

L. David Ash Oral History

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Note to Readers

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DESIGN ORAL HISTORY PROJECT

ASH, L. DAVID

1985

EDSEL B. FORD DESIGN HISTORY CENTER

**Henry Ford Museum &
Greenfield Village**

This is January 25, 1985, and we are interviewing Mr. L. David Ash, long-time Ford designer.

A Last time we met, we were talking about the '57 Ford, which, chronologically, would have been calendar year about 1955. Shortly after that, I was transferred again, and this time to the Lincoln studio, which was a place I hadn't previously been. It had a new chief stylist named John Najjar. The major project at hand was the all-new Lincoln and Continental and also finishing up the facelift of the '57 Lincoln, which Bill Schmidt hadn't quite completed before he left for Packard.

The 1958 Lincoln was quite a car. I noticed in some publications it's called "a slant-eyed monster." It was a monster all right in size. It was the longest car, I think, I've ever seen, at least as a standard production vehicle. It was also controversial in its engineering aspects, because it was not body on frame, as is customary practice, but the new unitized concept where the body and frame are integrated into one structural assembly. To further complicate matters, the car was to be built in an all-new assembly plant at Wixom, [MI] which had never been used before. The combination of all of these factors resulted in a vehicle that was not terribly satisfactory from a number of points of view. However, it certainly was impressive looking.

One of its interesting derivatives was another Continental. This was the Continental that superseded the demise of the Mark II, which was produced by the Continental Division. This Continental was strictly a minor modification of a '58 Lincoln, and it bore the designation "Mark III." More about that later.

Q Dave, may we move you back to the days of the '57 and the '58 and

the Mark III? The atmosphere had changed. The Mark II Continental program had been given the deep six by this time?

A Yes. Actually, there was a model year '57 Continental Mark II. I remember I inherited it because the division was disbanded by then. What I merely had to do was releasing some additional or changed colors on it. Very few were probably built, but it was the Mark II.

At that time the Edsel was rearing its head. The Ford management, in an effort to set itself up as a parallel to General Motors, had established separate divisions for each of its car lines. There was a Ford Division, a Mercury Division, an Edsel Division, a Lincoln Division, and a Continental Division. A very unwieldy situation, especially when you got into the trim and color aspects of it, because each one of those divisions had its own assortment of colors. We had five or six different whites, for instance, ranging from cool ones to ivory colored ones and a variety of reds and blues. It was terrible.

Q So you weren't doing much interchanging?

A There wasn't any. There was an interchangability in the cars. For instance, the Edsel was derived from the '57 Ford, and in its bigger series, from the Mercury. But the Continental Mark II was entirely individual by itself. But the interiors and the colors were all distinct and separate. The only one they shared was black, because nobody knew how to make a light black or whatever. So it was a strange time.

Q Unwieldy, you've said, is a good phrase?

A Unwieldy, yes.

Q And someone, obviously, realized that very quickly?

A Oh, yes. The first thing that happened was the Continental Division died with the car, and the division died entirely. The next

thing, the Edsel died, and a strange three-headed division was created called M-E-L -- Mercury/Edsel/Lincoln -- which lasted for a very short time.

Q Headed up by the ineffable John J. Nance at one point?

A Yes. Jungle Jim. He was something else. Henry Ford had a penchant for bringing in oddballs from the demise of other companies. This was Packard. Nance was one of the worst automotive executives I've ever come in contact with, for no other reason was that he didn't know anything about cars. He couldn't even drive a car. Fortunately, he didn't last long. That was something else.

Q In terms of the design center, were you able, with the personnel that were displaced by these amalgamations and consolations, to place them elsewhere?

A For the most part, as far as I know, they were. The people from the Continental Division -- Bob Thomas and his designers came into the design center and were assimilated. John Reinhart took a position with U.S. Steel as their designer. When the Edsel folded, all those designers were absorbed, and some of the more important people, like Roy Brown, were exiled to England or elsewhere to get them out of sight for awhile. That's a sad thing, in a way, because they did their best, and I think they did a fine-looking, unique car.

Q That was the procedure in those days? If you failed on an important procedure, you were exiled?

A I don't know. The first time that I ever experienced it -- there apparently was no disgrace connected with the demise of the Continental. It just was a car out of joint with its time. But, of course, so was the

Edsel. But the Edsel got such a black eye from the press and everybody, that no one would -- I know that they put one in George Walker's parking spot on introduction day, and he refused to drive it. In fact, he wouldn't even talk about the car. He wouldn't. If you talked to him about the Edsel, he'd just start talking about something else.

Q Roy Brown worked for him, and it affected him?

A That's right. Absolutely. It just became a terrible embarrassment for everybody, all the way up and down.

Q I worked for the Edsel Division very briefly in the Summer of '56, and I remember seeing the final mockup and naive as I was then, I thought it was beautiful. But do you remember any differences of opinion among your fellow designers about the final Edsel design?

A I don't recall any adverse comments about it from designers in the other studios. I know, eventually, I had working for me Ken Spencer, who was under Roy Brown, the Edsel exterior designer. He had to sort of hide around for awhile. He was never shipped off anywhere. There was no onus on him, really, except for what he thought he had on him. I guess he felt that nobody liked him because nobody liked the car. It took him a long time to recover from the trauma of that design experience. On the other hand, the guy's a crackerjack designer, and I was always glad to get him. A little grumpy and hard to get along with....

Q But he delivered the goods?

A No problem, yes. I owned an Edsel, myself. That was before they had the lease car program. I bought one with my own money, and I liked it very much.

Q It seemed gorgeous to me.

A I had no problem with it. I think the press killed it. The other thing they did wrong was they made too damned many models of it. They didn't need two complete line-ups -- one Ford-derived, and one Mercury and two series was in each one of them and a full line, from two-doors, to four-doors, hardtops, convertibles and station wagons. They went overboard on their investment.

Q I suspect another mistake was a separate dealership organization?

A I don't know. When you've got a full-fledged car division, you want to have a dealer organization.

Q Apparently, Larry Doyle insisted on this?

A I don't know. He was, what, Mercury?

Q No. He was the Edsel sales manager.

A Okay. Because I know Dick Krafe was the general manager. That's what they had to do, and that's what they did, but it was a very, very unfortunate decision on the part of the company. I guess it didn't hurt too bad.

Now later on, there was to be another Continental Mark III, which we'll get into.

Q At this point, you had the Mark III in '58, you had the Mark IV in '59, and the Mark V in 1960?

A That is correct.

Q But those were large merchandising labels?

A They were the names that were on the car, and those things that were called Continental Mark III, IV and V had the Continental star on their hood, which originated with the John Reinhart design group on the original Continental. They said Continental on them, and they carried the star.

Q But, in retrospect, they weren't considered real Continentals?

A Collectors don't consider them as such. When we came much later on to what turned out to be the Mark III Continental, Iacocca and others completely abjured the existence of these '58, '59 and '60's.

Q Rewrote history?

A Rewrote history, as it were, which is probably just as well.

Q But they were hybrids

A They were merely derivative models. I don't think they carried any real distinctive sheet metal at all. Some touches on the interior and the name star and whatnot, and that was about it.

I moved around quite a bit in those days.

Q Was it exciting?

A I found it very exciting, and I always welcomed it because it gave me different experiences, and different studios, and different projects. Shortly after the Lincoln experience, I was back in the advanced studio with Bob MacGuire.

Q He was a well-spoken of individual by most your colleagues?

A Yes. I think that you'll find that anyone that had been with Ford design for awhile will speak of MacGuire with great respect and appreciation. He was, I would say, my mentor. He was a hard man to get to know. He came from G.M., and he was in that little studio with Bordinat when I first came into Ford, and they were doing that spooky Lincoln.

Incidentally, I found a sketch of it in Bob Thomas' book, Adventures of an Automobile Stylist. This is that Continental that I found in the Ford design office when I first came in. It was a spooky-looking car, and that always stuck in my mind, and that's where I derive this effect,

which I eventually put on the Mustang -- that side scoop. That must have stuck in my mind.

Q I wonder what happened to that?

A It got junked eventually, because you can't keep those things around. It was before the days of fiberglass, so it just sat there. It was clay, and it was painted, and it looked gorgeous, but it wasn't very durable and nobody bought it.

Anyway, I was back in the advanced studio with Bob MacGuire and with a strange title. I was called Executive Stylist: Fashion Trends and Special Assignment. Boy, that's a real catchall. That's a license to do almost anything. So I said to Bob, "What's this fashion trends part of it?" He said, "You're supposed to seek out the trend of fabrics and colors in high fashion and home decorating as they might apply to and influence automotive colors and fabrics." I gulped that down, and I said, "Yeah? How do I go about this? What do I produce? I'm used to producing a clay model or something, eventually, in hard form for people to approve." He said, "I don't know what you're going to produce. We'll play it by ear." That was one of his favorite phrases for awhile. He says, "In the meantime, you're going to have some expert advice. J. Walter Thompson," which was the Ford advertising agency and is still is, "is going to connect you up with Virginia VanBrunt, who is their fashion coordinator and consultant and one of their employees. Through her you will have entree to others in the fashion world." I said, "That's a step forward."

It turned out to be extremely interesting. I don't know whose idea this was. I suspect it came from very top management, because, from time

to time, they would grumble -- Henry Ford, Breech and others -- about our colors. "What's wrong with your colors? They don't look right." That's very helpful. "The color doesn't look right." "Well, it looks all right to me." Of course, I never said that. But, anyway, somebody up there decided that we ought to plumb the depths of where the real stuff came from -- the fashion world. Okay.

I went bouncing off to New York, met with Virginia, and she introduced me to the editor of Harper's Bazaar. He set up a luncheon meeting with Christian Dior. I forget all the other people I met. That was all very interesting, but I still couldn't put my hand on something. I had been licensed, if I wanted to, to have somebody create a car. For instance, I proposed to Dior that he might want to decorate one of our cars. "Yes," he said, "that would be fine." I said, "There will be a suitable fee. I don't know what it is." Nobody ever told me how far out on the limb I could go.

Q What year was this?

A I find it hard to put my thumb on it. It must have been around '58. Around there, I would say -- '57/'58.

Q It's quite unusual for that time?

A Yeah. So, he wanted to do it in brass, and gold, and red plush velvet. I nodded my head that it sounded great, and never did carry it any further. He went back to France and died, and I went back to Ford and got involved in other aspects of this.

All this went on for awhile. In the meantime, I was doing my other part of the job, which was special assignments. That had a more concrete basis. For instance, I was given the studio in the Edsel building, which

was where the former Continental Mark II was designed. A very nice little facility down the road from the main design center and kind of out of the way. Nobody bothered me. In fact, I had to drag people over there to show them anything. It was really nice. At that time, it was the Edsel headquarters. The Edsel was still alive then. It was '56/'57. I know the Edsel was still going on in there.

I was also told to hire a fabric designer and weaver. I don't where I found Helen Vincent, but I employed her, and she wanted a hand loom. This is the farthest out part of my life -- well, almost. I moved into this nice little studio, and it was in the Edsel building, and there was a balcony in it. I put Helen up there with her hand loom and all of her yarns and things and told her to weave. She said, "What would you like?" I said, "Ahh, are you familiar with automotive fabrics?" "No. Are they wool?" I said, "I don't think so." We did some consulting with the trim and color department as to what we might have her do that could eventually -- hopefully -- turn out useful. Because she did it on a hand loom, and if it ever got any interest, it would have to be translated into commercial weaving techniques and pass all sorts of godawful tests for abrasions, soiling and all that stuff.

As a matter of fact, as it turned out, she actually did weave one fabric, which got approved and went into the production system, and survived that and wound up in a Lincoln -- only one. But she kept busy up there for awhile. Meanwhile down the floor, I was involved in a show car. The most exciting one I ever had anything to do with, although I don't have any pictures of it. It was called La Galaxie -- spelled in French. I don't know whether you have anything in your files on it, but it was a very spooky car.

Q Yes, we do.

A It was the last of the fantasy show cars that we ever did that was spooky and far out. On the wall of the studio, we had a full-size outline drawing of it while the clay model was in progress. I had assigned to me a young MIT graduate engineer by the name of Dick Noe, and he was supposed to sort of quasi-engineer this thing so that it had some sense of realism. MacGuire told him he wanted a nuclear power plant in it. Atomics were just coming on strong now. Noe said, "A nuclear power plant?" "Yeah, that's right. Put it in the back." So with that in mind, I created these enormous glass tubes in the rear end, which, I suppose, were to let out the nuclear exhaust into the general atmosphere. It was a striking a car, if I do say so myself.

One day MacGuire came over. He didn't come over too often. He liked me to come over to his place. He came down the road and dropped in on us, and he said to Noe, "Where's the atomic engine?" So Noe took him over to this full-size outline drawing, and there was a red rectangle. He said, "There it is." MacGuire expected to see a whole bunch of tubes, and dials, and things that glowed and pulsed. He says, "That's it?" "Yup. That's the smallest one I could get in there." Noe was putting him on. He said, "That's the smallest one I could put in there."

Q Did Bob MacGuire finally tumble that his leg was being pulled?

A I don't think so. He said, "What is that rectangle?" Noe said, "That's the lead shielding on the outside of it." "Oh, okay." "You, obviously, can't see what's inside because it has to be shielded." "Okay."

We were talking about the La Galaxie -- a show car here which was done in the little studio of what was then the Edsel building. It was

done full size in clay over a period of, probably, about three months. I don't really know what purpose it had, other than it was an assignment I had to do -- an advanced spooky car as far out as I could conceive without being too crazy. The car had a unique aspect to it. The greenhouse was quite different. And also the so-called C-pillar at the back end of the roof line viewed from the side had a unique scallop in it. The model, in its final form, was to have supposedly incorporated a nuclear power device for propelling it. Some of the thematic material on the model that reflects the supposed requirements for such a device -- putting the enormous exhaust tubes on the rear end of the car. We conceived a unique symbol or device to identify the car. It was an ellipse with a flattened X going through it. This motif showed up on the front fender ends and also in the rear end of the vehicle. Along the side was a distinctive bumper extension line with a large sunken area of textured chrome-plated metal which served to take air into the propulsion system. Some of the other unique items of the vehicle we had was chrome sidewall tires and an extremely unique front lighting system.

Q In what way?

A It had super beam headlamps on either side and a supplementary linear lighting system between them.

Q That was unique.

A Yeah. The model developed in clay over a period of time, and we also did an interior buck for it, where we did a special instrument panel. You ought to try to get a photograph of that, too, because we had what we called sputnik instruments. They were floating transparent spheres with the indicators in them, and they sort of hovered in a concave area. Everything was very spooky.

Q How were they suspended?

A Amto-gravs? How else?

Q I thought you might have suspended them in liquid.

A Oh, no. They were just there. They were actually supported at the back, but where they sat out from this central area, but you couldn't see the supports, so they looked like they were just floating there.

I don't know what brought about the decision to cast the clay and make it into a show car.

Q Would MacGuire have had to make that decision?

A I don't know. He came over, and he and I, eventually, approved the thing. I got to a stage where I said, "I'm done with it. What do we do with it now?" So he came over, and he looked at it, and walked around it, and felt that it was a very striking model and that something ought to be done with it. I guess he got Walker involved in it, certainly, although I don't think George had seen it up to that time, and he thought it was great. I don't know where it went from then. And which division sponsored it, whether it was Lincoln-Mercury or Ford -- probably Ford Division. Ford, eventually, picked up the name Galaxie. It originated here.

It was decided by somebody with money in one of the divisions to fabricate it and make a show car out of it for the show car circuit. So it was shipped over to the main design center to be cast where it caused quite a furor, because nobody had seen it up to this time, and there wasn't anything like it going on anywhere in those studios. When it got completed and rolled out of the shop all done in pearlescent gold, and these blast tubes in the rear end had spooky lighting in them where the

outer area of the tubes glowed a sort of a fiery red, and as it went inside, it got whiter and more violet colored as it got closer to the reactor core. It was a terribly spooky car. We had lights everywhere that worked. And the instruments were lit, and everything was just terribly spooky.

Q It elicited an awful lot of comment?

A Yes, it did. When it got rolled out into the main hallway of the design center, people looked at it with their mouths agape. That was about as far afield as I ever got.

Q Do you remember Bordinat's comment? What he said about it?

A No, I don't. He wasn't in charge of the place at that time. I guess he was the Mercury chief stylist.

Q But Walker did like it?

A Yeah.

In line with the generally kooky assignments that I had at this time, somebody thought it would be a good idea to see if we could reduce the cost of doing conventional show cars. A conventional show car is a modified production car, as opposed to a concept thing like La Galaxie, or the Mystere, or the Atmos. These are production cars that are taken. Special things are designed for them, and then they're contracted out for somebody to fabricate, paint and finish under the supervision of the design center.

Q They weren't done entirely in the design center?

A No. We tried to do it from time to time, but it took up too much capacity. The fabrication services in the design center were for fabrication of design material and properties. They just could not take on show cars.

Q What sort of an organization would you ship it to?

A There were several in the area. One of them was Dearborn Steel Tubing. I forget the names of the others, just offhand. Sometimes they were out of state. I never got involved in money. I never discussed money with these contractors. That was taken care of by the Lincoln-Mercury Division or the Ford Division. So the only thing I did was furnish them with photographs, drawings, and information, and supervision of what they were doing. And it worked all right, but it was quite costly. So, I was commissioned, along with a couple of other people, to go out to the West Coast and check in on the capacity of what were then called the customizers, which the West Coast used to have quite a number of them. One of the guys on this team was Jim Cappolongo, who eventually rose in the company and became president of Ford of England. Another chap that we had with us was Harry Miller of the Lincoln-Mercury Division. He was to represent the business aspect of having these people contracted to do show cars.

Q What was Cappolongo's...?

A Cappolongo was with the Ford Division, and he was on his way up. When I first met him, he had just come in from Chrysler, and he was a cost analyst. I think he might have been in that capacity, because he was going to review the costs associated with these projects. He had not made much of a step upward at that time, but he went gradually up and became one of Iacocca's boys, and became a vice-president, and, eventually, president of Ford of England.

The three of us went out there, and we interviewed three of these customizers, and one of them we rejected, and I forget his name, because

his operation didn't seem to be big enough to handle what we might give him. I didn't think he had the capacity or enough people around. In fact, he had only himself, and I knew he couldn't do it. His work was nice, what he did. Now you must understand that these people at that time designed their own customized cars.

Q They were individual customizers?

A Well, yes. In fact, George Barris had a thriving business going there. He's in Hollywood now. You've probably heard of George -- the king of the customizers. He did an awful lot of custom cars for Hollywood personalities.

Q He had a Ford connection about this time? Or about four or five years earlier? Bill Schmidt's Futura and the conversion to the Batmobile?

A As I understand it, he bought the Futura when it was going to be scrapped and made it into the Batmobile. I don't recall much of that, but I do remember the Futura.

Anyway, we settled on two of these California customizers with the idea in mind that we would give them a shot. Each had a show car aimed at an auto show, so they had a deadline to work to. And one of them was Gene Winfield, whose outfit was in Modesto, East of San Francisco, and the other was George Barris, who was in Hollywood. It was decided that we would give Gene Winfield and George Barris each a crack at doing a show car, and this was an experiment in part, but it was for real. In other words, they had to perform, they had to execute the cars, not the way they would have done them, but exactly as they had been designed by my group. And they understood this.

It was an extremely interesting experience. It involved a lot of travel. I went out to California about every two weeks. I'd go out to San Francisco, rent a car and drive across the bay over to Modesto, and spend a couple of days there with Gene Winfield. He was doing a Ford, which I named the Constellation. No one else would name these things, so I always named them. And nobody ever questioned them. "Oh, yeah, that's the Constellation, okay."

We sent George a 1964 Mercury Marauder Convertible, which was a prototype. That was another thing that was difficult to get was the cars to work on because they weren't really in production then. But this is the raw car that George got sent to him by the Lincoln-Mercury Division [showing a photograph]. This is me and Jim Quinlan with the scale drawing that we made as a general guide [showing a photograph]. We also made detail drawings of all the parts from the car, like the streamlined headrests and the little air intakes for the carbs and so forth. That was the basic design rendering that he had to emulate.

Q The code name is the Super Marauder?

A Yeah.

Q Had the Marauder been introduced yet in the Mercury line?

A No. This was actually a prototype vehicle that he got. This shows how he fabricated it. That's George Barris, and that's me and some of his guys [showing photograph].

Q You would go out and supervise the actual fabrication?

A Yeah. I did more than that. I had to work on it for awhile because they knew they had a deadline, but I got worried about it. I spent a week out there working in the shop. Fortunately, when I was at Fisher Body during the war, I was in template shops, so I knew how to work metal.

This shows some of the work that went on [showing a photograph]. How the car was done. Also shots of the completed car. You can see what we wound up with.

Q What are those distinctive four apertures on the hood?

A They are supposed to be high-velocity air intakes for the four-barrel carburetor. We did a special instrument cluster and a steering device, other than a steering wheel.

Q Was Jim Quinlan involved with instrument clusters in those days?

A Oh, yes.

Q He's still doing them.

A No, not any more, he isn't. He's in trim and color. This shows Barris at work on this device on the top here [showing photograph].

Q How did you find George Barris? A good, solid craftsman?

A He's fantastic. There he and I are when the car is in its rougher stages [showing photograph]. It looked pretty rough for a long time.

Q And that's the finished product?

A Yeah.

Q Fabulously turned out.

A Here I am working [showing photograph].

Q A unique glimpse into the customizers' studios of those days?

A Yes. They weren't used to working this close. They were used to doing whatever they wanted to with a car. There's George and I again with one of the unique taillights [showing photograph]. George is quite a character. He's a pure product of Hollywood: flamboyant, knows everybody out there, wealthy parties. It was quite an experience for me. I got a real exposure to the Hollywood high life, I'll tell you.

Q Even up in Modesto?

A Not so much there. That's a quiet place. Modesto is out in almost the desert part. It's not North of San Francisco; it's East. It's across the lower part of the bay, down past the airport. It's almost a desert-like area.

Q But you did get down to Hollywood, occasionally?

A When I got through with Winfield, I'd head South down to Hollywood and work on this one. We had the two of them going at once.

Q Winfield was in Modesto; Barris was in Hollywood?

A Right.

Q How many more of these show cars did you work on after the...?
What happened to the Super Marauder?

A I don't know.

Q But it was a concept car for the later introduction of the Mercury Marauder?

A Yes, I guess so. My memory doesn't serve me too well. I know it went into the auto show circuit. And how many it was, two, and what its fate was, I never really followed up on it. I always seemed to be busy on something else. You get the job done, and you go to something else.

Q Did you enjoy working on the Super Marauder?

A Yes. The only thing, as I said, in both cases -- the Constellation at Winfield's -- the time element got me pretty antsy. You keep reminding these guys, "Look, the show date is coming up, and it's something we don't postpone. The show goes on whether this car is in it or not. If it's not in it, I'm going to be in trouble, and you're going to be out of business." "Yeah, don't worry, Dave, we'll get it done."

So that was interesting. My career in the fashion trends and special assignments was pretty wild.

Q Later on, as you well remember, about decade or so later, they were coming up with fashion designer designs for the Lincoln?

A Oh, do I very well know it. I was involved in that from day one.

Long about now came a request from Ford of Germany for a designer to give them a hand on a new program that they didn't seem to think that they were well enough staffed for. They wanted a senior designer type of chap, which is a category of a guy who's a very good designer, and he's had quite a bit of experience, but he's not really into the management area of design yet. I heard about this, and I asked MacGuire if I could be considered for that, although I knew I was overtrained for it, in that I was a couple of notches above what they'd asked for. He said, "Oh, you do want to go to Europe?" I said, "Yeah, I'd like to have some experience there." He talked it over with Walker, and it was okay with Walker. Without any further ado, I got a passport and went to Germany to work for a summer.

Q This is Ford of Germany in Cologne -- the Taunus group?

A Right. That was a tremendously interesting experience for me, because I had never before been abroad.

Q What was your assignment in Germany?

A As I said, it was a new Taunus, and it had a code name of NXP. I remember that, but I don't know what it stood for. The exterior clay model was done, and they were just fiddling with some details on it, so I addressed myself to the interior -- the instrument panel, and the door trim panels and seats, which I largely completed. Toward the end of the

assignment, I was able to bring my wife over. At the end of the assignment, we had some vacation time, so we spent it on our first driving trip in Europe. We went down the Rhine, and Rohn, and Mosel, and to Switzerland, and had a grand time. That was just great.

Q What was the problem with the Taunus? Was it outdated? Did they want to...?

A I think it was successful in Europe. It was never successful here, to my knowledge. I think it was imported on a limited basis probably by Lincoln-Mercury. But I don't think it ever achieved anything. It would have done well now, because it would fit in with today's looks. I'd say it was ahead of its time, but it was kind of small and pinched looking and aero, where American cars were bigger, wider, longer, lower and lots of chrome hung on 'em -- out of joint with its time.

I came back from Europe, and the next thing I got put on was the Presidential parade car.

Q What year was this?

A What year it was, chronologically, I'm not sure. I know that the base vehicle that we started with was a '61 Lincoln convertible, which was new at that time. DeLaRossa was in charge of the exterior part of the car, which was pretty simple. It was about a ten inch stretch, and there wasn't too much more to it than that. The contract was let out to an ambulance and hearse building firm in Cincinnati named Hess & Eisenhardt, who were very good at that sort of thing. I didn't pick them out. I don't know who did, but whoever did, picked the right people because they knew what they were doing. I mainly did the interior of the car.

I made a number of trips down there from time to time, ordered the leather and worked around the special modifications to the car that the Secret Service required.

Q You worked directly with Hess & Eisenhardt?

A Yes, Hess & Eisenhardt and also with a chap by the name of Baughman, who was chief of the White House Secret Service staff, and a very imperious type he was, too. He wasn't hard to get along with, he just wanted it to be known pretty straight out -- I mean, this was his car. He orders the cars, and he has to do with specifying the special equipment that goes in 'em -- the armor and the bullet-proof glass.

Q Was this the Kennedy era?

A Oh, yeah. This was the car Kennedy was assassinated in. I never felt too well about that, but that was out of my control. Somewhere along the way in the project, the car was required to have a demountable roll bar, which was used when the top was down in a parade situation. The President would stand up and could hang to this while the car was moving in a parade.

I remember standing in the car with this thing in place, and Baughman was just outside, and I said, "Isn't this a terribly exposed position for somebody to be standing in? How do you protect the President?" He said, "Don't worry. That's our job. We do that." Well, ultimately, I guess they didn't. The car was loaded. It was all armor-plated inside and on the floor, and it had bullet-proof glass in it and so forth. But here's the President sitting in the back seat and nothing behind him.

Q There was no plexiglass overlay?

A No. That was the one that Roosevelt had -- the Sunshine Special that had a bubble top over it. That wouldn't have done much good, I don't think. Plexiglass wouldn't have stopped a high-powered, high-velocity rifle shot.

That was an interesting project, and it took me down to Cincinnati a number of times.

Q Were you aware that the Henry Ford Museum now has that particular vehicle?

A Which one?

Q The one that you designed.

A No, I wasn't.

Q It was on display for about three months in the Presidential vehicle exhibit.

A I was pretty sure they had the so-called Sunshine Special.

Q We have that, too.

A No, I didn't know they had that one. There was some little problems involved in working around compartments that had armament in them and communications equipment, but everything came out all right, except the car failed, ultimately.

Q When you questioned Baughman about the vulnerability of the passengers, he said, "Don't worry, we'll take care of it?"

A Yeah. He seemed to be almost offended that I would even ask such a question of such a person. He said, "Don't worry about that. That's our job. We protect the President." "Fine."

About this time, I was back in the Ford Studio again working for Joe Oros. Damon Woods, who had been there, left to head up the assignment in England, so I replaced Damon.

Q They were beginning to do that more and more now where they're shifting around several creative designers?

A Oh, yeah. It became quite prevalent, move people to England, and Germany and Italy to give them broader experience. It was very good, really.

Q This is the early 'Sixties?

A Yes, I'd say so.

Q Were you one of the first to go to Germany?

A No. Al Mueller had been there, and other guys had been there before me.

I'm back in the Ford studio, and we were busily engaged in doing the '64 Ford and also the Fairlane -- the small Ford. And finishing up the '63. Then the Mustang program came about. I suppose everyone you've talked to claims they designed the Mustang?

Q We we would very much like to have your version of it.

A You shall have it. About this time, Ford had a program going where they sent various managers to a Kepner-Trego management session where you're supposed to learn how to manage by the numbers, as it were. You take a problem, and you analyze it in about ten different ways, and it's supposed to all work out, and you come up with the right solution.

Q Where is that located?

A A number of places. What they did, you became part of a group of Ford managers -- some from the design center, some from Lincoln-Mercury, some from engineering and various parts of the company. In this case, you went to the St. Clair Inn for a week. You were there, and you got the sessions in the morning, and in the afternoon and after dinner. Then

you were allowed to have happy hour in between and so forth, but it was a pretty confined, pretty regulated....

Q Intensive?

A Yes, intensive. Anyway, Joe [Oros] was sent to this thing just as the Mustang broke. Leading up to the Mustang was a whole series of exploratory models variously called Allegro and.... They were all done in the advanced studio under DeLaRossa's direction. There was a whole raft of them. They were all done mostly on the same general package size, and the company was serious about producing such a car. As far as I know, it was Iacocca's special idea that this happen. I don't know how much time was spent; probably, at least, a year and as many as ten or eleven separate models were developed in full-size clay in DeLaRossa's studio. Some had minor variations in package, but, essentially, it was a small, sporty car.

Q When you say package, that indicates that there has been some preliminary discussions fairly high level, and some decisions have been made as to the general shape and form?

A Yes. Of course, I was not privy to any of these. I wasn't involved at all. I was doing other things at the time. I think the sequence of events was that, eventually, one of these was liked enough that it was taken to the styling committee for approval.

Q Who would be on the styling committee?

A It would have been Henry Ford. I don't know who the president of the company was at that time -- Arjay Miller, perhaps?

Q Could be.

A Although he was only president for a month.

Q No, that was McNamara. Arjay went into the 'Sixties.

A Yeah, probably McNamara, and Bordinat -- yeah, Bordinat, by that time, was a vice-president, and a number of other people -- Lundy, I suppose. All of them really had no ability to judge style, but they had the rank. In the course, the vice-president and general manager of the divisions, especially the one that was involved, in this case, was Iacocca. I was not at that styling committee meeting. What must have happened there was that, "Yeah, Lee, it's a good idea, but what else have we got to look at." So they had one model in front of them. I'm surmising that this is what happened, because that's how I got involved in it, and that's how the other studios got involved in it. That afternoon or early the next morning, Gene called into his office Buzz Grisinger, and DeLaRossa and MacGuire, too. He would have called Joe [Oros], except that Joe was out at the St. Clair Inn, so he called me in. He outlined what was to be done, and he said, "You've got two weeks, and you're going to have to come up with an alternative proposal to what was in the show this morning," or yesterday -- whenever it was, "and you'll be given the package that you cannot deviate from, and good luck."

It seems I made a mistake about describing that Damon Woods had gone to England. He had not. He had been promoted and was now chief interior designer.

Anyway, back to the Mustang project. We got a wood armature, and everything set up, and piled the clay on it, and started the designers on making sketches of what we might do. First we had photographs available to us of the previous models that had been developed in the advanced studio so we knew what not to do. I wouldn't want to say that those

vehicles were poor looking, because they weren't. They were all kind of different, although they seemed to have a main theme running through them, but we all well understood that model might be still be approved if we didn't come up with an alternative that found favor with management.

I did some sketching myself at home the first few nights while the clay was getting shaped up and carved down into the general package, and then we all got together and settled on the design elements that are mainly evident in the car that stands today: the long body side scoop terminating in the quarter panel, and the triple element tail lamps, and the mouthy front end. At this time, the car was called Cougar.

Q An early code name?

A Not Mustang. I don't know whether it was a code name or whether it was serious, but it was a Cougar. As you can see in these photographs of the early Mustang models, it had a cat regardant in on it. It also had an eagle at one time and a Ford crest. There's a cat going the other direction. So it had a number of different symbols and names for awhile.

Anyway, at the beginning of the next week, the model was pretty well along the way. I wouldn't say it was complete, but all the elements were there. Joe came back from his training session, lined us all up -- as if the model never sat there on floor -- and was telling us how we were going to go about designing it by using the new Kepner-Trego analysis method.

Previous to that, about the end of the previous week -- the first week that we had to design it -- Iacocca had been in, and he liked it, even in the rough state that it was. He has a great eye for perceiving

things. I let Joe know that the thing was in high favor, because it was. He usually didn't like doing this kind of thing. He wanted his thumb print on everything, and he got his thumb on this, eventually. He wound up putting a better-looking, what we call, C-pillar on the car than the one we had. The one I had was more stiff and formal, and he gave it a little more slope and rounded it a bit, which, I think, sat better on the car. By the way, the model had two different sides to it. Only one side had this long side scoop theme on it; the other side was totally different. This was done frequently. It gives you two looks at a single clay model. You can always see one side at once, so it's like making two separate clay models.

Q What was your input into this model?

A I would say substantial. However, anyone that says they designed the car by themselves, is wrong. Iacocca didn't design it. He conceived it. He's called the father of it, and, in that respect, he was. I did not design it in total, nor did Oros. It was designed by a design group. You look at the photograph taken at the award banquet for the Industrial Designers' Society where the Mustang received the medal, it's got Damon Woods in it (the group that did the interior), and Charlie Phaneuf (who was with Damon), and it's got myself and John Foster (who was with me), it's got Najjar in it. I'm not sure what Najjar was involved in, but he had some involvement with it.

Q Something to do with the name, perhaps?

A I don't know. And, of course, Bordinat and Oros. So nobody actually did the car, as such. Iacocca in his book flat out comes and says I did the car. It's right there in print, "It's Dave Ash's

Mustang." Bordinat will tell you I did the car. This book tells you I did the car, but, in actual fact, I had a lot of help, and I don't think anyone ever does a car by himself, not in these times anyway. But it was a huge success. It was a hands-down winner when we had the beauty contest shortly thereafter. There was no contest, truly. It was the right car. It went through the engineering system rapidly, and had a spectacular introduction, and was a tremendous sales success. I think it did me a great deal of good, personally. I think it stuck in Iacocca's mind that I, probably, was the major contributor to the car in designing it or helping design it and bringing it along, because shortly thereafter, I received a major promotion.

I've got to backtrack a little bit. There's a cloak and dagger story involved in how it got its final name. Once again, I was out of the Ford studio and back in what was called the corporate projects studio with MacGuire again. The car -- the Mustang -- was in the Ford studio -- by now, a fiberglass replica and all spiffed up, painted vermilion (poppy red), and it had lettering on it that said Cougar. It had a cat in its front end. In the interior, the seat buttons had cougars on them and so forth. The instrument panel said Cougar. Everything was going into tooling this way.

I was in the corporate projects studio, and, at that time, I was working with race car people on the first GT-40 LeMans car. It really wasn't a styling or design project; it was pretty aerodynamically controlled, but it was fun to work in a real flat-out LeMans race car. Najjar, who I think was in the studio at the same time, was working on the show model of what eventually became Mustang I.

There was a show model being developed in the corporate projects studio, which I'm pretty sure Najjar was in charge of. The idea being that it looked a great deal like what the production Cougar was going to look like and that the production car coming out hard on the heels of the show model would get very good rub-off from the show model. So, as far as I can recall, this show model was being done by Najjar and MacGuire.

One day, as I was going about my business, Bordinat and Iacocca came into the studio and took me aside into my little office and, in effect, swore me to secrecy on pain of death and dismemberment and told me that I was to work with Najjar on this thing, to the extent that I was to change its symbology and its name to Mustang. I was given authority to find out where the tooling had gone on the Cougar script being cast in metal and Cougar lines or Cougars in the interior and elsewhere, which I did. I didn't tell any engineers to stop tooling, because I didn't have that authority. Besides, I was sworn to secrecy.

I went to the Ford studio, and I looked over the model. I made notes of where I found Cougars or Cougar lettering anywhere. Najjar and I then went about the business of having one of our fine clay modelers sculpture this horse, and we designed this little emblem, and we changed the buttons on the seats. Anywhere there was Cougar elements; they were changed to Mustang lettering or the Mustang symbology.

Q Who did the first sculpture of the horse? Do you remember?

A Yeah. I'm trying to think of his name. It was a Hungarian -- Karestes. A very fine guy; a very fine modeler and sculptor.

Q Was it his final design that you all approved?

A Yes. Sculptured in clay.

Then I got a lot of flack. I'm getting ahead of myself again. I had to make sure that everything that we did was not just something that was going to be made one of for a show car. It had to be exactly what was going on in the production car and had to fit in those places, which it did. At a given signal, I don't know what it was, all of sudden the Cougar stopped being a Cougar, and a Mustang came in. I couldn't tell Joe Oros this, and I couldn't tell Damon Woods this.

Q Sworn to secrecy?

A I was sworn to secrecy. So under cloak and dagger, I changed the name around.

Q It must have caused some consternation and surprise?

A It did. Damon sort of chuckled at it. Joe was a little discom-
bobulated about it, as he might have been, but maybe not. So, anyway,
that all got done and happened.

The Mustang hardtop -- that I didn't really have anything to do about because that was done subsequently in the Ford studio which I was no longer in.

Q The Mustang was a great success.

A It certainly was.

Q And your career was certainly solidified at Ford?

A Yeah. In fact, it took a dramatically dramatic leap upward. My major promotion wasn't too long after the Mustang. I was in the corporate projects studio. I got summoned into Bordinat's office. As you've observed, he likes to talk. He gave me a lengthy, rambling account of how Iacocca liked to have competitive proposals put before him, from not just one design group, but from a number of -- like the

Mustang project. He said, "The way we're set up now, we've got some of that," and he gave me an example. He said, "For instance, if there's a Ford project going on that the Ford studio has, the advanced studio will frequently do a competitive version of it. We call that 'vanilla and chocolate.' Lee wants a third group to involve in this competitive action, and he wants what he calls his 'strawberry studio.'" Then he got to the point, he says, "You're going to be in charge of that." What this does is elevate me to the rank of chief stylist, which is a very good place to be. It's right under vice-president.

Q You were co-equal with Joe Oros?

A I don't work for MacGuire, Oros, Najjar, or anybody, except Bordinat and Iacocca, as it turned out. I said, "That's just fine. Where am I going to be? What's my staff?" He said, "There's been a lot of work done on that already. You're not going to be just put out in the hall and told to find a place. You're going to be in the basement for awhile." There was a storage area down in the basement. A lot of it is vacant. That was all right with me because it kind of got me out of the way, and I wouldn't have a lot of people traipsing in and out. It didn't work out that way. I said, "What's the name of this studio?" He says, "I don't know. Why don't you name it."

Incidentally, this is a real fine promotion. This puts you on what's called the "E roll" -- the company executive roll. You get a company car -- a couple of them every year -- an enormous boost in salary, and bonus. It's a real major thing, and I was just delighted.

Later on that day, I was meeting with Bill Corrigan, the personnel manager, to line up who was going to be on my staff: designers, clay

modelers, administrative people, and secretary. I also got a private office up in the front row there, and a private secretary went with the job -- real nice stuff. I said, "Where do I get the people?" He said, "It's sort of like an expansion team in a football league. They come a few from here and a few from there. All of the other studios have to give up some designers and clay modelers to staff you. They'll get replaced out of art schools, but, for the time being, you're going to be staffed by people that have come out of there." I said, "They'll probably give me the dregs." "Oh, no, no." They'd had meetings with the other chief stylists before I had been promoted, and all this had been settled, except for my two key people. I was to get two executive stylists. We didn't do any interior work in this studio, but I had sort of a Ford side and a Lincoln-Mercury side. That's the way I divided it up, and I was supposed to get two executive stylists. One of them came from the Edsel thing. This is Ken Spencer. He'd had some assignment since then, but he seemed to be very happy to have a place like home. The other one was unknown. He was to be hired. Gene [Bordinat] got back to me, and he said, "The first thing you've got to do is meet with John Reinhart and try to convince him to come back and be your other executive stylist."

Q At this point, he's where?

A He's nowhere. His job had folded up at U.S. Steel. He was sort of in limbo.

Q This was about...?

A It would have been '64, because that's when I got the job in '64. I said, "Well, do I have any choice?" "No," he says, "not unless John

turns the job down." John endeared himself very deeply to Bill Ford, and Bill Ford was over Bordinat. I gather it was kind of force-fed that we should hire John if John wanted the job. So I arranged to meet John at the Dearborn Inn for breakfast the next morning.

Q He was back in town by then?

A Yeah. He was supposed to be, because he knew he was getting interviewed for a job back at Ford. I laid it out to him just absolutely truthful. I told him what the job was. I told him it's down the basement. I said it's a brand-new studio, we're going to have a lot of fun, a lot of challenging work, and very competitive. I said that's our whole job is competition with the other studios. I told him who was working with us: stylists and the clay modelers.

John's a great guy. He's very slow. Everything he does is slow motion. He's a good designer, but the earlier contacts with him were he just had a terrible time keeping up with the pace. In the Continental Division, it was different. He had one car to do and nothing else. He did fine there.

He mulled it over, and he obviously decided he didn't want to get back into our rat race because he called, not me, but Gene the next morning and said, "Thanks, but no thanks."

I went back to Corrigan, and I said, "I got a turndown from Reinhart. Who's the next candidate?" He said, "We've got a call from a guy by the name of Kopka, over at Chrysler, who is not too happy working for Elwood Engel and would like to come with us." It so happened I knew Kopka. I knew him very briefly, and we had been co-speakers at a SAE function. He from Chrysler at the time, and me from Ford, so I'd met

him. I didn't know anything about him, as far as his qualifications were concerned. He seemed to be a very personable chap, but that's all I knew about him. I was told he was supposed to be a very hotshot guy. I said, "You intend to bring him in as an executive stylist?" He says, "That's the only thing he'd come in at." He had done the '57 DeSoto and some other rather memorable cars. So I said, "Fine, bring him in." So Kopka came in, and, boy, am I glad we got him. He was just terrific. He's the vice-president now. He was just great. He was a lot of fun to work with. You couldn't ask for a better guy.

Q He came in as your...?

A As my other executive stylist.

What we did to start with was the next generation of Mustangs, among other things. We also worked on Fords, and Cougars, and Thunderbirds. I forget what model or year it was. It was an all-new Thunderbird, and we were in a flat-out, competitive race with the Ford studio -- Oros and company -- and won that one. We got an all-new Thunderbird and a Cougar.

Q What year was that?

A I'm trying to recall. '65. It was the one with the long sloping nose and the mouth on the front end. Sort of a gigantic Mustang, in a way. Things went very well. We got a lot of approvals, much to the annoyance of Grisinger and Oros, but that's the way it went. And we got a lot more attention from Iacocca. He came down to that studio very often. Gene would let me know, and he said, "You probably should have something good for Lee to look at."

One time I did a Ford front end for '66, and it was asymmetrical. In other words, it wasn't the same on both sides. It had sort of a

mouth-like effect with one headlamp in it, and the other side had like three more. It sounds terrible, but it looked pretty good in a spooky sort of way. Lee came in. He stood in front of that, and he looked at it. He'd never seen it before; never seen anything like it before. He tried to make up his mind whether it was any good or not. He finally says, "No. That won't fly. That's not right for the car." I said, "I don't think so either, in a way. It's not right for a family -- the Ford." He said, "Maybe on something else sometime -- a Thunderbird or whatever." So that was the end of it.

But he came down there a lot, and, in the main, he liked what he saw. I guess, it was one of his projects, really, to set up that studio. Incidentally, I named it the Special Development Studio. I named it, because I was told to name it, and that's what I called it. Sort of an innocuous name. I thought it took care of things all right.

Q How did that square with the advanced studio? Was DeLaRossa still doing that?

A Yeah.

Q Did you find yourself in competition, occasionally?

A Yes, of course. Although not as much. We competed mainly with the Ford and the Lincoln-Mercury studio.

Q What were Don Kopka's strengths chiefly?

A Everything you could imagine. He was a fine designer. He was a fine manager. There wasn't anything that he couldn't do superlatively. Everyone liked him -- everyone. The girls thought he was a doll. He's still a very good-looking man, even though he's 57 by now. He seems to be ageless.

Q What was the problem at Chrysler?

A No. He just didn't like working for Elwood Engel.

Q He got a little restive?

A Elwood is a tough person to work for, and so is Joe Oros.

Q They came up through the same matrix?

A They came out of George Walker's consulting firm. Both of them very good designers. Not very good personalities. Although, Elwood wasn't bad. He was just kind of dumb in a way as far as working with people. He was fine working by himself. He was funny to be around. He was always joking and throwing clay balls. He'd throw clay balls up in the ceiling of the studios at work and pitching pennies. Work for him was play. He loved designing cars and working in the clay, and he was always throwing clay balls and pitching pennies. That was all part of the same thing.

Q I guess he was having his problems, administratively, with Chrysler.

A I can imagine so, because of all the things that Elwood was, he was not a manager. When I was with Najjar once, he came into my office with one of the designers who, apparently, had told Elwood that he, as a designer, was unhappy, that he wasn't getting anywhere. So Elwood comes marching into my office with this designer (I've forgotten his name) and says, "Hey, Joe here wants to be an executive designer. Why don't you fix him up." Really.

Q He was serious?

A Yeah, he was serious. Another time, for some reason or another, he'd gotten ahold of all the envelopes with pay raises -- notification of salary increases in them -- and walked around my studio with this bunch

of envelopes. He says, "Okay, Bill, you get one of these. Nope, you don't get any." He goes to the next guy and says, "Yeah, you get one." He did this! Now, those should have come to me. I would have called the guys individually into my office and told them this. Oh, well.

Kopka just did everything right. He eventually was transferred out of there, and he went to work for Damon Woods in the interior studio, and Damon -- he was very critical -- couldn't find anything wrong with him. He eventually succeeded Damon as an interior chief designer.

Somewhere about this time, I don't know what the circumstance was, but studio space became available upstairs, and we moved out of the basement, which was kind of nice, because we saw daylight. The work proceeded in a normal way with more Mustangs, and more Thunderbirds, and some work on a Lincoln front end -- a facelift, also.

Q What year was that?

A You're going to stick me with the year again? It's hard for me to tell. I would say we're talking about in late 1966 or early '67. About this time came a project which Iacocca initiated and was carried forth exclusively in my special projects studio. At the outset it was nameless, and it was set up rather loosely as a Thunderbird equivalent in the Lincoln-Mercury lineup; that is some special, personal luxury car that would fit in between the Mercury Marquis and the Lincoln. Smaller than either one of them, but probably as expensive or not quite in the Lincoln price range but more than the Mercury. It was to be based on the Thunderbird, as far as the general package and the chassis. Underneath the engine and drive train were all Thunder-bird. There was also to be quite a bit of interchangeability in the body panels, except for the front fenders, the hood, and the rear end.

We got into this quite a way, and around then we became aware that Cadillac was about to introduce the Eldorado. When I say we, it was the company, really. The character of this project got switched around from a in-between Mercury and Lincoln into a top-of-line model. In other words, it was going to wind up in the Lincoln lineup but still in disguise as a Thunderbird derivative.

One of the biggest problems we were having with the clay model was the door, because the product plans called for use of the Thunderbird door which had very definite characteristics stamped into it, which we were having a great deal of problem working with. Eventually, it was recognized that this was a severe impediment to getting a distinctive-looking car, so that requirement was removed. In other words, we could use unique outer door skin on this car, as long as it was fastened suitably to a carry-over Thunderbird door inter-panel.

Q Was this done to save money?

A Well, yes. Any derivative car is done to save money. Two things: save time and money. When you don't have to develop an all-new car from the ground up -- as far as chassis and engineering is considered -- you save time. You also save money because you don't have to tool a lot of stuff. In many cases, you can build two different cars on the same assembly line: Thunderbirds and what this turned out to be, for instance. It gets you into the marketplace sooner, and it gets you into the marketplace with less investment, which is all to the benefit.

There was a rather brilliant product planner by the name of Hal Seigel, who was working on this car with us. He eventually quit and went to American Motors. He did some very interesting analysis, because, at

that time, there was also a four-door Thunderbird which had a longer wheelbase and more package room -- more couple distance. He did a very careful engineering analysis and found that, lo and behold, we could work off of the four-door Thunderbird platform or chassis, if you want to call it that.

Q That's what platform means -- chassis?

A Not always. Platform usually refers to a unitized car. But talk about chassis and floor pan and so forth, all that stuff you don't see, and wind up with a longer car -- a longer wheelbase -- and more couple distance inside.

Q What do you mean couple distance?

A Couple distance is the distance between the front and rear seat. The more couple distance you have, the more spacious the leg room is when you're sitting in the rear.

So we shifted gears a little bit, and it wasn't any big deal. We just lengthened the wheelbase on the clay model and started over again. We were working, at that time, with themes that were pretty contemporary American luxury car themes, as far as the front, and rear, and side view were concerned. Frankly, it didn't seem to be getting off the ground in the way that we thought it should, and Iacocca recognized this, too. In fact, I have to give him full credit for inspiration of what the car eventually turned out to look like.

Q At this point, what is Iacocca's title?

A Iacocca is, at this point -- I don't know. He was certainly above vice-president of the Ford Division. I don't know whether he was president.

Q Was he car group vice-president?

A I couldn't really tell you. I guess you might have to refer to his book or something else, but he was a vice-president over all the car and truck divisions, otherwise he wouldn't have had anything to do with this Lincoln-Mercury project. In his book he says he was in Canada one night in a motel and couldn't sleep. He was thinking about this car, and he says he called Gene Bordinat. As a matter of fact, he didn't. I guess he tried to, but Gene was in Europe, and he wound up talking to me. He said, "You know, Dave, I've been thinking about this. Why don't you try something like the old Continental rear end -- you know, the spare tire effect and maybe something classy like a Rolls-Royce front end." I said, "Fine." In fact, after I finished talking to him, I thought we should have thought of that, but we didn't think that way. If I'd put a Rolls-Royce front end on a car at that time, Bordinat would have chewed me up and down. Well, nobody did that. But Iacocca, with his foresight, had a minds-eye picture of this.

Q Can you tell me why Bordinat wouldn't have thought that? What was his mindset at the time?

A I don't think I would have thought of doing it to begin with, but, if I had, I think Gene or anyone in his position would have thought, "What are you reaching back for? That's old-fashioned." I would have, too, if I were the vice-president, and someone else under me was doing this project, I would have said, "That's not the way to go. What do you want to do that for? It's dumb. It's backward."

I had one of my designers make a perspective front and rear end rendering of this car with these elements on it, and I had to admit, when

I saw this, that it looked awfully good -- very distinctive. We started right away with this rendering to revise the front and rear end appearance of the car. We even added some front end overhang to it, which is something engineers hate. They don't like weight hanging out over the front axle in order to give it this very long nose.

Gene came back from Europe, and I told him what had happened. He said, "Oh, God!" or something like that. I said, "Well, no, wait a minute. It looks very good. It's very distinctive." He said, "Well, I guess if Lee wants it that way, you got to do it," or something. I'm not quoting directly, but this is sort of the way the conversation went. I said, "Come back to the studio and have a look at it. I think it looks very good. It's very distinctive." So he did, and he thought it was great. Neither one of us would have done it on our own, I'm sure. I have to give Lee credit for that.

Lee came in, in due course of time, and he saw it, and just like that, he said, "That's it. That is it." In a way, I wouldn't say he had to say that, but it's his ideas. He must think they look good, and they did. Of course, we had to execute it.

Q Which is no mean feat?

A No. It was diverse design elements, but they worked all right. It got tuned up some more and feasibility studies made -- initial ones, anyway, to make sure that the interchangeability had been preserved with the Thunderbird.

We used the Thunderbird roof panel and windshield entirely, but we raised, what we called, the upper back panel -- the part of the body that's directly behind the back window. We raised that two inches higher

than a comparable body panel on a Thunderbird, and that made the roof look lower. It was swallowed up more in the body of the car and gave it a more hunched look, which we thought was a pretty good design ploy.

Anyway, it got tuned up, and it went to the -- oh, by the way, I wanted to draw a little bit on the name. I had a habit of naming projects just so I knew what I was talking about, and other people did, too.

Q Personal code names?

A Personal code names. First of all, I called it Merlin, which I thought was a rather clever amalgamation of Mercury and Lincoln.

Q I like that, plus the famous Arthurian magician?

A Yes. And the Rolls-Royce Merlin engine. It's a smooth-sounding name. It's a slick name.

Q It rolls off the tongue?

A The Lincoln-Mercury Division people, who didn't want this car at all, by the way....

Q Oh, really?

A Oh, they didn't want that car.

Q Who was opposing it at this time? Who in the Lincoln-Mercury Division?

A They couldn't really oppose me.

Q In spite of that?

A I don't know -- some of their product planning people. I guess, the vice-president. I forget who he was at the time.

Q Who was that at that time?

A I don't know.

Q Is Ben Mills still around?

A I don't think it was Ben, it was probably someone else. But, anyway, in general, the Lincoln-Mercury Division did not want this car at all, but it was sort of being shoved down their throats. Once they got it, of course, it tasted very sweet, because money poured in like it wouldn't stop.

Anyway, someone in the division decided that if we're going to have this car, this was a slick name, and others didn't. Anyway, it went by the wayside, eventually, and I rechristened it Lancelot; again sticking with the Arthurian legend. If you're familiar with the design of the Continental hood ornament, which originated with the Mark II Continental, it's not a rectangle exactly; it's got bowed sides, and it's got a cross motif in it. What I did -- I designed this, by the way -- I kept the general outline of the bowed rectangle, but coming up through the middle, it was a sword, yes, with a point sticking out of the top. And this looked really neat, and it went with the Lancelot name. However, there were those -- Ralph Nader amongst them, and his word was being taken fairly seriously -- who thought that an upstanding hood ornament, by itself, was bad business, but one with a sword point coming through was even worse! I wish I had kept the handmade model of that thing, because it was kind of neat.

As I recall, it went to the product planning committee with a modified hood ornament on it -- just with the Continental star as we know it now. But it still had the name Lancelot on it at the product planning committee meeting at which it was approved.

Q No eyebrows raised about the name?

A I think it was pointed out to them, probably by Iacocca, that the name was a temporary one, and it was not at all finalized. Approve the

car, and we'll thrash out the name later. It was one of the few times that I saw Henry Ford actually excited, and almost ecstatically so, about the new model. He knew, of course, he was looking at a clay model. I was there, so I heard it. He said, "I'd like to drive that home tonight." I'd never heard him so enthusiastic about a car. I think they authorized forty million dollars for its engineering and production. A lot at the time, but nothing now. They're talking billions now. Maybe it wasn't that much. Anyway, it was enough.

The next thing that happened was a chief engineer in the Lincoln-Mercury Division -- Burt Andren -- came into the studio one day, and he says, "Well, you know you've got to take four inches off the front end." I said, "What for?" He says, "Too much overhang." I said, "I'm not going to do it." He said, "You have to do it."

Q Overhang is what?

A The amount of car -- body, whatever you want to call it -- that overhangs the front axle. In other words, if you look at the side view of a car and the front wheel, the center of that is the axle. If you have fifteen inches of car, including bumper and everything sticking out, you've got a fifteen inch front overhang.

Q Why would body engineers be unhappy with that?

A He's not the body engineer, he's the car engineer. Body engineers don't give a damn. All they do is draw the thing up and stamp it out. They're not concerned about it. It's the guy who is the car engineer, who is really the designer of the guts of the car -- the chassis. He's responsible for how the car performs, how it rides, how it handles and so forth. And, of course, you don't want to overload the front end of the car, but this is mostly air. It was done really to give a long nose.

Q The Rolls-Royce touch?

A Well, yeah, if you want to call it that, although this is certainly longer than a Rolls-Royce. Anyway, it was a standoff. He wasn't my boss, and I wasn't his boss, yet he was insistent that four inches had to come off, and I said, "No way. I'm not going to take that off. You should have spoken up several weeks ago. This thing has been approved by the product planning committee as is. I'm not about to take four inches off of that." "Well," he says, "you gotta. Too much overhang." So I went to Gene and....

Q Would he have thought that it was dangerous?

A No. I think he was concerned about the weight. That would have been his first concern was overloading the front end. The weight distribution, front to rear, on a car is important. It has to do with the way the car rides and handles and so forth.

Q Would it have a tendency to dive on stops?

A Right. Something like that. You don't want to overload either end of the car, actually.

I went and talked to Gene, and I said, "Now, I've got an impasse here. Burt insists on taking four inches off the front end, and I told him that we won't do it." He says, "That's right. We won't do it." Now, I never heard anything more about it. I gather Bordinat had a consultation or a conversation either with Burt himself or with Burt's boss, who would have been our vice-president of engineering.

Q Would have that been Herbert Miesh?

A I don't know. Could have been. Andrew was a real good guy, really, and a nice guy to work with. But he probably felt he was doing

the right thing. The only thing was, he was out of joint time-wise. He should have made his comment much earlier, and then we could have negotiated it, maybe. As it turned out, four inches stayed on, and between Iacocca and the Lincoln-Mercury Division, they decided to abjure the Mark numbers on a series of Continentals that were Lincoln derivatives in the 'Sixties.

Q That would have been the Mark III, IV and V?

A Yes.

Q '58, '59, and '60?

A Those.

Q Which were phony Marks?

A Phony Marks. They were Lincoln derivatives -- different gimmicks on 'em. As Iacocca, as he was wont to do -- decided to abjure them.

Q Rewrite history?

A Right. They're not there, and dubbed this the Mark III.

Q Not a bad idea?

A Right. Takes guts to do, in a way, but, anyway, that's what happened. So it became a Mark III. It went into production, and it was just a huge success.

Q Did you get proper credit through the company and the industry for this?

A Yes, I did. The first credit I got was -- at that time, I was on the E roll, which was the executive roll, and I was assigned a company car twice a year, not always of my choice, but always luxury cars. However, the Mark III, when it went into production, the use of it as an E car was restricted to vice-presidents. Now I wrote a letter to

Bordinat stating that when the Mark II went into production, its chief stylist, John Reinhart, was assigned a Mark II as a company car, even though he did have vice-presidential status. I said, "With that precedent in mind, might it not be appropriate that an exception could be made to this rule?" He said, "Well, why not. We'll give it a try, what the hell." I guess he talked to Lee, and I suppose Lee said, "Yeah, what the hell. The guy did a good job."

Anyway, the next thing I got was a phone call from somebody at the executive garage and said, "Mr. Ash, there's been an exception made to the E Car Program as regards to Mark III, and I'll order one if you like." So he did, much to the surprise and consternation of my colleagues when this showed up. That's about the only time I ever tried to pull anything like that, but it did work. I was quite pleased with that.

I guess that was the last real major thing that happened in my career. The Mark III went several more years with several modifications, most of them minor.

Q They knew a good thing when they had one?

A Yeah. The investment was pretty well paid for, and it was just making money -- pure money. Bunkie Knudsen came in somewhere along there.

Q How did that impinge on your area?

A Not terribly much. I kind of liked the guy in a way. I liked him in that he was a pure automobile man. He was like Iacocca in a way. Very different, but he was not what we call a "bean counter" -- an accountant -- or a product planner. He was a bonafide automobile man. Grease under his fingernails type guy.

Q The son, of course, of the original Knudsen.

A Yeah. Worked for G.M. and he quit. Bunkie left General Motors because they didn't make him president. Henry drove out one dark and stormy night and hired him, which was not a very good thing to do when you have people like Iacocca standing around twiddling their thumbs.

Q It was very odd that, although Iacocca tries to explain in his book, Ford, at this time -- about 1969 decided that he wanted the G.M. look again?

A I don't know. Bunkie, of course, immediately brought in a couple of guys from G.M. styling.

Q Who were they?

A Dave Wheeler was one, and the other was a Japanese/American chap, whose name I don't recall at the moment.

Q Larry Shinoda?

A Larry Shinoda. Wheeler's still there. He got demoted immediately after Bunkie left. Shinoda got fired.

Q Wheeler's still with the company?

A I think so. He wasn't a terribly effective person, but Shinoda was a real crackerjack designer, and I liked the guy, but he rubbed an awful lot of people the wrong way, including Gene, who was his boss. He had no respect for Gene at all. He said, "Don't bug me, man, or I'll tell the man," in effect. He relied entirely on Knudsen to stand behind him.

Q That must have really galled Bordinat?

A Boy, did it gall him! The day Bunkie was fired, Larry Shinoda was in Germany attending the Frankfurt auto show, Gene called him, and he said, "You'd better get back here right away because, as of today, you're not on the company expense account. You're fired!" That was that.

Q What was the story where somebody put up a sun that was no longer rising, that was somehow sinking into the sea?

A I don't know. I don't recall that, no.

Q Elaborate a bit on Shinoda, since you're one of the few people who liked him and thought he was good.

A I liked him as a person and as a designer. I got along with him because he had no axe to grind with me. We were heavily into stock car racing then -- the Ford Motor Company was -- and I worked with Larry a number of times modifying certain elements for the stock cars so they'd go faster. We just got along very well. Kindred designers. I was aware of his personality and his tendency to flaunt his "Big Daddy."

Q Relationship with Knudsen?

A Yeah. But, as far as I was concerned, he never bothered me in any way. He had no axe to grind with me or anything like that.

Q And you felt he had a lot of talent?

A Very talented, oh, yes. Very talented. He sure didn't know anything about company politics, or he sure didn't seem to know who his boss was -- his real boss.

Q I guess he was the impetus, was he not, behind Knudsen's penchant for taking the Mustang and turning it into what later became the Boss?

A Right.

Q Do you have some observations on that period?

A As I recall, the Mustang, at that time when Knudsen came in, had a phony air intake on the rear quarter panel, and this Knudsen didn't like at all, and he got Shinoda to redesign the rear quarter panel with it eliminated. I don't think it improved the car at all. Developing of

other elements of the Boss were mainly colors and stripes on the outside. The rest of it was purely mechanical -- big wheels, and tires, and an enormous engine all cooked up so that it would.... I had one at one time when they first came out, and I didn't keep it very long because it was such an awful car. It would throw you back with the slightest touch of the accelerator. It was so over-powered. I lived in an area where my driveway went uphill before I reached the street. If there was the least bit of slickness, I could not get up with that car because it would just spin its wheels.

When Bunkie came in, the Mark III was already going, but for some economy reasons at the outset -- tooling economy reasons -- it had Lincoln wheel covers on it. Bunky didn't like that at all. It's got to have its own wheel covers. He said, "That's very important." I certainly thought so, too, because those are important elements of the car -- what the wheels look like. My executive designer that was working with me at the time -- Art Querfeld of the funeral home here in Dearborn -- his brother runs that. Art's retired now. Very talented, obtrusive, cranky type guy but good, too.

Q Talented?

A Yeah, but funny. Anyway, having got this assignment, we thought what we can do that will compliment the classic look of this car -- classic being the front end and rear end. So we went over to the Henry Ford Museum and looked at the old cars there -- looking at the wheels only, of course. The only element that we could come up with was the hexagonal nut -- large one -- that we found on a quite a number of the cars -- Packards, some Rolls-Royces.

Q That was one of Packard's trademarks?

A That was one of their trademarks. So we picked up that element, and the new wheelcovers that we designed for the Mark, in which Bunkie enthusiastically approved, had this element on it. I noted that ever since that, it has proliferated the whole industry. Practically everybody with wire wheelcovers have that element in them now.

We introduced the sunroof and, eventually, the moon roof in the Mark series.

Q Do you have background on that? What inspiration did you have for that?

A The moon roof, of course, was not an invention on our part. It was Heinz Prechter's thing, but the idea of....

Q He runs what company?

A American Sunroof. It's gotten to be a real combine now in Southgate. Prechter -- a German guy. A real nice guy. I know him well.

Recalling the earlier cars I'd been involved with, the '55 Ford was a tinted transparent roof, and the more recent development of being able to mirrorize glass so it's reflective and yet still transparent. Kopka and I worked on this. Working with Heinz Prechter, we developed the so-called moon roof, which is Prechter's sliding roof with a mirrorized glass panel instead.

Q Did he copyright any of these names? Moon roof, for instance?

A I think that was concocted by the advertising agency of the Lincoln-Mercury Division.

Q Kenyon and Eckhart?

A Yeah. They, of course -- the Lincoln-Mercury Division -- were by now in love with the car.

Q It was their bread and butter?

A Yeah, it was really knocking the pins out of the Eldorado, too.

Q Which was beginning to be a little stodgy, at this time?

A Actually, the first Eldorado, I thought, was one of the very best ones.

Q But they had begun to goof it up?

A They started to. Like a lot of things, it got progressively worse.

Q But your styling remained fairly clean?

A That it is. Until the Mark VI. It's a terrible Mark. That, again, harked back to the Marks of the late 'Fifties and 'Sixties, and it was really a goofed-up Lincoln -- the Mark VI was. I did quite a number of special Marks for Bordinat.

Q Special in what sense?

A Custom paint, custom interiors. One of them was real spooky. It was called a Black Diamond. It was a metallic black finish that looked like black diamond dust or anthracite coal dust, you might say. And a new technique which some plating company was trying to interest me in was utilizing black chrome. It's hard to describe black chrome, because it's shiny, yet it doesn't look like shiny black paint; it looks like, if you can imagine, a film of black put over chrome -- a transparent black film but over chrome. It was pretty spooky looking. This car was really spooky looking.

Q Who tried to interest you in this?

A Some plating company. I thought, okay, I'll give it a try.

Actually, I told Gene I was going to do this first, because it was his car. He thought it would be pretty great. And I had these people do it,

and they started running into all kinds of problems of not being able to keep it consistent. Because, originally, they were trying to interest me in it, from an industrial standpoint, as a production-feasible thing.

Q Was it a U.S. company or a foreign company?

A Yeah, it was U.S. I don't recall who it was, but they eventually did furnish the parts after many tries. The stuff was never used to my knowledge because they couldn't work out a quality consistent process.

Q Recently chrome has gone out of fashion?

A It has, to some extent.

Q Some of the more avant-garde cars from Europe are now using black metal parts without the bright work?

A There are U.S. cars -- there are Fords now, too. For instance, I've seen, what is it, a Thunderbird turbo coupe with a front end grille, which is normally chrome, is painted body color. Mustang is similar. I've seen a Cougar with a painted grille. It's a style swing that will go eventually.

Q Telnack told the story that that happened when he was in Ford of Europe, that after a question on one of their surveys, they painted over the chrome, and everybody liked it. They said, "What the hell. Why don't we do it."

A It's different. When you're in the business of establishing and maintaining style trends, whether it's automobiles, whether it's clothing, whether it's popular music, whatever it is, the one thing you can't do is stand still. You cannot be successful by doing the same thing over and over again. You have to change. Whether in the eye of the beholder, it's changed for the better, that remains to be seen, but change

you have to do. I realize that now, too, because I've been very critical of recent cars, but I realize that I'm basing that on what I did years ago, and that, if I were still doing that now, I would very shortly stop doing that because nobody would look at it. You have to continually come up with new ideas, refreshing things. Things run in cycles, however, and you won't forever see this blackout look. It's faddish, and it's different looking. It tends to look slightly ominous. They have kind of a mean look, in a way.

There have been a number of Marks that have followed, and most of them have been good or excellent. I think one of the finest was the Mark V, which I had nothing to do with, but which is a great-looking car.

Q Had you moved on to another responsibility?

A Yes. I spent about the last ten years of my career at Ford in interior design.

Q Did you enjoy this?

A Yes. I've always liked it, although, at the end -- or a couple of years before I retired -- I asked to be transferred out of it because I thought I'd like to have a different assignment, but that was not to be.

Q Who were you under at that time?

A Bordinat.

Q Still Bordinat. Reported directly to him on that?

A Yes.

Q Was it the Lincoln-Mercury interiors or the Ford interiors?

A All of them.

Q So you headed the interior studio?

A The interior design office. All automobile and truck interiors. We even did a tractor cab.

Q Which was just becoming popular?

A Yes. Enclosed cabs for tractors. We did one of those. It was a very fussy project. You had so many functional requirements on it. It was interesting.

One of the more interesting aspects of this was the designer series Marks. It got me involved with three designers and one executive. Cartier is not a design firm, as such, so I worked with their general manager Ralph Destino on the Cartier versions. Most people probably think that these people actually designed the Marks that bear their names; such is not the case.

Q Can you elaborate on that? That's kind of interesting.

A I'm about to elaborate. First of all, in a large car company you have what's called complexity. Complexity is number of parts times number of colors. That's loosely it, and it runs into millions of items. Every time you make a blue interior, for instance, you've got blue fabric, blue carpet, blue plastic parts, blue this, blue that, blue everything -- headline knobs and all kinds of things. Every time you add an interior or an exterior paint, you multiply complexity by parts, and it's something that has to be controlled, otherwise you'll drown in complexity. The more expensive the car is, the more complexity it has, probably because you offer a wider range of colors -- exterior and interior -- to the customer. That's part of what he pays for, a big choice. But complexity is something that has to be controlled, even in the top luxury cars. You cannot let these designers muck around with

special exterior and interior colors. We don't let them do that at all, anyway. What we do is we put existing exterior and interior colors together in ways that they haven't been done before and then add some special touches -- striping, or this, that, and the other thing -- a few touches.

It was difficult at the outset to get these guys to acknowledge or to understand this. I had to lecture to them. We did have three actual designers: Bill Blass, Emilio Pucci, and Hubert de Givenchy.

Q Who picked these designers?

A As far as I know, the Lincoln-Mercury Division and its advertising agency did. We had nothing to do with it. Bill Blass, never any problem with him at all. American guy. A real nice guy. Full of beans and everything, and he liked everything we did. He thought it was just great.

Q Did they come out to Dearborn to talk to you, or did you go to New York?

A The Lincoln-Mercury Division usually brought these people in for about a week -- all of them at one time -- to review what we had cooked up for them. Usually we had no problem. Givenchy was a little difficult at first to get him to understand this complexity situation. Pucci never did.

Q Language problem?

A No, no. No language problem. He just didn't understand why we couldn't do what he wanted us to do with all combinations of purple, and blues, and rose, and this, that and the other thing. I said, "We can't do that. We have to work with what we've got."

Q You have to keep it fairly simple?

A A real super guy, on the other hand. He's nobility. I'll get to that a little later.

We introduced these designer series on the first four Mark IV's. Highly successful. Made lots of money. We didn't have much investment in them at all, really, because we worked with what we had. We just put things together a different way. For instance, on the first Bill Blass car, the lower body was a medium metallic blue. The top was covered with a cream-colored vinyl, which existed to go with an exterior cream body color that was also in the line but was never put together with blue. Those are the kind of tricks we did. We did unusual combinations.

Q Were you your own color person, or did have a lot of talented people on the staff?

A The interior design office was, by far, the biggest one in the Ford design building because it encompassed not only the design activity, but it had an experimental trim shop and the trim and color section upstairs. We were spread all over the building. The trim and color activity reported to the interior design office. I had some talented people up there that would work on this, including some girls, putting together these things that we would review and decide that this is what we want to do before we even brought anybody in.

Q This is where the ladies usually broke in at this period?

A Yes.

Q Pick fabrics and colors?

A Yes. We had some in design. Now they've got some doing clay modeling, too. Some of them are very good. There was a lot of resistance at first. "Girls can't design cars. The colors will be terrible or it'll be fruity looking." It worked out fine.

Sometimes we were faced with a deadline. For one reason or another, we hadn't gotten decisions out of these people, or agreements really is what there was, and I had to do some traveling.

Q To the designers?

A Yeah. We never had any problem at all with Ralph Destino from Cartier. He was always in agreement with what we did. I had to go to New York a couple of times to meet with Bill Blass. That was a lot of fun, too, because he'd put on a fashion show for me. Real exciting. Models and gowns and everything. I'd take the stuff to him. I'd take what we call swatch boards. There'd usually be a side view rendering of the car showing the colors -- color chips -- a little paint and vinyl and the interior material swatches.

Q Did you have plastic overlay, and you could switch them back and forth?

A Yeah. A nice little folder. I had to go Europe once and do the same with Givenchy and Pucci. I went to Paris to meet with Givenchy. He was utterly charming. He took me to lunch with the French movie star named Cappucine, who I recall seeing in a Peter Sellers movie ["A Shot in the Dark"]. Absolutely gorgeous woman. We went to a very fine French restaurant for lunch and just had a marvelous time eating, drinking, and talking. And he went along with what I'd brought over.

Then I went from there to Florence to meet with Emilio Pucci. You ought to see what he's got there. He stems from a line of royalty that goes back to the Renaissance. His place of abode and work is in the Palazzo Pucci, which is in the center of Florence. It's a fortress. It dates back to the Renaissance. He took me to lunch in his own private

dining room in the fortress with his daughter, who was on recess from school. Had an absolutely elegant lunch. Pointed out a painting on the wall that was done by one of the great Renaissance Italian painters. It was a wedding feast, and he pointed out his relatives in it. It was a great painting.

Again, I had a bit of a problem with him. We were great friends. "Well, Dave, if that's what you think it should be, let it be." Sort of resigned.

Q So it worked out pretty well.

A Yeah. That one was so late that I had to send a wire back to Dearborn to let them know it was okay to go ahead and release it.

Q Where would it go from there, technically?

A It goes out on what's called a FAB chart.

Q What does that stand for?

A I wish I knew. It's a designation that is so old that no one really knows what it stands for. It's like an SBD drawing, which I'll tell you about a little later.

The FAB is a chart which is cross-referenced, and it's issued on every name of car of every series, every model, two- and four-door. A lot of them go out. Of course, on any Mark series you use only one chart, except the second chart goes out for the designer series -- one chart for the basic production car and the second one for the designer series. The title block will tell you what it is -- a 1971 Mark so and so Designer Series Release. This is released from the design office, and it goes from there to body engineering. It goes to the trim plant in Mount Clemens, or wherever it is now, and the paint people and so forth.

It goes to the Lincoln-Mercury Division. It goes to anyone who has need for it. That's the official release. That's the go-ahead to start doing this --put it together.

An SBD drawing -- I don't think they call them that any more, but that used to be the official full-size body draft of a new model that left styling, as it was called then, and went into body engineering. It was done by a drafting group right in styling. SBD stood for styling blackboard drawing. That isn't done anymore, because the contours of a model are now taken off with an electronic scanner of the tracts of surface every inch or so all along the way and records the thing on a computer. It's an entirely different system. Human hands drawing all these lines are a thing of the past.

Q You must tell us about your feeling for that new development, as opposed to the style that you had grown up with.

A Well, again, it's like everything else, progress will have its way, and usually for the better. Styling blackboard drawing was something I never was involved in. That was after the fact. My work pretty well stopped with the approved clay model and then what we called the feasibility model, which was a very finely tuned, separate one derived from the approved one. Very carefully done so that all the contours were precise. From there on in, others took over and recorded the surfaces, originally on paper, but now it's through electronic means into computer readouts. I'm sure it's a much better system. It's certainly faster and, probably, more accurate.

In fact, I read in the Ford Times recently that the entire roof panel for the upcoming Ford Aerostar van was taken right off of the clay

feasibility model by computer and never had to go through the body engineering process at all. It went right to the toolmaker direct from the clay model.

Q Because it was felt, collectively, that there was no derivation needed?

A Right. The model was that carefully done, and it was scanned electronically. No human hands were involved to interpret anything. Right from the clay model.

I think that about winds up my reminiscences.

Q We're not going to let you get off that easily. You skimmed over ten years. What were these trips to Europe and Japan you were taking?

A Those were authorized trips to auto shows.

Q Were these helpful, or were they boondoggles?

A A little of each. I tried to make them as helpful as possible to others in the design center by carefully photographing everything. I think I was the only one that did that. I would photograph every show that I went to, and when I got back, I'd give my film to our photographic department, and they'd make enlargements of it, and then I'd spread them out on a great big blackboard displayed in a prominent area in the design center so that anyone walking past could stop and look at them. I'd put out an announcement to the other studio heads, that this thing had been set up, and they were welcome to look at it.

Q Which were the best ones?

A The best ones, it's hard to say. The worst ones, I'll start there. The Earls Court Show in London.

Q Was this an annual?

A Yeah. I think it was an annual sponsored by the British motor industry.

Q What was wrong with that?

A Earls Court is a terrible exhibition facility. I guess it dates back to the Victorian times. All cut up and terrible looking inside. I don't know, it just didn't attract the more interesting exhibits of cars, as I recall. The Paris Auto Show was superb. Always. Great looking girls and models there. Frankfurt is a great show. I think that's every other year. I don't recall how they worked now. I know that some of them were on one year and off the next. The Geneva show was always fine, and so was the one in Torino.

Q Which is where Ghia is?

A I think so.

Q And a couple of others -- DeTomaso?

A What made them boondoggles more than anything else was the fact that I always saved some vacation time and tacked this onto the trip and always took my wife with me. She did some work there, too, because when I was photographing, she would take notes as to what I was taking pictures of, so it wasn't always just pure fun.

Sometimes, like if I was in Germany at Frankfurt, I would also drop in on the design center in Cologne, or if I was England, I would visit them, too.

Then the Japan show, I don't know when it started, but we didn't send anyone to it for -- I forget what year it was. I was in the second contingent that went. Of course, it was great. It's a great auto show, but it was very constricted. It's almost exclusively Japanese products

-- cars and trucks. Awful large exhibit on a pier.

Q Wasn't that the case of most of the national shows, or were they international?

A Most of them were international, and you saw a lot of experimental and show cars, which was kind of nice.

Q Advanced styling?

A Right. But the opportunity to go to the Japan show was great because it was a very interesting show, although, as I said, it was mostly Japanese, but you saw so many things that they didn't export at the time that were quite interesting.

My wife and I, once we were through with that, we went on a two-week tour of Japan. Kind of neat.

Q Back to your interior days, the last few years you were with the company, when did the thinking about occupant comfort, which I guess has been described, at least involving this product, as ergonomics?

A Ergonomics. Human factors. It's got a number of names. I can't tell you exactly when. Actually, it was always there.

Q In industrial design, it had popped up about a decade ago.

A For instance, think about the word "environment." It was in no popular usage at all twenty years ago. I know when I first ran across it, I didn't know what it meant. But human factors is a little less scientific word for ergonomics, but it had always been in some considerable practice, because any time you'd evolve what we call the interior package of a car, you're primarily designing around human beings, because that's what's in there.

Q But didn't it seem that there was a less of a recognition of the need for leg room, and head room, and elbow room?

A Not in my early career, there wasn't. I remember Henry Grebe, the chief body engineer, he always wore a hat when he came over to sit in the seating buck to make sure that it didn't touch the headliner. This is back in the late 'Forties. We gradually acquired these more technical names like ergonomics and human factors. Package design engineers developed at Ford what we called Oscar. How that name came about, I don't know, but it was an idealized median human average figure: size, weight, length of arms, fingers, the whole thing. It was developed in two ways: as a three-dimensional articulated sculpture and then as a two-dimensional plastic articulated template, you might say, that you could put on a flat drawing. The eyelets were developed, which is the sphere that the vision of the eye takes in a horizontal and vertical plane. So instruments and things got placed more carefully. I'm sorry to see that this has been, to a large extent, ignored in the Mark VII, one of which I now have, which is a terrible car in the ergonomic respect, along with some others. It's a beautiful car to drive. As a car, it's superb, but there's an awful lot wrong with it. I wrote Kopka a three page critique on the car, and I haven't heard from him.

Q He probably passed it on to the current interior guy Trevor Creed?

A Yeah. An awful lot wrong with it.

Q What have they done?

A There's too much black on black. If you look at the instrument panel, you'll notice that they have black buttons and black controls on a black background. You can't readily see them. Now you can say you don't have to see them, just pick them out. That car has got so many controls on it, it's junky. It's garbage. It's over-controlled. It's got stuff

that I'll never use, I know. That's one thing. And it's arranged in a confusing manner. But to change any of the heater controls, for instance, you've got to pull off the side of the road and stop it so that you can get so far down, and it's black on black. The radio controls have been super sub-miniaturized so that my wife with fingernails can't even push the memory buttons. They're only about a quarter of an inch square, and they're black on black, of course. It's a real tragedy. I can't imagine how it ever happened.

But that's what you're talking about when you're talking ergonomics and human factors. You have to take into consideration the placement of things: the color contrast, element with background, and line of sight. The Continental seems to have ignored almost every one of those. Some of the primary things are so low, that if you deflect your eyes long enough to really take a look at it, you're off the road. It's dangerous. But it is what it is. If you ever drive one of these things sometime, observe the turn indicator arrows -- the little green ones. They're [quite close together]. They are so dim that they're almost invisible. Now there's no excuse for either one of those. When I first started driving this car, I started observing these things one at a time, and I was just appalled that the finest automotive expression of the Ford Motor Company was so bad in regard to some of these things. And the really cheap, sleazy, fake woodgrain stuff looks like it was stamped. It's a very disappointing car.

Q Fake woodgrain on a Mark VII?

A Oh, yes. It's just terrible. And it's the fakest fake I've ever seen. It looks like it's stamped tin.

Q Not even appliques? It's stamped?

A The original Mark III had original wood in it. Real wood. It was called paka wood. It was impregnated with resins so that it was stable in the kind of conditions you get in a car: heat, humidity and cold and so forth. It wasn't just wood right off a log. It would have been impregnated with resins so that it was stabilized, but it was real wood. Oh, well, times change.

Q You feel a bit out of touch with some current things?

A Yes. I've adjusted my thinking about exterior design a lot. I realize that what I see is probably what I would have been doing if I were there. In general, I like the outside -- the exterior design -- of the Mark VII, although it isn't distinctive enough. If you look at it from the front, if you put a Thunderbird, a Mark, and a Cougar lined up and looked at their fronts from a distance, you would be hard pressed to tell which was which. The width of the radiators of all of them must be almost exactly the same. The headlamps and everything. All the elements are identical. The car lacks distinction.

Q Individuality?

A Yeah. It doesn't stand out. It looks, at first glance, like a customized Thunderbird. From the rear end, it gives the opinion of being too pinched looking; too narrow for its height. But that probably has to do with its Thunderbird underpinnings.

Q Apparently they were pretty much all the same mold, roughly, with extensions and refinements?

A Yeah. The Cougar, of course, is the most distinctive in the side view, because of its upper structure, which is cut off sharp. But the

T-Bird and the Mark all have the same side profile. Certainly the rear deck fake spare tire is distinctive and continues the heritage.

I like driving the car. It's a really great car.

Q There has been some buyer resistance to the Mark VII?

A I gather that, and that's why I have it. You see, I had a Ford station wagon. I always had those because they suited our life style. I only had it for three months -- this is an '85 station wagon --when the lease plan announced that we could lease Mark VII's or Continentals and turn in what we have. So my wife and I discussed it, and we decided we weren't taking a long trips or going camping, that we'll take a flyer on a luxury car, so I did. Almost the day after I took delivery of it, I regretted the decision. I'm involved in a massive relandscaping job where I'm going to turn three sides of the house into a Japanese garden, for which I have to haul in all kinds of stuff. I can't haul diddley in that. I didn't realize that car was so small.

Q The Town Car is fairly close to...?

A It's a pretty big car. But as far as utility is concerned, forget it. It's a real nice car for two people, even with its faults.

Q They've got a new model out. A new completely electronic -- at least electronic as they can get these days?

A The LSC?

Q Yeah.

A That's been out for awhile. That was available also. I decided I didn't want that.

Q I asked Creed about electronic voices. He said, "No. We're not going to go in that direction." He thought they were obscene.

A I don't think there's any place for voice. I'd be annoyed by it. It doesn't seem to be the right thing.

Q You were taking these trips to Europe as a sort of a high-level commentator?

A It was an authorized thing, and it's still being done. I know that. The idea behind it was it's a bit of a bonus, in a way. And, secondly, it gives you exposure to a big international show where you see things. I got some ideas from some of those shows. I admit I swiped them. But, what the hell?

Q Oh, yes. All is fair.

A As Iacocca would say, probably, "What the hell." He didn't originate the ideas that he delivered to me by phone about the Mark III: the Rolls-Royce and a previous Continental.

Q Speaking of that, did you notice the business about the Mini-Max in the 'Seventies that DeLaRossa and others tried to bring in?

A I was very much aware of that project. I was never involved in it. I was interested in it because I thought there was a real market for the thing. It went on and on and on for years and years and years. I don't know how many models were made. DeLaRossa could tell you, maybe, although I don't whether his memory is any better than mine. They made, I don't know how many studies of it.

Q Who was dragging their feet? Was that Henry Ford II?

A I don't know. As I said, I was never involved in the thing, and I only looked at it from the outside, you might say. I knew it would go into the showroom, and they'd have meetings on it and drawings all over the place, and the competitive things, so there weren't any really competitive things. But it went through all kinds of stages of adjustment:

little changes in size, and package arrangement inside. Iacocca must have been supportive of it until he was relieved of his assignment. Whether it was his idea or not, I don't know.

Q Apparently, it went to Chrysler. When he went to Chrysler, he was quoted as say, "It's easy to do once you've already done it."

A Right. He took an awful lot of development of that thing with him.

Q And then DeLaRossa came over?

A Right.

Q And the two of them probably said, "Let's steal a march on everybody and get this out."

A Why they did that with the front drive, I'll never know, because that's a mistake -- a real bad mistake -- on that kind of a vehicle.

Q Ford's new aero van is going to be front-wheel.

A It's rear drive.

Q Yes, they're sticking with rear drive. But the Voyager and the Caravan are selling like crazy?

A Until recently, they've had no competition.

Q There's a Toyota and...?

A G.M. has now got the Chevrolet Astro and G.M.C. version of it.

Q Right, two of them. Then there's a Toyota, which has been out for awhile?

A Yes. It's interesting. It's a very poor car; a very poor vehicle. I read a Consumers' Report evaluation of the -- at that time, the G.M. van was not out, but between the V.W. Vanagon, the Toyota, and the Chrysler one, the Chrysler came out far ahead of the other two. The Toyota was, by far, the worst. It has a very short wheelbase and tends to go like this and very underpowered.

Q And the Vanagan?

A Underpowered, and I forget about what all was wrong with it. The Chrysler vans are rated much higher. I think when all the dust settles, the Ford -- if they ever make it.... Do you know if they really plan to manufacture this?

Q Yeah. They've selected the plant. I think it's Atlanta. And I think they roll sometime this month -- April.

A I'm glad they're finally going to make it. I thought they were never going to, with all their piddling around.

Q They, apparently, had some supplier problems with robotics and so forth.

So here you are in the early-to-mid-'Seventies?

A Yeah.

Q What is your situation?

A My situation was I was becoming, you might say, fed up.

Q What contributed to this?

A I sensed, but I could never prove it, that I was being bypassed for promotion because of the age element.

Q Being shelved?

A I don't know. You can't actually prove it. That was one thing. The increasing government regulations were beginning to make the work less and less interesting, because you keep running into an obstruction almost everywhere you turn. I was beginning to feel that, as I was getting older, I was starting to use my life in a way that I didn't really like any more. It wasn't any fun. I wasn't likely to get promoted any more. There wasn't too much excitement left, and I got to

thinking more and more about the fact that I was getting on into my fifties and beyond, and I would rather have time to do what I wanted to do with my life. So I sought an early retirement, and when I looked at the figures that they generated, they looked pretty good to me -- very attractive. So I went ahead and did it, and I've never regretted it.

Q What do you think contributed to this atmosphere that you found in your own career?

A I just think it was an accumulation of things. The fact that nothing more was happening to me. I always seem to be in an area, up 'till that time, where I would get a transfer into a new assignment.

Q You're still overall interior?

A Yes. Director of the interior design office, yes. And I had a pretty good sense that I was being bypassed for promotions by much younger guys.

Q What would have been a logical step for you at that point?

A The logical step, at that point, would have been for me to be promoted to an executive director, but this didn't happen. I sensed that it was certainly because of age.

Q How old were you at that time?

A Fifty-seven or so.

Q Not elderly, by any means?

A No, no. They were promoting people past me that were in their early forties. Just like this thing that happened at Chrysler recently. This chap, Tom Gale, is it?

Q Yes.

A Forty-one years old now. I imagine there are a number of pretty-highly placed design personnel in Chrysler that are older than that.

Probably like fifty-seven or fifty-five, but they didn't get promoted. I'm surmising now that it was probably because of age for one thing. I'm sure the guy they promoted is certainly very competent.

Q But also very young?

A Yes.

Q You're speaking of the situation as of April, 1985, where Don DeLaRossa has shifted to the West Coast design center?

A Yeah. You could say he was put out to pasture. Well, that's not a bad pasture to be in at age sixty-two. He probably got a raise out of it and gets to live in California. I'm sure he would want to be there if his work is there. On the other hand, he had authority over that place, anyway, plus the Detroit-based design center, so he's got less.

Q He's got two strong people above him?

A Yes.

Q In the persons of Sperlich and Iacocca?

A Right.

Q Forgive me for sounding pompous, but would you like to, at some length, sum up your design philosophy, if there is such a thing, over your long career?

A Design philosophy. I don't think I ever had one. If you look back on it, it's a matter of trying to do the best you can so that what you do gets noticed. It's like any other business, you won't get ahead in it unless you do well and get noticed. People have to see you do things that are good, have to be impressed by your ability, and, of course, as you go up in management, you have to acquire management skills of dealing with people in the right way so that you get the best out of them without being overbearing.

As far I know, I've been told that I have guys that have worked for me told my wife that I was a great boss. I let them do their work, instead of doing it for them, and I worked with them and not in competition with them like some guys do. They liked working for me. So it's things like that that help you get up the ladder, and getting up the ladder is really what it's all about, and it doesn't really take a philosophy. I never had a Bauhaus approach, for instance, where I'd take one look at something or one characteristic and carry it through a whole series of product designs. I don't think you could do that in the car business, because you'd be obsolete before you were very far along the way. It's a matter of being conscious of contemporary competitive design and other elements, sociologically, that make up the time frame that you're designing for, which is difficult because you're always designing for a time frame in the future. Sometimes you wind up with the right thing at the wrong time. Like the Edsel, and Mark II Continental, and there's a number of them. It's done by other companies, too, It's always difficult because you're in the business of forecasting the future to some extent. Hopefully, you aren't going to be wrong.

I just adapted my design thinking as I went along and changing it with the times, so to speak. Sometimes being influenced by people higher in the organization than me, for better or worse, but, as a rule, things worked out pretty good.

Q Looking back at Ford, who were some of your major influences?

A The early influences were numerous because I was pretty new at the business. Some of the important ones, that I recall, were Bob MacGuire, [Don] DeLaRossa, Gil Spear. I'd say those in particular, at the outset.

After that, I don't think there were any that really influenced me that much. I guess I'd gotten my own feet on the ground and decided that I would do the influencing on my own.

Q Bob MacGuire seems to be universally respected and liked.

A He's sort of a father to all of us. A difficult person. A strange person. Unapproachable, initially. You could be introduced to Bob, and it was like being introduced to a stone wall, in a way. He was very cool, distant type guy. But once to got to know him, you couldn't have known a nicer guy. Just great.

Q He was very helpful to you?

A Yes. And a great musician, too. A flutist. Also played the sax. He introduced me to a lot of classical music. Had a great influence. Bach and Handel -- flute and harpsichord sonatas -- stuff like that. He loved classical music. He played a lot of it.

Q The early day of the LP?

A Yes. I still have records -- the Decca recordings -- that he influenced me to buy of the Bach and Handel flute and harpsichord sonatas. It's superb music. They still sound great, because you don't need stereophonic for two instruments. In fact, they probably sound better without it.

Q DeLaRossa has acquired sort of an aura. While some of his contemporaries were not too complimentary about him, you seem to think that he had a certain....

A I wouldn't say he's exactly like Shinoda, but maybe an element there. He was a guy who was very involved with loving life.

Q What about Bordinat? Can you give us a critique of Bordinat and

his career? He seems to have touched so many lives and so many of your contemporaries?

A Again, he's another personal friend. Has been for many, many years. I first ran across him at Fisher Body at the trim and hardware department. He sat at the drawing table behind me, and we did our thing there. I learned a lot from him. He had had previous design experience before the war at G.M. styling, and he knew how to render much better than I did. I just learned a lot from him -- design and rendering -- by just looking at what he was doing and having him teach me certain tricks -- how do this, how to do that.

Q Was he generous with this?

A Oh, yeah. He has always been a bit of an egotist, and the position of finding himself able to teach somebody -- to impart something that was good -- was something that was flattering to him. There's not much difference in our ages, but kids that were struggling now, they could help out.

Q You were pretty much contemporaries at Ford?

A Not quite. He decided that trim and hardware was not his thing to do, and he wanted to get into real automotive styling, and he put together a portfolio, and he went to Ford and got hired immediately. Shortly after that, he called me, and he said, "You really ought to come here. They'll hire you right away. Make up a portfolio and come over here." So I did, and I got hired right away. He had been there a few months, and he and MacGuire were in charge of advanced design, whatever that was at the time.

We didn't cross paths an awful lot for many years because he was

always in a different part of the design operation, and usually a couple of steps ahead of me up the management ladder.

Q A master politician?

A Very good, yeah, but with a great deal of ability to back it up. Until I became a chief stylist, I never worked for Gene, directly.

Q That's interesting.

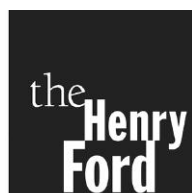
A That is interesting. I never worked for him directly. So he kept going up the ladder and working in different studios. He was the Mercury chief stylist when I was in the Ford studio, and Joe Oros was the chief stylist, and we just never crossed paths in a working relationship.

Q On the whole, you've had a fascinating and interesting life as an automotive stylist?

A Yeah. I would say that I had a very interesting life. I did what I really wanted to do with my life, even before I knew what I wanted to do. I never wanted to be a surgeon or an aeronautical engineer like my parents thought. I knew I wanted to be a car designer even when I was high school, but I had no idea at all how to go about doing it. But things feel into place. I did, and it did, and I'm happy with it ever since.

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Editor's Note: David Ash died on July 2, 1991, after a long and successful career as an executive designer at Ford Motor Company.



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