out here?

A Henry Kaiser always worked on the West Coast.

Q Not in New Orleans, as is popular, supposedly, with his ship company?

A No, no. He built his Liberty ships right here in Richmond during the war.

Q This was his main area?

A Right. He started up around Seattle as a road building contractor, and then he started doing government work. Then he built Grand Coulee Dam. He also built Boulder Dam. So that's where he got his start here on the West Coast, and then the war came along, and he, of course, built the Liberty ships.

Q He convinced them that he could do it his way, which was an assembly line technique?

A Yes. Everything with him was assembly line. He figured everything could be done on an assembly line. Everything worked for him except his cars.

Q You hung onto those lucrative sales and packaging contracts?

A Right, with Kaiser. So that gave us a good start. Then a little later on, I developed a line of office accessories.

Q What were they?

A Desk trays, and desk pads, pen holders, notebook dispensers, writing pads, wastebaskets, clocks. There's the clock that I designed.

Q That's fascinating.

A That's made out of one piece of aluminum extrusion. That's just one extrusion, the case and pedestal.

Q Is this the model, or this is just one special one that you did for yourself?

A No, that's the production model.

Q Who made the works for you?

A Westclock.

Q That's your logo?

A Designer's Products, yes. That was separate from the design office.

Q Did this go very well?

A Oh, yes. We sold several thousand of them. We sold a lot to Kaiser Aluminum as executive gifts -- promotional gifts. There's your works in there. The only steel on it is this back piece.

Q Who manufactured it for you?

A Kaiser. In their Dalton, Illinois, extrusion plant. Then I had the extrusions sent out here, and I had a job shop that would cut them to size and anodize them first in fifteen foot lengths, and then cut them. I set up a little shop and had some people working to assemble all these things.

Q It's very handsome.

A We had them sold in a lot of the best stores: Gump's in San Francisco, carried them. Neiman-Marcus in Dallas carried them.

Q What did they go for?

A Originally forty dollars.

Q In audio terms, can you explain this so that those listening on tape know what we're looking at?

A It's a desk clock approximately four inches high and about seven inches wide and about an inch and three-quarters deep. It's made from one piece of aluminum extrusion, and then it's anodized in a dark brown architectural color, or some of them we had anodized in the polished aluminum. Then I had the faces stamped out, bought the movements from Westclock, and set up a shop and had them assembled. I had contact with reps that sold for me, and we sold them in New York, Florida, Southern California, Washington, Oregon, Arizona.

Q Most striking is the face. Could you describe the face? Rather advanced for its time?

A Yes. The face is plastic. It's imitation wood grain. It's vinyl with a rosewood grain, and the hands and the face markings are white against the rosewood background.

Q There are dots instead of numerals?

A Yes.

Q The hands themselves are different in shape, and this gives it a modern look.

A It was very well received by everybody. The only thing is, it got to be involved. When you're a designer and trying to be a manufacturer, you just try to wear too many hats. You get mixed up in incredible problems business-wise. I had this line and sold it for about four or five years, and I concentrated too much time on it and not enough in my

design business. Anyway, I gradually phased it out and opted for a little more leisurely type of existence, which was freelance design.

Q You and your partners prospered obviously?

A Yes. Grabe Smith has carried on, and the office is still in operation. I left the office in 1971, and so did Ed Chan. He went to Hong Kong to work for Young & Rubicam advertising company.

Q But the partnership has been dissolved?

A Yes.

Q Do you see Grabe from time to time, and does he consult with you from time to time on various projects?

A Oh, yes. Both of 'em are still in the area now, and we see each other quite regularly.

Q By 1970-'71, you'd had it. You wanted to...?

A Yes. So then I started freelancing and answered an ad for an interior airplane designer for World Airways.

Q A small West Coast outfit?

A Yes. World Airways goes out of Oakland Airport here. They're an international outfit. They fly DC-10's and DC-8's and 747's. It's a good little airline.

Q They wanted to upgrade their cabins?

A No. Dave Bell had started a design section in their modification facility. They wanted to have a complete service. In the airplane business, they have modification centers where they will take other airlines' airplanes and will overhaul them, they'll paint them -- like a big repair shop, only for airplanes. They install new engines, they install extra fuel tanks. They can remodify a whole airplane. And they wanted to offer interior service as well for executive airplanes.

So Dave Bell, who had been doing this type of work with a company in Los Angeles, came up here and joined World Airways and advertised for a designer. I was freelancing, and I answered the ad. Dave and I started work together at World Airways.

Q Tell us about Dave Bell's background.

A He was a pilot in the early stages of the Vietnam war. He is an Art Center graduate and a very talented designer. After he got out of the Air Force, he went to work for a company in Los Angeles, Air Research. It's a big mod center down there. The biggest one in the country. He worked for Air Research for several years.

Q When you say mod, what do you mean by that?

A Modification center.

Q A bit of jargon in the design business [meaning] modification for someone else?

A Yes. Modifying airplanes. It means repairing and rebuilding or building.

Q Refurbishing.

A Refurbishing. In fact, Air Research has done Ford executive airplanes -- their interiors. We did two airplanes for the Italian government -- two new DC-9's for their navy brass. And then we did one 727, one 720 interior.

Then Dave wanted to open his own office, and their modification business didn't turn out to be as lucrative for World Airways as they thought it was going to be, so they decided they wanted to phase it out. Dave opened his own office. He has a lot of contacts in the airplane business. So I've been working with him off and on since 1974.

Q You answered an ad that he'd placed in the paper.

A Yes.

Q You went in to see him, and what happened?

A Well, he wanted an airplane interior designer, and I had had experience in that particular thing, and there aren't too many people around with that kind of experience, so it was kind of a natural thing. Since 1975, I have been working with him on a part-time basis. I officially retired about 1975, and I work with Dave on two/three jobs a year.

Q Has it worked out to your satisfaction?

A Yes. Just right, because I haven't wanted to work full time, but I do like to do something once in awhile, but I don't want to be tied to a job. I want to feel that I am retired, and this gives me that opportunity. So I've spent the last ten years restoring cars and working on airplanes and landscaping my house.

Q What type of airplane interiors have you worked on in the last few years that are still in service?

A This is just a few of them that we've worked on. One of these airplanes is a Boeing 720 interior, and this is for Kerk Kerkorian, the international oil man.

Q And motion pictures?

A Yes, motion pictures. Owns MGM.

Q What distinctive features did you come up with for him, if you can describe them in audio terms.

A An airplane like that has a complete interior. It has a bedroom, has a shower, has a conference room, has a bar, it has a lounge, has a television, it has all the comforts of home.

Q However did you rig up a shower in an airplane?

A The engineers worked it out. They have water that's pumped through the system to turn it on.

Q Where would you get enough pressure to have a normal shower?

A I don't know exactly how it was done, but it's done quite regularly on the large ones like this. On the 720, 727's. Then we've done a lot of work on the Gulfstream G-3's, G-2's.

Q Chrysler just picked 'em up about six months ago. They bought 'em out completely.

A They have?

Q Added them to their corporate stable, and Lee Iacocca is still number three on the list. He can't get an executive jet. He complained that he had to wait in line for his own jet.

A We did a G-3 for Coca Cola Company, one for Seagrams. [One was] a Challenger concept for the Arkansas modification center.

Q When you say Challenger concept, what is that?

A This airplane is a projected airplane. They're working on it, and this is a projected interior for it.

Q What were your specialties? Was it leather?

A Oh, no. Not very much leather is used in the executive airplanes.

Q Why is that?

A They [have] plushier fabrics.

Q They prefer something like velour?

A Yes. Carpeting, a hundred dollars a yard, and fabrics, seventy-five/eighty dollars a yard. Custom-designed carpeting, and custom-dyed carpeting. Usually they have a budget, but they're pretty liberal.

Q So you'd have to work with specialty fabric and dye houses?

A That's right.

Q And special indirect lighting, I suspect?

A Right. There are certain companies that make aircraft lighting. You work with them. You have a list of suppliers that make standard items in lighting, ashtrays, drink holders, the coat closet, telescoping racks -- things like that. Very expensive things.

Q There's a minimum of space?

A Oh, yes.

Q So you have to be rather ingenious to come up with a compact interior?

A You have to make everything count.

Q Luxurious ship compact?

A Right. And fine woods. They like burled walnut and....

Q Oak?

A Some oak. The wall coverings are usually custom. They don't use too many drapes any more or curtains. For instance, [in one] Boeing we used Levellors -- the little mini blinds.

Q How about tinted glass?

A Not much glass. Plastic mirrors, windows, etc. Cut glass is used, however, in bar accessories and food service.

Q Elaborate kitchens, or, at least, compact?

A Yes. They're galleys. They're microwaved and refrigerated, and there are standard components that you buy and install in this space.

Q How about stereo and television? Are they staples?

A Yes. Stereo, television, telephones.

Q They all have to be sort of compacted into the bullpen, I suppose?

A Yes. Or in your consoles, along the side, or in your seat. The seats are bought from seat supply houses that specialize in airplane seats.

Q They can do special ones for you?

A Yes. But you specify the fabric covering and styling. Sofas are the same way.

Q I'm interested in the fact that you didn't use much leather.

A Well, leather is a little too sporty for executive aircraft. Sometimes leather is specified, but if the customer happens to really like leather, he'll put a couple of leather seats in there, maybe, something like that, but normally these interiors are very plush and very homey. It's all right to have an occasional leather chair like I've got. I have one leather chair in here, but I don't have my sofas and everything in leather.

It's very interesting work, and we sometimes travel. The airplanes are not always built in the area. Most of these airplanes that we've done are built in Los Angeles at the Jet Center. Occasionally, they're built out of town in Kansas City or Texas mod centers; Florida, too.

Q What about sleeping accommodations? Obviously, you have to pack those into the rear of the fuselage.

A Well, it depends on the floor plan -- your layout. If it's a big enough airplane, you can have the bedroom anyplace that works out the best. You may have one bedroom; two bedrooms, sometimes. The smaller airplanes, of course, don't usually have beds. Sometimes a sofa bed. But the bedrooms are in the large airplanes where you're traveling from here to Europe or something.

Q Or Hong Kong?

A Hong Kong or from Saudi Arabia to London -- back and forth. Then they will specify a bedroom.

Q Have you ever done any large corporate jets, like Ford?

A These are all corporate jets, but we haven't done any for Ford Motor, no. We've done none for the automobile companies as yet.

Q It's been a very successful ending to your [career] -- not an ending, really, it's still going on. A very successful [interim period].

A It's kind of sputtering along now.

Q In the time we've got left, Mr. Miller, which is about five minutes, can you sum up your design career and philosophy as to what you think you've accomplished in the sense of personal accomplishment? What impact you've had on design in the various areas that you've worked? What's the future for industrial and automotive design in the next decade and into the Twenty-first Century? That's a rather tall order.

A That <u>is</u> a tall order. I don't know what impact I have had on design, if any. I have designed products, seen them produced and in use, and that has given me a personal sense of satisfaction, and I guess that is what it's all about in this business. I have never seen a designer approach a project with the idea of how much money can I make, but always with the desire to do the best job possible. It's a matter of pride in your work. I have never known an industrial designer to do a slipshod piece of work. Some are more talented than others, but everyone gives it their best shot.

Industrial design, I believe, has a great future with many opportunities. Products are becoming more sophisticated and are demanding

more emphasis on appealing design and colors. It is all an important part of modern marketing. There are very few products on the market today that haven't been worked on by some designer endeavoring to give them eye and sales appeal. Automotive design, of course, is part of industrial design; however, it is somehow a little different in the respect that most of the outstanding car designers have a definite affinity to automobiles. Not all designers, regardless of how talented, are successful when it comes to automobiles. The future design of automobiles is difficult to project. It appears that for the predictable future, the emphasis will be on small and medium, fuel-efficient, low-drag coefficient cars. When these optimums are combined, the resulting designs tend to look pretty much alike. So the designers of the next decade and into the Twenty-First Century will face a real challenge trying to achieve a distinct identity in their dream automobiles -- a greater challenge than we of the 30's, 40's, 50's and 60's faced.

Q What do you drive today?

A My wife and I have three collector cars. One of my hobbies is restoring old cars. We have a 1968 Camaro convertible, a 1954 Kaiser Manhattan and a 1964½ Ford Mustang. We use the Mustang as a driver sometimes. And then we have a 1975 Pinto station wagon -- a great little car that we are going to be forced to retire soon in favor of one of the new breed.

#

Benson Ford Research Center
The Henry Ford
20900 Oakwood Boulevard · Dearborn, MI 48124-5029 USA
research.center@thehenryford.org · www.thehenryford.org