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INTERVIEW WITH IRVIN W. RYBICKI, 1985

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

NOTE TO READERS

This PDF-format version of the Irvin W. Rybicki interview transcript was created from a Word document, created in turn from the transcript available on the *Automobile in American Life and Society* Web site (http://www.autolife.umd.umich.edu).

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

Staff of the Benson Ford Research Center
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AUTOMOTIVE DESIGN ORAL HISTORY PROJECT

The Reminiscences of Irvin W. Rybicki

Reminiscence from the 1985 Interview with Irvin W. Rybicki. Automotive Design Oral History, Accession 1673. Benson Ford Research Center. The Henry Ford.

This is Dave Crippen of the Henry Ford Museum 's Edsel Ford Design History Center , and this is June 27, 1985 . Today we are at the General Motors' Technical Center in Warren , and we are conducting an interview with Irvin W. Rybicki. Mr. Rybicki is currently Vice-President for Design and Product Development at the General Motors Corporation, and he will recount the highlights of his career as an automotive designer.

A: I'm a native of Detroit born here in 1921. My parents were Walter and Helen Rybicki. My dad was from the State of Pennsylvania , and my mother is from Bay City , Michigan . I spent my entire life in this city. I attended a Catholic grade school and went on to a public high school called Chadsey High on the West side of Detroit . My interest through my school years lay largely with aircraft and sports. I played just about every sport imaginable, including football, hockey, baseball, tennis, and golf. I was a member of the swimming team, but aircraft was always on my mind. I drew and designed my own planes, built aircraft out of balsa wood in kit form and attended the few art schools that were in the city. They no longer exist. One was called the Meinzinger's in Orton, and I spent some time there trying to understand how to use an air brush and how you create proper perspectives. I didn't think I was getting enough of that out of these classes in the school. I pursued that along with sports up until I was about fourteen.

Q: Did you go to Meinzinger's in your off hours?

A: Yes. In the evenings. I pursued aircraft and sports until I was about fourteen, and I used to work in an uncle's grocery store. I remember this like it happened yesterday: it was a Friday evening and it must have been somewhere around October. My cousin and I were stacking produce in the window when my uncle drove up with his new car. It was a black, 1938 Cadillac Sixty Special, and, with the lights playing on it out there, I thought, "My God, that's the most beautiful thing I've ever seen. If I can draw airplanes, why can't I do something with automobiles?" And from that day on, it was cars, period. That's all I ever did. I created a portfolio at home that must have been two feet thick, and, if I wasn't studying school work, I was designing an automobile. My dad had a summer home out at Portage Lake , twenty miles West of Ann Arbor, and I spent my summers out there fishing, swimming and playing and thinking about automobiles. It was a beautiful lake.

After I graduated from high school and without my knowing it, my dad packed up some of the work I'd done he thought was the best, and he went to General Motors on his own. He had an interview with a fellow who was Jules Andrade, who was one of Harley Earl's assistants. Jules suggested that I come in to see him. So, that particular weekend--my dad always came out on weekends out to the cottage because he was a working man--he told me this: "You've an

appointment with General Motors on such and such a date." I couldn't believe that my dad would go out and do a thing like this, and that someone in the industry might be interested in my work. So I took the sketches down to General Motors. This was just prior to World War II, and, while they had an interest in me, Jules told me that, at the time, they weren't hiring because of the developing situation in the world and in Europe , but they would keep my name on file.

The war came along, and I didn't go to work for General Motors. I went into the service instead. I wound up in an armored division, was injured here in the States and never did get overseas and was discharged. After the discharge, I thought I'd better position myself somewhere within General Motors so that I'll be within striking distance of what I wanted to do--design automobiles. I managed to get a job at the General Motors proving grounds in an engineering data office. And, in that office, I kept drawing automobiles and far-out military vehicles, and I had them all over the walls. A fellow named Hubbell was the number two man out at the [proving] grounds at the time the war concluded. He came into my office one day and said, "You know, you really don't belong here. You belong on Harley Earl's staff. Do you mind if I take some of your work and send it down there?" I told him about what had happened [several] years before. He said, "I can help you."

So he sent them down here, and it wasn't two weeks [before] I found myself working on General Motors' design staff. It was called the Styling Section at that time. That was one of the happiest moments in my life, and they put me in what they called Forty Milwaukee. That was a school for trainee designers, and there were many young men in that class. There were fifteen who were all striving for positions. We were told that we had a year to prove ourselves and [would be] audited every quarter.

Three and a half quarters had passed, and this is another scene I shall never forget. It is very clear in my mind. It was a Friday morning toward the end of the month, and the phone rang. One of the young designers in the group of trainee designers got a call to come to the 10th floor in the research buildings' administrative offices. He came back, and he had tears running down his cheeks. He was let go. Before we got to 5 o'clock in the afternoon, there were just two of us left--a chap named Carl Renner and Irv Rybicki, and we sat there won-dering. That was the most traumatic weekend I've ever gone through won-dering whether they ran out of time and hadn't got to us or were we in. Monday came around and nothing had happened. It just cruised by, and we did our work. Carl and I congratulated ourselves and felt now we're a part of the team. We had a few of the chief designers running divi-sional studios come through the school--one was Bill Mitchell of Cadillac, and the other was a fellow named Anderson . He was running Chevrolet. The following week Carl Renner found himself in Chevrolet, and Irv found himself in Cadillac.

Q: Had you, up to this time, encountered, Harley Earl?

A: I had seen seen Mr. Earl only once. He came by the school to look at the trainees' work and some scale models we happened to be doing. He spent an hour in the school and left. That was my only encounter with Earl until I became a part of the Cadillac studio.

Q: Who was the head of the trainee program?

A: A fellow named Ned Nickles who [later] became chief designer, of Buick. Then Frank Hershey came in to run the school. Frank finally left General Motors and went on to Ford. He's somewhere in New Mexico now.

Q: In Arizona .

A: In Arizona ? I haven't seen Frank in thirty-five years, but he was a very fast-moving, aggressive, fast-talking fellow. I enjoyed him very much. My career in the Cadillac studio began. I spent six years in Cadillac with Bill [Mitchell].

Q: Tell us about the atmosphere at the design center in those days right after the war--the divisional setup as far as design work involved. Who were the studio heads?

A: I don't know that I can remember them all. Anderson was the chief designer of Chevrolet at that time. Pontiac was run by a chap named Robert Lauer who was essentially an engineer and not a design artist. He later became Harley Earl's man in charge of engineering in the styling section. Bill Mitchell ran Cadillac, Art Ross ran Oldsmobile, and Henry Lauve ran Buick when I became a member of the Cadillac team.

Q: Jules Andrade, was he a...?

A: I don't know what title he carried at the time, but he was Harley Earl's man on surface. Jules' background was in sculpturing. He wasn't an artist as such, but he had a good eye for surface and 3-D. Earl kept Jules close to him when we were discussing surface and highlights and how a surface should flow or should not twist. That was his expertise.

Q: Was Howard O'Leary still with the company?

A: Howard O'Leary was Harley Earl's administrative assistant and stayed apart from the design process all together.

Q: There you are a fledgling designer working with Bill Mitchell at Cadillac...?

A: That's right, and I was getting the feel for what happens in a General Motors' divisional studio.

Q: You were at the top of the line studio?

A: I started in the Cadillac studio, and the people in design called members of the Cadillac studio the "Blue Bloods" at the time. We were the royalty doing this top-line automobile, but I hadn't done anything for General Motors at all. A year had passed, and I'd contributed nothing but artwork up on the walls. But I can remember the very first thing I ever did that became part of the Cadillac automobile. That was back in the days when, if the customer wanted backup lights--little, pointed beehive spheres--they were bolted to the back of the car. We were doing the 1950 Cadillac. The car had fins in the '48. We carried those fins in '49, and, in '50, we were

looking to change the fins. I made this sketch of a backup light integrated with the taillight. The taillight flipped up and revealed a gas cap that was concealed under the taillight. Bill looked at the sketch, and he said, "Jesus, I like that. Let's do that in the clay."

Q: That was yours?

A: It was mine, and it was the very first piece I ever sold. I have a large photo of that car in my office at home along with a montage of all the vehicles I had influenced as a designer. The vehicles that have been produced while I was vice-president are in picture-frame form. I want that as a record. That was the first contribution, and then there were many. Like a ball player who might hit .150 for two or three seasons, I suddenly became a .350 hitter. I'd get a face here and body side there and an upper in another program, and I was moving at a pretty good rate. But they had a policy--a correct one at the time--that five or six years for a designer in any one room was enough. He ought to work on another product with another image and test his skills there. So I was moved on to....

Q: Before we leave Cadillac, [can I ask you a question]?

A: Sure.

Q: How was Bill Mitchell to work for? What kind of a boss was he for a young designer?

A: He was a terrific boss. Very inspirational. He gave you a lot of room to move in--didn't hold your hand. I can remember that first day when I walked in there. I put my gear away, and he said, "You're ready to go to work?" I said, "Yes." He said, "See that layout of a full-sized Cadillac right there?" They had it all drawn up on black paper on a full-size board. I said, "Yeah, it's a good-looking car." He said, "I want you to illustrate it." I said, "I've never done a full-sized rendering." He said, "Don't give me your excuses, just go up there and illustrate it." If the man didn't worry about destroying the piece, I thought, my God, I can do it. He gave you that kind of confidence. So I did the illustration, and it wasn't totally professional, but I did get through it. As a result, I gained confidence in the medium, and, inside of a year, I was one of the better men in the studio doing full-sized illustrations. Bill was a terrific boss. He was also very enter-taining. When the room got quiet, he'd go into a one-man show. [It was] like you [were] in a theater on Broadway, and [he would] do this skit. It would have everybody in the aisles for a half hour, and it was a good lift. He [was] that type of personality.

Q: It broke the tension?

A: It broke the tension. You were refreshed as a result and went back to work.

Q: Do you think it was a calculated device of his?

A: I don't know whether it was calculated or Bill, himself, needed to cut loose. We just enjoyed the performance. I have no idea. He never said to me that he did that to lift the troops. It was, perhaps, bore-dom on his part, and he needed to do this to refresh himself, and we gained the benefit. But he was a good man to work for--no question about it. I can't fault Bill in any

way, shape or form. He was fair, he was just, he gave the creative staff a lot of room, and he wouldn't sort out your work. When you did something, he'd put it up on the wall and say, "Let's have a look at them and then we'll decide what direction we'll take." Yes, I enjoyed my five or six years in Cadillac very much. It was a worthwhile experience. I gained a lot from it.

Q: Did Mr. Earl come in the Cadillac studio often?

A: Mr. Earl came in frequently. On some occasions, he made several visits a day if we were in the heart of a program and it wasn't moving to his satisfaction. Or there might be something radically wrong with the face of the car as far as he was concerned. He'd live with you. I can recall Mr. Earl coming in--I can't remember the year when we were doing a Cadillac with a vertical sash on the rear quarter panel in chrome. That's the way it wound up, but when we were searching for a theme, nothing seemed to satisfy him. So one day he came in after lunch, and he said, "Fellows, I'm not leaving until we find it." There were five designers in the studio at the time, and I happened to have the lead desk. He'd sit right on the bench with you, and here's the Vice-President of General Motors, 6' 4", 250 pounds [with] little Irv sitting there. I picked up a pencil, and I started sketching. I'd make about three lines, and Earl put his big hand on the pad, wrinkled up the paper and threw in the basket. He looked at me: "Let's try again." So everything was winding up in the basket. When he decided this fellow isn't going to get it, he'd move down to the next desk. Everything wound up in the basket that day. But inside of two or three days, we found the solution to the problem. Once Earl was satisfied that you were on the right track, he'd move down the hall into another room which was having a problem, such as Olds or Buick.

Q: You would call him an instinctive reactor, rather than a finished designer--Mr. Earl?

A: He had a gut feeling for what he wanted--absolutely. It was instinctive, but we have to remember that when I compare those days to what we face today, it was relatively simple back then because each of our divisions had one car. The time frames were stretched. When I was in the Cadillac room, we'd be sketching for five/six months, and sud-denly a plaster body would move into the room, which Mr. Earl did in a room he called the Body Development Studio. It was everything from the windshield back except for the rear quarter panels--or rear fenders in those days. All the studio had to do was create the face of the car, the rear quarter panels, the taillights, put bumpers on both ends, and you were finished. The process is entirely different today. A division like Chevrolet has eight or nine cars and trucks, and we're into com-puters and all sorts of other techniques. The business is very complex as a result, and we're working night and day in this place. When I started in at General Motors, we had 400 people on the staff. Today, we have 1367, and we're under-staffed. We can't get everything done they're asking us to do.

Q: The impression I have was that Mr. Earl's personality was such that he got his way largely through the strength of that personality in terms of....

A: To run the [design staff] and deal with the general managers?

Q: Is that a fair statement?

A: I think his personality played a large part in Earl getting what he wanted out on the street. I also think that back then, as well as today, the design staff were the experts. We're the tailors in the cor-poration, and I've worked with a lot of general managers in my career. I've been here forty years doing this work, and I've met a few who had reasonable taste and could understand what we're doing. I'm not faulting these people when I say that, because their skills are in another area. They may be engineers, they may be sales people, they may be manufacturing people running car divisions. I don't think they should be expected to understand the aesthetics as we do. We spend a lifetime at it. Yes, it was Earl's personality and the fact that Earl and his team were the tailors in the corporation. They never doubted what we were trying to do. Even today they say, "Are you convinced Irv--you and your team?" "Yes, we're convinced. That's the way, the car should be." "Fine. We'll do it."

Q: One more question from that era. How did the body engineering fit into the product development scheme at that point?

A: Which body engineering do you have reference to? We have had an engineering group here in the building on the [design] staff.

Q: Did General Motors, in those days, have a team approach where body engineering and design sat down and worked out the product outline--the Package?

A: We had a body engineering group in that styling section. We have today. It's called the Vehicle Packaging Group. Back in those days, we had one in the building, and there was Fisher Body, of course, and they were the people we were going to release the body to. Yes, they had a body engineering group that worked on glass drop and structures. To give you some broad perspectives of where new ideas came from, I can remember back in the 'Forties or 'Fifties when Earl had the idea that he wanted to do a steel car that looked like a convertible, and it shouldn't have a number two pillar in it. The problem became how do you drop the glass in the four-door sedan if it doesn't have a pillar and get by the locks and door releases? Fisher Body said it was impossible--you couldn't build a car like that. So Earl went to our body engi-neering group, and we had a German chap there who spoke with a heavy German accent--he was the leader of the band. His name was Freddy Walther. He sat down with a group, and they worked out this articulated glass drop. It dropped at the back, and the nose dropped in and cleared the door. We put a working mockup together, and Earl, with a big smile, invited the Fisher people over. He said, "I want to show you how impossible that is. Demonstrate Freddy." And there it was. So the four-door hardtop was invented at the styling section back then and not at Fisher Body or anywhere else. It's like hidden wipers at the base of the windshield. We created a lot of those devices in this building.

Q: That's good to know that you had your own in-house, body engi-neering group.

A: Earl did this. He didn't have it in the beginning, but he did this so that he would not find himself at the mercy of the production engineers. He felt they were never reaching out far enough, and they were always comfortable with what they understood. So the opportunity to do something new wasn't in that group, and he made the decision--a conscious decision--to go out and hire what he called far-out, creative engineers that are willing to take the risks that the

designer is shooting at, and we maintain that group today. It's absolutely neces-sary. As a matter of fact, people downtown on the 14th floor say, "You've got to have them, Irv, because you guys are always pushing tech-nology right to the very edge." And that's part of our responsibility of how to create new and interesting products.

Q: You don't want to stand still, obviously?

A: You can't stand still in this business. Hell, it was easier then than it is today. Our competitors are all over the world. This is an international market. It isn't domestic any more. We don't often think about people in Dearborn or Highland Park , we're looking at Honda and Toyota , Mercedes, BMW--they're all here.

Q: You've had an interesting eight years at Cadillac?

A: Six, then I moved on to Olds. I was in the Oldsmobile studio about five years.

Q: Who headed that up?

A: Art Ross. Art was a terrific designer. He is the chap that created the broad hood on the Cadillac. Up until that time, all were quite needle-nosed, and he was working for Bill Mitchell in the Cadillac room. I think that development alone got him the job as chief designer of Oldsmobile. He's a very creative chap. I learned a lot in that room.

Q: The Oldsmobile was a good line in the 'Fifties?

A: Good line. Always has been and still is. They build quality pro-ducts, and they have a good reputation up there. We had some good designers in that room, and if you can't absorb things like a sponge.... First of all, it is necessary for an individual to be totally honest with himself and understand where his weaknesses are. If you do that, and you look around you and see where the strengths are in other people that can plug your weaknesses, you focus on those individuals. I learned a lot that way. I didn't have the tools that a lot of young people had, but I had the desire to learn, and my experience in Cadillac, Olds and Pontiac brought me to a point where I became a pro-fessional designer. I moved out of Olds after about five years to become the assistant chief designer in Pontiac .

Q: Before we leave the Olds [studio], do you remember any specific model or part of a model that sticks in your mind that you're very proud of?

A: Back in those days, we were doing a lot of Motorama cars when I was in Olds. We'd work on the production programs during the course of the day, and in, the evening hours, we'd work on these Motorama vehicles, I can remember a very hilarious incident that took place in Olds.

Q: Could you describe the Motorama setup? What it was and what G.M. was trying to do with it?

A: We were trying to nudge the future with these vehicles, entertain the public with these efforts, learn from them, and get the public to focus on General Motors.

Q: So, usually, they were advanced vehicles?

A: They were advanced vehicles. What we believed might happen in five to ten years didn't necessarily track in that direction, but it does give you a feel for where you may want to go. But we were doing this Olds. I can't remember which Olds show car it was--there were four or five of them--and the face of the vehicle was a problem. That evening I got back from dinner, and I sat down with the studio engineer. We're going over all the dimensions on the face of the car on the drawing--headlights to the ground, bumper to ground, header bar to ground. Mr. Earl dealt with the numbers, and I just about finished with the studio engineer when Harley Earl came in. He pulled up a chair, and he sat down in front of that Motorama car, and Art Ross was still out at dinner. So I walked over, and he said, "Young man, get me the dimension from the header peak to the ground." I gave him the dimension, and he looked up at me, and he said, "Now I'd like center of headlamp to ground." I gave him that dimension. He asked for still another--bottom of bumper to ground--and I gave him that number. He finally turned to the studio engineer, and he said, "Come over here. I want you to check these numbers for me. I think he's guessing." They went over to the engineering drawing, and Frank gave him all the numbers, and they corresponded with mine. Of course, I'd just gone through the drawing, and I knew them. I might of made a few points with Harley Earl right there, but that was coincidence. We made some adjustments in the front end, and that front end went into the Motorama as it was done that evening. When Art Ross got back, we had it locked up. I brought him upto speed. That happened often.

Q: He didn't mind?

A: No, he didn't mind. Not if Earl dictated that one of these were to go. Mr. Earl did have complete control of the aesthetics within the staff because it was simpler to do then. There were five cars--one for each car division. If anybody, sitting in this office I occupy today, tried to do the very same thing and go out in each of these studios--there are 33 of them in the building now--we had five back then--and design every automobile, it couldn't be done. Secondly, you don't build a strong staff by doing it yourself. You've got to inspire the people and create the right environment and let these young chaps go out and do it. If they make a mistake, you're going to tell them about it. "Cover that up, and let's start over, gentlemen. That's not the direction we're going to take." But back in Earl's day, it was an easy thing to do. I might have done it that way myself in that environment. Today we're a people world. You've got to give everybody a chance to do their thing. You've got to push responsibility downward. That was the outstanding incident for me in Olds, and I'm certain if I thought about it at great length, I could come up with many [more], but we're digging into a long-gone past, and my memory doesn't serve me very well at the moment.

Q: Do any of the Motorama cars that you were particularly fond of stick in your mind as something you had contributed to?

A: I contributed to a few, yes. There was a Cadillac LeMans conver-tible. It was called LeMans. I did the instrument panel and the interior in that car, and I was pretty proud of that. Back then, no one designer did an entire automobile. You did a piece here and a piece there if you were fortunate enough to get it in. Today, it's a dif-ferent story. The present Camaro was done by one chap in our building. He did a full-sized illustration on his own, and we took one look at it and decided that was the direction we were going to take, and it evolved into the car you see on the street. But it didn't work that way in days gone by. My stay in Pontiac was very short. I think it might have been something like a year when Harley Earl decided he wanted a change in the assistant chief designer [of Oldsmobile]. I cannot recall his name now. I think it was Don Hoag. He wanted someone else in there because Art Ross was, at times, a very difficult individual to work for, and this chap couldn't handle it. Earl called me to this office and said, "I'd like you to go in there, and here are the reasons why." I said, "I know, Mr. Earl. I've worked for Art Ross several years as a designer." He said, "Do you think you can handle it?" I said, "I certainly can," so he moved me in there, and I spent about a year and a half as Art Ross' assistant. Then Earl made a change in Pontiac , and he transferred me back into Pontiac as chief designer. Now, that was the shortest tenure as chief designer of any individual in our business.

Q: Really?

A: Yes. I was chief designer of Pontiac for an hour and a half, and that's it. I moved into the office, and I was unpacking. An hour and a half has transpired. I didn't even didn't get a chance to go out and talk to the people in the studio. I received this call from Earl to come up to his office. He'd just gotten a call from Lansing . The general manager of Oldsmobile was extremely unhappy that the chief designer, Art Ross, and his assistant had been moved out of Olds design, and he wasn't going to buy that. If there was to be a change in the chief designer job in Oldsmobile studio, he wanted Irv in there. So, Earl looked at me and said, "Are you prepared to pack up and move back into Oldsmobile?" I said, "Yes, sir, if that's where you want me." So that was my tenure in Pontiac--one hour and a half. I packed my gear, went back into Oldsmobile, and I ran that room for five or six years. We did a string of cars....

Q: What years were these?

A: We were wrapping up the '59, at the time. Must have been late 1956 or early 1957. That was the bizarre time of fins and tubes and rockets, and we went into more sophisticated vehicles in the 'Sixties. Earl had retired just shortly after I became chief designer of Olds. That was in 1958. Bill Mitchell took over, and we wrapped up those models. When we had those on the road, most of us decided we were moving away from automobiles into other forms that none of us really understood. So Bill, in his wisdom, decided we'd better start cleaning up our act. We got rid of the fins and started moving back toward auto-motive shapes. Bill was a fellow who liked hard-edged cars, and he had to have creases in fenders and uppers, so we were taking a different direction. Earl came from the school of round, and Bill Mitchell was more toward the shear. He called it it the shear look, and we moved down that path through the 'Sixties and into the 'Seventies.

Q: Can I ask you to backtrack a bit and give us an idea of how the fin era evolved as you saw it at General Motors?

A: The fin, as I saw it in the industry back then, evolved as a result of World War II and some of the wild aircraft that happened at the time. I know that Harley Earl had a warm spot in his heart for the P-38. It was a twin-fuselaged aircraft, single-wing fighter. There was a canopy in the center between the two fuselages [that had] dual fins.

He took a-team of chief designers out to Self ridge Air Force Base with him about the time they were getting into the '48 products, and what evolved was a '48 Cadillac. It was the first car with what you might call a fin. Then as we moved into the late 'Fifties, it started getting out of hand. Earlier, our friends in Highland Park came out with some fins that were a foot and a half over the fender crown lines, and that put fear in the G.M. design staff, so we did wild fins, rockets and tubes. I often sat back when all of this was happening and wondered where we would go from there, because that was pretty far out. I never saw an automobile [designed] that way. Recently, driving home from the office down one of the mile roads, I happened to [see] a vehicle setting on a lawn with a For Sale sign in it. It was the 1959 Chevrolet with the wings and the oriental eye shapes for taillamps, and it is bizarre and gross-looking by today's standards. It appeared that way to me at that time, but this was the mood and the trend within the building, and there was no way anyone was going to stop it.

Q: Was Earl in sympathy with it?

A: He was pushing in that direction. He wanted the lead. He wanted to do something well beyond what our competitors were doing. We tried vehicles with the headlights mounted in the center and rounding off in the ends, and they looked like a train coming at you. The sky was the limit then. We toned it down, fortunately, [from] what we were doing in some of our [design] rooms, but, nevertheless, it was still pretty far out. However, the public bought the vehicles. I wondered just what you can sell out there. We come from another school today. It has to be in good taste. If it isn't in good taste, there's no point in doing it.

Q: Earl had taste, but he also had a vision that went beyond good taste.

A: You have to ask yourself, Dave, after you spend a great deal of time in this career, whether you might not lose sight of where the future is. I caution myself each day about this and spend time going through the rooms looking at what the young people are doing. What are they saying with their work, because they are the future? What Irv believes may belong to the era of the 'Fifties, 'Sixties, 'Seventies and early 'Eighties. Now I've got to focus in on what the young people are telling me with their work, and I don't want to get caught up leaving automobiles behind with Earl's fins. So we're looking at what the young people are telling us and experimenting with in our advanced rooms. We're finding that the young chaps today are far beyond us when we came into this business--they're bright, they're creative, they're hard working, they're dedicated, they're fun to work with.

Q: So, you are in 1958. Earl is retiring, Bill Mitchell is taking over, and you're pretty much his chief assistant at that point?

A: Bill takes over. Then Bill, not too long after he was running this place, decided that one of our operations in Europe --Opel--was being run by a few German engineers who weren't doing the job. So he sold the corporation the idea that we ought to take an American designer and put him over there as director. Then an Opel management team came through the building one day, and I thought it was just a casual visit, because they visited all the rooms. They came into Olds. I took them around the room, and we chatted and had a lot of fun. A month later, I'm invited to go to Opel and run that operation.

Q: What was your reaction?

A: I thought it was fine until one day Bill asked me to go downtown and talk to Hoaglin--his son is now president of Saturn Corporation [1985]--who was Executive Vice-President in charge of overseas opera-tions. I sat down with him, and when he outlined for me what it was they wanted me to do, I wasn't too sure of it because they were offering this as a career opportunity to spend the rest of my days in Germany designing Opels. When I went back to my wife and children, they were opposed. They were not about to spend the next twenty years in Germany . I had to bring that message back to Bill, and he was not very happy about it. But the Opel people came back and selected the chief designer of Chevrolet--Clare MacKichan. Clare took the job, but he took the job because Bill had sent me back to tell Mr. Hoaglin that no designer in our organization was going to take it on as a career. A service stint of three to five years would probably be practical, but that most of our people would want to come back here, and that's what they offered MacKichan. I thought if they offered me that, I would take it, but they never came back to me a second time.

Q: There was always tension when you refused Bill's suggestions?

A: Yes. I had a lot of people tell me that it was going to affect my career and the future, and that I had made the wrong decision. But if that's the way it is, that's the way it is. I made a decision, and I'm going to have to live with it. Mac went on to Opel, and I got trans-ferred out of Olds into Chevrolet to run those operations.

Q: What was the reason for that?

A: MacKichan had left Chevrolet, and the studio was vacant. Bill decided I was the logical man to run that operation, so I spent another five or six years in there. It seems that's the span of time I've used in every [major] transfer I've made within the organization.

Q: This is a different thing for you. You've worked largely with the luxury cars, and now you're....

A: I worked the top-line automobiles at General Motors. Now I'm down at the bread and butter end. I'm glad you brought that up, Dave. The first week I looked at what was being done in the studio, meeting all the people, understanding what the program was and what direction it was taking. I looked at the way bumpers, grilles, taillights were being designed, and I wasn't happy with that at all. I got the whole staff out of the room and into the hallway outside the studio. Each of our studios had a divisional symbol impressed on the door: the Chevrolet bow tie,

the Pontiac arrowhead, and the Cadillac crest and so forth. I said, "Gentlemen, I'm going to do something here this afternoon, and I want you to pay attention." I had the maintenance people loosen the nuts and bolts on the metal crest, and I took the bow tie off the door, and I put in my pocket, and I said, "When you walk into this studio from now on, think Cadillac, think Buick. I don't want to see any rubber stamp grilles on this damned automobile. We're going to move off in another direction."

It was about that time that Bunkie Knudsen became General Manager of Chevrolet. Bunkie was far out. He was always reaching for the best. When we did this, he was very sympathetic. He said, "Damn it, Irv, you're on the right track. Keep 'em going." So we turned out the '65 Chevrolet that had a bumper up in the middle of a grille. The following year we went into plastic grilles and got detail just like a Cadillac diecast grille. We had trapped hoods that had never been done on a Chevrolet before. I think we broke new ground in that room. I can't say that I was largely responsible for it, because we had a good team of designers, and those were interesting days. I learned how to deal with nickels and dimes, not dollars, and still create an interesting product. It was a valuable experience for me moving through the system. As a matter of fact, if it hadn't been for that, I would not have been pre-pared to take on this present position. I had dealt with truck design, the low end of the vehicle market, the high end of the vehicle market, the middle range, commercial vehicles, buses, interiors--it was a complete career, to say the least. Anyway, the stint in Chevrolet was a good one. It was a good learning experience, and I think we produced some very interesting automobiles.

Q: What you had done was to bring Chevrolet out of the meat and potatoes era and [make] it into what we now call an upscale automobile.

A: Yes. A Caprice Classic today is on a par with the top-line vehicles in trim and options and appointments and quality. We moved it in that direction, and there was good reason to because Chevrolet was filling in under that Caprice automobile. We had a Chevelle at that time, and they were doing other cars. There was a Corvair out there, and a Chevy II.

I do recall another incident in Chevrolet that I think you will find interesting. Buick had just taken on the Riviera --the four-place, luxury, sport coupe, and they were out there in the market doing quite well with that. One night after dinner with the team, we were sitting around chatting about is there any possibility for Chevrolet with a car like that? If Buick can sell thousands of cars at that price, if we did it smaller, less expensive, we could prob-ably sell three or four hundred thousand. Why don't we make a proposal? We had a warehouse across the street, and the studio was jammed with production work, so I took a few designers over there, and we started creating this full-clay, sports, luxury Chevrolet. It evolved nicely, and it became a hell of a good-looking package. I took Bill down one day--he hadn't seen it--and he took one look at it, and he said, "Jeez, we've got to show this to Bunkie. It's a dramatic car!" About a week later, we got Bunkie in and took him over to the warehouse. He walked around it, and, with a big smile on his face, he said, "Damned good-looking car, fellows, but I want to tell you something, the last thing Chevrolet needs is another car." We had five or six at the time, and everybody was talking about deproliferating rather than adding, so the program got shelved.

It wasn't any more than nine or ten months later that Ford announced the Mustang at the World's Fair in New York , and the car took off like a rocket. They sold 400,000 the first year, and everybody was back knocking on our door, "Where is that--we'd better get things moving here now." We were a little late coming in with the Camaro, and the first one wasn't all that exciting, because it was a rush project, and we did it off the Chevrolet X platform. We couldn't get the cowl heights where we wanted or anything else to create a logical sports machine. But [on] the second-generation car, we had a blank sheet of paper. We got that one done right. It set the image for what we're going to do on through the next decade or two.

Q: That's been a fantastic car.

A: But we should have had it the first time out. We might have beaten those other fellows to the punch, but we didn't.

Q: What was the reason?

A: Why we didn't do it?

Q: Yes.

A: It was Bunkie, himself. He never did show it to anyone. He was convinced he couldn't sell another body. He had five or six cars at the time, and the 14th floor pressure was on deproliferating, and he was convinced he couldn't sell it. He probably could not have if we hadn't been nudged by another source. But those things happen in the industry. They have the Mustang. We created vehicles like Corvettes and Rivieras and Toronados. They have a first, and we have some firsts. We do one, and they copy it. They do one, and we jump off and do something along those lines. It's a highly competitive game. You can't stand still in this business. You don't dare look back because somebody might be chasing you.

Q: What about the Corvette? Did you have any input into that?

A: I had no input into the Corvette at all. As a matter of fact, I'm not sure any designer did, because that vehicle was done in a faci-lity that was called Plan 8 at the corner of John R and Brush. It was an old Fisher Body plant that the styling section utilized a couple of floors in. Earl placed the studio in there, and he was the only one that had the key to it. He put a few modelers and engineers in there and created the Corvette. I can't ever recall a young designer being assigned to that room.

Q: It was a creation by [several] hands?

A: Yes. It was he and Ed Cole. Ed Cole was chief engineer of Chevrolet, and he was pushing hard to get a two-place, sports car. He and Earl got together and created this thing.

Q: Ed Cole looms large, in retrospect, as a body engineer who worked directly with designers.

A: He spent a lot of time in our organization. We talk about people at the top: Ed spent a lot of time here. Pete Estes was a weekly visi-tor, and even though he is retired today, he still comes back to the design staff. "What are you fellows up to? Let me see what the future holds." Pete was always a product guy, and he found a good deal of excitement in the shapes and the moods we could create here. We have people like that today.

Q: Was Ed Cole the first to come up from the engineering ranks? Had most of your previous presidents been either finance people or sales people?

A: No. Finance people were largely the board chairmen. Presidents were generally engineers. Pete Estes was a body engineer. John Gordon was an engineer. Harlow Curtice was a salesman.

Q: Ed had a certain flair?

A: He had a love of product.

Q: It meshed with the design staff.

A: He spent a lot of time with us, and he'd tell us about what he was trying to do with the running gear, and the suspension, and how we needed to come to up with some shapes that were exciting to complement what he had underneath. He gave long-winded speeches, but they were interesting. You could feel that the man really had a love affair going with the product, and people like that are always interesting to us. There are individuals within the automobile industry that might be designing a computer console or a refrigerator and be just as happy. These are all automobile fanatics. They love cars. They wouldn't go out and design one other product under any circumstance. I happen to one of those.

Q: [What about] the Monte Carlo ? There's a prestige, top-of-line [vehicle]. How did that come about? What sort of thinking went into that? Would your product planner come in, and say, "We need this kind of thing?"

A: No, no. A lot of those things evolve right here at design staff. The need for a prestigious luxury coupe created the first Monte Carlo shapes which we weren't too happy about. It was a '73 car that we loved very well, and that came together from one illustration on the board by one designer. We modeled that vehicle out. John DeLorean was then General Manager of Chevrolet, and I never did show it to him. We kept it concealed until we finished the clay and di-noced the car in black with silver glass. John liked to travel with a large entourage. When he came over here, it was a group of 40/45 people. They'd fill up a studio. He walked in, and I told him, "John, you and your team stay right there. I'm going to show you something." We pulled the full-sized boards away, and this black jewel was sitting there. There was total silence for thirty seconds, and then they started applauding. They applauded like nothing you'd ever heard in a theater, and, naturally, we were all very happy. John said to me, "Don't touch it, just release it the way it is, will you?" [That was] their first look at the car. We were pretty proud of that. That's a hell of an accomplishment, because usually you're in the with a car division--they like this, and they don't like that. Sometimes we'll bend for them, and other times we will not. I take it to a higher court.

Q: You're able to do that now?

A: Oh, yes. We could do it then.

Q: Who would have been a higher court?

A: Fourteenth floor people. I'll take it up as high as I have to go to get what I believe to be correct for a certain time frame. Bill did that. Harley Earl never had to do it very often because his size would overwhelm you. I'm not that big, so I have to use other devices. But that was one of our successes in Chevrolet putting that car together.

Q: It has remained so.

A: It has remained so. I can tell you a little story about that car. That automobile was supposed to be introduced to the public in 1971. Then General Motors was hit by a UAW strike, and the whole program was postponed. In the meantime, they were tooling a new Eldorado that was done a few years before in Cadillac, and it had conventional side glass. We had this little opera window in the Monte Carlo--big quarter panel with a little opera window. We were talking in the hallway one day, and I said to Bill and Ed Cole, "You know now that this A Car is stalled--this new Monte Carlo--I think it would be good marketing strategy to put that opera window in the Cadillac Eldorado in '71. Get it out there, and then let it appear on this lower-priced car. It's going to give that car a lift." Ed Cole said to Bill, "I like that. Get Fisher Body on the phone." The Cadillac was already on its way, and he put a lot of pressure on a lot of people, and they got that opera window in the Cadillac. We modeled it quickly--took us about four days--had the Fisher people over and gave them rough drawings. They went back and changed tools and dies and got it into production, and it did precisely what we believed it would do. When those A Cars came out with the little opera windows, everybody thought, "My, I've got a little. Cadillac here." That's good marketing. Earl used that strategy continuously. He started with Cadillac, and then let it drift down through the ranks.

Q: A very smooth technique. I had a personal experience. I bought a 1960 Chevrolet station wagon, and you'd gotten rid of the fin era pretty much and had come up with a very sharp, utilitarian, family style.

A: It was a clean, clean vehicle. I remember that very well.

Q: Very clean and crisp. I'd seen them go by for a year, and I said, "I've got to have one of those." I had a growing family, and J drove that car for ten years. I drove it everywhere--all over the country. We went on several vacations with it.

A: A 120,000 miles?

Q: A 135,000. I had never had a bit of trouble with it. I had no major overhauls. It was a fantastic car, and I've often wondered who was responsible for that gorgeous family machine of that era?

A: Parents-wise?

Q: [Designers and engineers].

A: Dave, I'd have a hell of a time going all the way back to 1960. That means we were designing the automobile about [1957]. It would have to be Clare MacKichan and that team, because I was in Olds. Clare was running Chevrolet, and Earl was still there, so he had influenced what was done as well.

Q: Crisp and clean and the engineering, [partly] because of its longevity, [must have been] incredible.

A: They didn't have the problems back in those days with machinery that you do today. Of course, [there are] very sound reasons for the problems we have today being pushed by CAFE and having to do the smaller vehicles overnight without pre-testing on the marketplace. I suspect you know something about this industry, and if General Motors did a new transmission in 1949 or '50, they'd put 10,000 of them in the customers' hands after testing them for years in our proving grounds. You'd let the customer know that he's got a new device as a transmission. If it failed, we brought it back in, corrected the problem until we had the damned thing working right, and then it went into full production. You don't have the time to do that with any more. It has to be done tomorrow. The car has got to come down In size. You've got to downsize transmissions, engines, all the systems, along with the size of the car with no test time. It's costing the industry in many, many ways. Our customers are unhappy, and the Japanese make inroads as a result. But we're getting by that. We are totally dedicated to doing this thing right. If you have driven some of our cars in recent years and looked [carefully] at them, the sheet metal is coming together right, the paint has been enhanced 200%. The new C Cars--the new luxury sedans. I'm driving a Buick Park Avenue and a Cadillac, occasionally. They are fine automobiles.

Q: You've come a long way.

A: We're not finished. We're going to be number one when we're finished.

Q: What about product proliferation which had been part of somebody's antipathy back in those days?

A: It has exploded, and contined to explode as you can see and read about future products that are going to hit the market such as two-place Cadillacs and two-place Buicks, and Pontiac has a Fiero. There are many more things that'll happen in the next five or six years in the way of new products, but that market out there is so diversified, that you couldn't possibly play it with a standard line of vehicles, and the need for two-place cars today is quite evident. There are so many single people in the United States today that there's a need for that kind of machine. While we're doing it, I'm sure all our competitors will come into the market with similar products, and, hopefully, we'll be out front.

Q: You've been successful at Chevrolet. Things are going very well. I'm putting you back in the [past].

A: Yes, I know you are. I have a hell of a time going all way back, but I'll work at it.

Q: What seems to be in the offing for you? You've been with almost all the divisions except Buick. How do you feel about your career at this point?

A: At this point, I'm running Chevrolet? I'm feeling very good about my career. This may be very difficult for anyone to believe who may listen to this tape, but I have never set goals for myself. The only goal I had was to be the best at what I did. When I was a designer in the studio, I wanted to produce a better design than any other designer sitting at those boards. When I was chief running a room, I wanted to be sure that the Oldsmobile led all the other General Motors' products. If it was Chevrolet, by God, I was going to beat Pontiac , Olds, Buick and Cadillac, and they were going to copy what we did in Chevrolet.

Q: There was a competition there at that time?

A: Constantly, and management created it. They promoted it.

Q: Encouraged it?

A: Yes. And they encouraged it. Earl would walk into a room in his day and look around the studio and say, "Fellows, you're pretty proud of that?" "Yes sir." "Well, I want to tell you something. I just came out of Oldsmobile, and what you've got isn't worth a damn," and he'd turn around and walk out. Now if you don't think that gets a team moving in one hell of a hurry. We're not doing things necessarily in that fashion any more. But I had never set goals for myself, and if my work was recognized, and corporate people as well as my boss of design staff felt I was doing well and wanted to move me on, fine. I was willing to accept it, and that's precisely what happened. A fellow that Bill Mitchell had as his director of design--Ed Glowacke--died at an early age--41 or 42--so Bill moved Chuck Jordan up from Cadillac to fill that spot, and about six months later moved me up to assist Jordan. Chuck was in charge of all divisional design operations, and I was his assistant. Then Chuck got moved to Germany to run Opel, and MacKichan came back, and I took over all of the divisional rooms, and Clare MacKichan took over all advanced design--Bill split it up. When Chuck came back, Bill split the production divisional studios between the two of us. I took Chevrolet, Pontiac , and commercial vehicles, and Chuck got Olds, Buick and Cadillac, and four or five years later, Bill switched us again. I took over Olds, Buick and Cadillac, and Charlie took the low end and commercial vehicles.

Q: That's [interesting].

A: It was, and it's a neat technique. But at the same time, when you get in the shared body parts in a program between the two men--the one running Chevrolet/Pontiac and the other one running Olds/Buick, it slowed the process because you couldn't get them to agree. No one would make a decision that this is the way to go, the process slowed, and time was passing us. One of the first things I did when I came into this office was to eliminate that process. I put one man in charge of all of it. We got rid of that lost time and went ahead in a hurry. But things moved fast. When I drift [back] over all these years, it's astounding to me that I'm sitting here. I'm delighted,

Dave, that you remind me that it was '72 when I moved from Chevrolet, Pontiac, and commercial vehicles to Olds, Buick and Cadillac--BOC as we call it in house. As I've told you, I have a very poor memory. I think of the future and not of the past.

I came into the upper level of the market just about the time the oil embargo hit. There was a lot of discussion within the corporation about whether our products were right and were we going to deliver the kind of fuel efficiency the customer was going to look for because everyone expected the price of gasoline to rise dramatically. So sizes were looked at, and the first one I can recall coming into this building as a result of that oil embargo was the need to create a small Cadillac.

President Ed Cole was very strongly behind that. He was pushing hard, and for some years prior to '73, we had done some fiberglass models of a small Cadillac. We were experimenting here in the building, because on and off over the years, people in this building have believed Cadillac ought to have a smaller, very sophisticated package, and I don't mean a car that would compete with Chevrolet by any means.

Then the embargo came along, and the word came down that we'd better start on a small Cadillac. It is a bonafide, corporate program, and we looked at everything we had done and determined for ourselves. But it wasn't more than a week later that we were told we had something like six weeks to create the car in. We normally take nine to fourteen months, depending on how many divisions are involved, and in six weeks you can do nothing but make mistakes. So people like myself, and Jack Humbert was my assistant at the time, were damned concerned about how we were going to do this in six weeks. The Cadillac studio was busily occupied with other programs, so we went down into what we call our Advanced Design One Studio, which was also reporting to me at the time, and elected to do the car there. A fellow named Stan Parker was chief designer in the studio at the time, and we got busy in a hurry--it was six weeks.

It didn't look like we were going to have the opportunity to ever take the car out of the platform and get it out in its natural setting in daylight. As a matter of fact, we never did. The car never moved out of that studio. We designed it, we refined it, we tuned it, we had meetings with Cadillac, and I can't recall now who the general manager was. But the release date came, and we cut the car loose. I can remember sitting in the office I occupied down the hall here with Humbert and talking about this, and we were very concerned that we were releasing a car we had never seen outdoors.

Q: Humbert was?

A: Jack Humbert was my assistant. He used to run the Pontiac room in the Sixties. He created some very good-looking Pontiacs . Jack was an excellent designer, and he could refine an automobile like nobody in this building, but we thought, what the hell, they didn't give us the time, we did the best we could, and that's it. We've got to live with it. The car was finally released. Every surface and every detail was released to our drafting room, and the day came when we could now clean it up, di-noc it, and take it outdoors and see what in hell we've got.

We got it out there, and we were all pleasantly surprised. It was a darned good-looking car in our view. There were a few lines we might have adjusted. As a matter of fact, there were a few lines I tried to adjust. I took the car back in the building and made some corrections in the rear end, but Cadillac couldn't accept it based on their engi-neering tooling time frame. It wasn't in that block of time, so we had to live with what we had. Fortunately, the car got into the marketplace and did beautifully. As a matter of fact, you go out to California today, you'll see that original Seville everywhere in mint condition, and it seems that California likes that car better than what we have currently. So that was an interesting experience. I've never been involved in a program where we had to do it that fast without checking our papers outdoors.

And once we had launched that, then the corporation set a goal for themselves to downsize all their vehicles. The next series of cars that we were to downsize were the standard-size, family sedans and coupes and the luxury sedans--what we called BOC in the corporation. That program went on for a long time. It might have gone on for as long as 14 to 18 months. There were five car divisions involved from Chevrolet through Cadillac, and the concern, on the part of the corporation and design staff as to how small we make it, was great. People like Pete Estes, who was our president at the time, would come by once a week and say, "Do you think we're too small? Should we go a little larger?" And we were not quite sure either, because when you took the clay out and looked at it with a current car--1971--there was a lot of shrink in the package. They were a lot lighter than the fuel efficiency targets we had set for ourself. It looked good based on what we were doing, and, after much trepidation, the decision was made to go.

Right up until the car got into the dealer showrooms, everyone was concerned, and we got started a little slowly that first year. The customer wasn't totally accepting the package size, and, as a result, our competitors gained some market share that first year. But as we got into the second year, the car got stronger, and the third year we were right back where we should have been with our volumes. So, it does take the consumer some time to adjust. It's a cultural shock, and Americans have been driving large vehicles for so darn long that they found it difficult to accept this package size.

Q: It's hard for them to equate smallness with quality and....

A And price. If somebody's spending, by today's standards, $15,000/$18,000 for a luxury sedan, there are people out there that still believe it ought to be 230 inches long--that you can't buy quality on a small package. But it's not necessarily true. You can spend a million dollars on a tiny diamond. We went on from there to downsize our personalized coupes such as the Eldorado, Toronado , Riviera and the Seville , and the process continued right up until today.

Q: Was there anyone having any second thoughts as you got into it? "Jeez, we shouldn't have done this," or "But Ford made the right decision?"

A: Never. I have never heard that from any member of the corporate team--from any general managers. Once we launched the program, everyone got behind it and worked like hell to get the products sold and believed in them. We saw no other course to pursue. As a matter of fact, when the car was out on the road for about two years, we started planning the next generation. But it, apparently, had to be a little smaller because these cafe targets became tougher. The current

target for next year is 27/ miles to the gallon for fuel economy average for a corporation. And the industry--Ford and General Motors, especially--are in Washington trying to bring that down to 26 or we are not going to build a larger automobile. And if we don't build a larger automobile, a lot of people will be unemployed. In our view, the customer doesn't have choices, and he should.

Q: My impression is that [the Transportation Department] will be sympathetic to both yours and Ford's request.

A: We certainly hope so, because we'd love to supply a full line of vehicles. We are a full-line builder here at General Motors. I suspect Chrysler's position is proper for them because they're not a full-line builder, and they've got a lot of small, fuel-efficient cars. They want the standard to remain where it is.

Q: Is it my recollection that, although Ford rejoiced in the fact that their competitive position was enhanced by your decision--at least the first year--but, in truth, they didn't have the money to downsize?

A: They had made a decision not to do it. I wouldn't know why. It may have been financial, but you got to bite the bullet at a time like that, because the game is moving in one direction, Congress had passed a cafe standards, and there was no other way to go.

Q: G.M. borrowed, as Ford should have done?

A: Yes. If you want to remain in business, you're going to have to do it. The programs were planned over a period of time, so we weren't doing three or four in one year. First, the B Cars, and the per-sonalized coupes, and then we went into the A. The Citation was the first thing we brought out.

We downsized the large cars, and then we came in with the small, transverse, front-wheel drive Citation which did a lot for us from a fuel economy point of view. We had a few recalls that didn't help, but the car was rushed to market because there was a need for it out there. Downsizing continues even today. We're doing vehicles for the late Eighties that will be lighter and far more fuel efficient with the eye on one target and that is to maintain interior comfort. We trying as hard as we know how not to shrink those internal dimensions. The American consumer is not going to buy a tighter car. He wants all the space he get inside. He wants leg room, he wants head room and torso room, and we're trying to maintain that even though we reduce the exterior dimensions of the vehicle.

Q: How are you solving that?

A: By working with a 9H pencil as we look at the occupants in the vehicle and finding every little millimeter and doing thinner doors and thinning up the outside of the shapes. By reducing length which takes weight out. We've dropped 1500 to 1800 pounds since we've started this downsizing process with most of our products. That, along with a lot of attention to aerodynamics, is giving the customer far more fuel--efficient vehicles. I'm currently driving a Buick Park Avenue, and when I go back to about 1971 or 1972, that large luxury sedan--and I

drove those--would take me two tank fulls a week to get from the office to home. This current Park Avenue , I can drive all week long from office to home and back again, and I've still got fuel in the tank. So, we've made some great gains.

If you take the lower end of our lines and measure them with the low end of everyone else's lines, such as Chrysler or Ford or the Japanese, you'll find our cars are just as fuel efficient as theirs are. But we have so many top-line automobiles that bring our average down. However, the customer is demanding that automobile. There are people out there buying the rear-wheel drive Chevrolet with V-8 engines in them. They've got to have that V-8.

Q: You've conditioned them to ask for it.

A: I don't think that we conditioned them. I think they were demanding more power back in the 'Thirties and the 'Forties and the 'Fifties. And the hot rod generation in the 'Fifties and 'Sixties.

Q: They've never gotten over that?

A: No. We're getting back into more performance because the customer is demanding it. We brought out a J automobile with a focus entirely on fuel efficiency, and because the car didn't have the performance the customer expected, they turned away from us in that first year or two until we fixed the performance. Now the car is selling extremely well. The American consumer demands performance along with fuel efficiency, and that is not an easy target.

Q: It must drive you crazy trying to figure out exactly what will be the most saleable in terms of...?

A: You try to offer the customer a wide variety of engines and transmissions so that they can select and put together the package they are personally interested in.

Q: So you were very flexible in that area?

A: Yes. In paint, in trims, in options, in engines, transmissions, and that you must do today if you want to remain competitive.

Q: Moving you back to the mid-'Seventies, you're the chief assistant to Mitchell.

A: Yes. I'm reporting directly to Bill.

Q: And you're handling the upper end of the line, and Mitchell is probably thinking about retirement about this time. What was the situation in the design center at that time in terms of...?

A: You mean in terms of human relationships within the organization?

Q: Yes.

A: You'd have to speak to Bill about what his thoughts were in that time frame because he was three or four years away from retirement. He never revealed his inner thoughts to me.

Q: He never said anything?

A: No, and he tried to stay active around the studios; and, of course, when we did something out in the rooms, we never released anything without inviting Bill in. If I changed the entire side of the car, and then the studio and Jack Humbert and myself were happy with what we had, and we did it in a week, I'd invite him in and say, "This is what we like, Bill. This is the way we'd like to run. He'd either say, "Yes," or "I don't think you have it, you'd better keep working." So that's the way we were operating in that time frame. When Bill first took over after Earl left, he was extremely active in the rooms and pretty much dictating design. As he became more comfortable with his position and the people and their talents, he backed off and let them run it, which is, in my view, the proper way to do it.

Q: Is that your technique today?

A: I have been operating that way from day one. I don't go out there and hold anybody's hand nor do I go out there and dictate design. I will go out there, as I did yesterday, and stop something because I don't think they have it, but I won't tell them how to do it. We may, in discussions in the room with the team, paint a word picture of where we may go, but I don't want to take my work in there because you don't build people that way. They've got to face the problem, they've got to shoulder the responsibility. Irv spent a lot of years in those studios and created a lot of cars. Now I find myself in a different position, and I firmly believe that the way we're running this place is correct. I wouldn't change it.

Q: Mitchell, by this time, has reached the senior executive level, like you have today, and sitting back and letting the teams do the work?

A: Pretty much.

Q: And he is beginning to think about retirement a year or two before he retired.

A: I imagine he was thinking about it. He had developed, in his last five or eight years, a love of motorcycles.

Q: He had?

A: Oh, yes. He was buying motorcycles, and he a little shop down the street here, and he didn't like the shape of current motorcycles. So he had a designer, and they redesigned the bike and created their own forms. He'd paint them in very glamorous colors and [have] leathers tailored in the same color to fit the motorcycle. I don't mean to suggest that Bill forgot automobiles, but he developed this love of motorbikes, and he stayed with that even after his retirement.

Q: He did?

A: Yes. As a matter of fact, when he created his own design organi-zation, he had a contract with either Yamaha or Suzuki, and he designed rare motorcycles.

Q: That's interesting. It's a wonder he didn't suggest that G.M. take over Yamaha so he could be in the corporation.

A: He may have, for all I know.

Q: This is mid-'Seventies. Your downsizing program--everybody is enthusiastic about it, and it's on schedule for the next ten years. What motivated the pace of the downsizing without criticizing anything? It seems to me that downsizing has had an evolutionary approach to it over the years at G.M. You guys, and this may be your philosophy, have preferred a gradual approach both to downsizing and to a rounding or smoothing and a lowering that you're gradually coming to in the next five years. Was that a reflection of your personal design philosophy?

A: No. I wouldn't say that. I think the corporate approach to down-sizing vehicles was a matter of cost and resources. We could not have taken all of G.M.'s products in say a three or four or five year span and downsized them. Even General Motors couldn't do that. There's a lot of money involved in doing a new car program today. It had to spread out over time, selecting the vehicles to downsize that move us toward those cafe figures. We're aiming at those numbers. I think they started somewhere around 18 miles to the gallon, corporate average fuel economy, and went to 20 and then 22, and 24, and it's 27h next year. So the products were selected that would keep us on top or ahead of those average fuel numbers. Even if that wasn't the target, the corporation could not have done all the vehicles in five years. We didn't have the resources here to do it, and I don't imagine General Motors had the financial resources to do it in that time frame. So we had to take a program at a time and be sure that we had done it right.

Q: So it was financial constraints?

A: That played a large part in this.

Q: If I'm reading recent history correctly, your approach has been one of a gradual movement toward the future rather than jumping five years ahead?

A: Are you talking about the vehicles that have been accomplished while I've been in this office?

Q: Yes. The last ten years.

A: How do I answer that? I don't know that you could say it's a gra-dual, measured approach. We try to reach out as far as we can with each program we do, but one of the chief factors in any design program here at General Motors design staff is to maintain the personality of that divisional car. We will not, as an example, do what our friends at Ford did. They had some very stiff, harsh automobiles, and, in a year's time, they turned right around and did soft, rounded cars, and the former T-Bird doesn't look like the present T-Bird. That can have a hell of an impact on

the resale value of the old car, and we're trying to protect our customers who are out there with a vehicle that's a year or two old that resale values remain strong. If I'm the customer, and I'm driving in those '72 or '73 Cadillacs, and we downsized it in '77, it was smaller, but it was still a Cadillac. It had all the cues up front and in the rear, and we're not going to move away from that. The per-sonality of a vehicle is there, and we're going to move that personality forward as far as we can.

Q: An admirable approach, especially with General Motors' large number of car lines. The shock would have been too much for the average G.M. buyer to jump five years ahead, so you preferred to retain the identity, protect the previous buyers, and hope to court new buyers.

A: Yes. If you look at what we did with the third generation Firebird and Camaro. They're strongly related to the second-generation car, but they're new and they're fresh and they're faster looking and smoother, and I think you could say that about a Corvette, also. You don't put labels on the new Corvette. You know it's a Corvette. On the other hand, if we get an entirely new program, and there wasn't anything before this car we're now doing, such as the Fiero, then we try to create the personality that we can carry down the road for many years to come.

We worked on that car for something like two years--maybe a year and a half--downstairs in our advanced rooms and another six to seven months in the Pontiac studio refining it. But everything I read indica-tes that people who like two-place, sports machines, this is one, fine looking car. Everywhere you look you see young ladies driving them. They love them, too, so I have to believe that this team did a good job with something new. Now we've got a personality to work with, and you won't see the next generation of Fieros turn around and head 180 0 in the other direction. That's just not going to happen here.

Q: But, as you point out, the Fiero was a jump ahead. That was a special design project?

A: That's right.

Q: It was off to one side from your bread and butter [studios]?

A: It was completely off to one side, buried in our advanced room, with Pontiac having the strong interest in it and very concerned about when they could sell the two-place car to the corporation because you have to ask yourself how many two-place cars does General Motors need? On the other hand, the market in North America today is very diver-sified. The standard sedan coupe and wagon is no longer going to enter-tain that entire group of consumers out there, so you've got to have a wide variety of products. If you look back in the late 'Sixties and early 'Seventies, with a car like the Impala and Caprice, you could sell a million and a half of those in one year. I don't think we look for volume such as that any more. If you can do six or seven hundred thousand of one body type, you've done a hell of a job today. You're to see more two-place automobiles from General Motors. Buick is going to introduce a two-place car, Cadillac will very shortly, and what's up the road remains to be seen, but the customer is dictating where we must go. We're not doing it.

Q: I'm fascinated by the reports about a Farina Cadillac. Are you going to go ahead with that?

A: Yes. They designed the car, and they're building the body, and the body will be air shipped to our new plant in Detroit/Hamtramck, and the running gear will be put into that car in that plant. That was the process decided on by the corporate management. I must say, in all honesty, it didn't please us here at design staff.

Q: Why was that?

A: Pininfarina got the design assembly, and....

Q: How did that come about?

A: I can't remember exactly how that happened, but I know that Cadillac wanted to do a two-place car, and we were preparing to do, and I got word from my boss, Howard Kehrl--who is a vice-chairman at General Motors--that they were going to ask Pininfarina to design the car. That didn't make me happy, it didn't make any of the management team happy here, and the Cadillac studio was all upset. The chief designer, Wayne Kady, was walking around with a frown, and, I thought, win, lose, or draw, I've got to give these fellows a shot at the program even though the decision might have been made that Pininfarina is going to do it.

We got started, but we didn't have enough time. Pininfarina had been working on it for some months, and, when I made the decision, he was five or six months into the program, and he was to bring a car here in about 60 to 90 days. So we hurried a two-place car, and I informed management that I was doing it. They weren't too sure it was the right thing to do, but I explained the problems I was having with the team, and I thought they ought to have a shot at it. I'm walking out to the [design center]--the Pininfarina car is sitting there, and our car clay model is sitting there--with certain members of the executive team down-town when they said, "Irv, regardless of how much better your car may look than the one that Sergio is doing, we're going to select his because we believe if it's his design, he'll do a better job of engi-neering and fabrication and build a quality into it that's necessary." And that's how the decision was made.

Q: It, obviously, still rankles?

A: It did for awhile, but we're over that. We've over that because we've a lot of programs coming through this building, and once a deci-sion is made, I set them behind me and we go on and do the other work. Lloyd Reuss was running Buick at the time, and it was really Buick that started the idea of a two-place car. They came to us first.

Q: When was that?

A: I can't remember [when] that happened. I was in this office for about two years when that happened. Lloyd came to me, and he, said he'd like to do a two-place Buick, and we got started on a few proposals and then, for a variety of reasons, none of which I can remember at this time, Buick backed away a little. Cadillac got wind of the idea that Buick was working on this, so they jumped in quickly. So, the cor-poration did this thing with Pininfarina. When the decision was made to have Pininfarina do the car--design and build the body--the Buick group--it was still

Lloyd Reuss--came back and said, "I want to get started on this. I don't know how much of chance I've got to sell it, but I want to do this. Get me a hot car."

So having lost the Cadillac project, our team was all fired up, and we spent about a year putting this Buick together. I recall it being shown to the corporation prior to a product policy group where the program was going to be presented. I took our chairman and our presi-dent out there, and we had the car in the hallway on the second floor. I showed them the Buick, and Roger Smith walked around it and said, "My God, that's one hell of a good-looking car." I don't know how they're reacting about the appearance of the Buick relative to the Cadillac, but I know they like the look of the Buick, and that satisfies us.

Q: Can you give me your personal opinion as to the relative qualities of the two?

A: Appearance-wise?

Q: Yes.

A: [Pause] Dave, that is....

Q: Is that a leading question?

A: That's not a leading question. It's just that having been so deeply involved in the two-place Buick, it's very difficult to be objec-tive about this.

Q: We don't want you to be objective. We want you to be subjective.

A: Yes. I believe we've got a hell of a finer looking car than the Cadillac. If I didn't feel that way, I shouldn't be here.

Q: Right, okay, good. These will be out in '87, '88?

A: Yes. If I remember the dates correctly.

Q: About the differences in style and approach that between you and Mr. Mitchell and Mr. Earl--especially Mr. Earl whose large size and intimidating--would intimidate people along with his rather forceful personality in terms of getting executives to accept design changes and so forth, you indicated that you have a different approach.

A: I have a different approach, Dave, of course, and I think I'm operating in a time frame that's entirely different than the time frame Earl operated in. If you go back to the Twenties, Thirties and the Forties and Fifties, a boss was a boss whether his name was Harley Earl or Mr. X, or Mr. Y or Mr. Z. He was the boss, but our society has changed fantastically in the last thirty/forty years, and that approach couldn't be used today. It would be impossible. You've got to focus on people, you've got to help them grow. You do not intimidate. I'm not sure--and I've heard this over the years--that Harley Earl went out of his way to intimidate people on his staff. I did gain the impression--and I had worked for Mr. Earl about eleven or twelve years--that he

went after those that he considered weak, spineless. I had a lot to do with Earl when I ran the Oldsmobile studio, and I dealt with him on a daily basis, and he was always very nice to me and always very kind. And if I had something he didn't like, he would plan it out. But if he didn't think it was any good, he never really got angry with me. If he had, it wouldn't have frightened me, because I fear no man regardless of title.

Q: One of the things that we should look into, momentarily, was the sports car syndrome that General Motors fostered, starting with the Corvette, and you were the leader there, and coming up to the magnifi-cent Z-28?

A: Camaro/Firebird and the Z-28. But the Camaro and Firebird were the result of a Mustang. Mustang announced their car in April at the New York World's Fair. But what the consumer doesn't know, and probably the people at Ford, Mr. Knudsen--Bunkie Knudsen was running Chevrolet at the time, and Chevrolet had added quite a few cars over the years, because the market was demanding it, and Buick had the Riviera . Bill Mitchell sold that on his own to the Buick division. He was very strong for getting a personalized coupe, and Buick bought it. We looked at the volumes that Buick was turning out the first years. I was running Chevrolet studio at the time, and I sat down with the team, and we had a little discussion about it. Buick can sell X number of cars in one year at that price, what if we did a little personalized car? How many would Chevrolet sell if the price were right?

We wouldn't go the Buick route because that's a more formal, sophisticated, four-place automobile. We'd do something to appeal to the youth of America . Something sporty and dynamic. We talked ourselves into it. I came to Bill, and I chatted with him about it, and he said, "Well, all right, if you want to do it, go ahead and do it. You got room." We didn't have room in the studio, so we had a warehouse across 12 Mile Road , and we went over there and worked on this car. I had a fellow working on it who is now in charge of Advanced-One, whose name is Phil Garcia, and we put together some ideas, found one we liked and modeled the automobile. In having the operation away from the this building, Bill didn't get involved, so we had a pretty free hand. We created the car in clay, di-noced it, and I invited Bill over. He took one walk around it, and he said, "Jeez, that's a damned good-looking car. We'd better get Bunkie over here." So we got Knudsen over about a week later, and Bunkie walked around the car, and he said, "Damned exciting." But he said, "I want to tell you something, fellows. The last thing Chevrolet needs is a another car." And that ended that four--place--what would have been the Camaro program, and that was about a year before Ford announced the Mustang. The following year, in April, it was there for everyone to see that there was a need in that spot at the low end of the market. When Ford brought the Mustang out, General Motors didn't react to it until the first year numbers came in, and I think they sold something over 400,000. Then we started moving fast. The question of whether Chevrolet needed another car or not was a moot point at that time, and we went right after the Camaro.

Q: Had you kept the project?

A: No. It wasn't kept alive. The armature was used for another program. We photographed the car, and when we got the word we'd better get started on a four-placed, sporty vehicle--it wasn't called Camaro at the time, it had an XP number--we thought we'd go back to that. But the

decision was made that it would have to come off the Chevy-tooled under body and cowl and use the suspension and engines and windshield. We didn't have the flexibility. We couldn't reach the car we were doing at the warehouse. So the original Camaro, while it did well in, the market, was not satisfying for anyone here in this building--not Jack, not myself, not the chief designers involved. Henry Haga was the chief designer of that studio at the time. He's now out on the West Coast running our advanced concepts [center]. We did what we were asked to do. But when that program was finished, I got with our vehicle packaging group, and we started planning the second-generation car, and there was no inteference. We did a new under body and placed the seats where we wanted them, and go the cross section.

A year or so later, we started modeling it, and when we started, Bill Porter was in charge of Pontiac . He was going to do the Firebird . That's why we did cars like the Berlinetta. Pontiac had one in the middle, too. I don't remember now what they called it, but they've given up on that one.

Q: It was a good idea, but, apparently, the ladies wanted the hot car.

A: The ladies seem to buy what men like. They like the same cars. The industry for years has been talking about, "Let's tailor this type of car for women," and it has always failed. Women like the same auto-mobiles men do.

Q: They're competing with them now in the marketplace.

A: They are just like men when it comes to wheels. There are girls that like to go fast. I have a daughter that wouldn't buy anything but a performance automobile.

Q: How old is she?

A: She's 29.

Q: That's interesting.

A: She's living in Boston , and you couldn't sell her a four banger under any circumstances. She's got to have a quick automobile, and then there are ladies just like there are men who want fuel efficiency and a lot of room. They're no different.

Q: It's a different market. It's fluid now.

A: We did some colors on both the Firebird and Camaro about half through the second-generation car. It was supposed to be tailored for the female. They were bright and cute. The colors didn't do a thing out there. Women didn't buy them at all.

Q: What are your plans for the sports car? Have you got some innovations in the next five to ten years as far as sports cars, or are you Trans Am, and Haga was going to do the Camaro Z-28?

A: We had a little contest going between the two groups--Pontiac and Chevrolet. We selected the upper that Bill Porter's team did--windshield, upper pro-file line, side glass, graphics and put that on the Camaro and got pre-cisely what we wanted. The divisions weren't involved. They were busy selling cars. They had to sell cars. They had to engineer. So we took some time with that program, and Bill was delighted with every step as we went.

Q: I can imagine.

A: Yes. When we invited the general managers in, and I don't remember who they were, there was no question about the vehicles. No question at all.

Q: Instant acceptance?

A: Yes. The Pontiac group liked what they had, and the Chevrolet [people said], "Don't touch it. Leave it alone. Release it," and that's the way we go. The car made its mark. It was out in the market for ten or eleven years with just facial changes and graphics in the rear.

Q: It's been a success story.

A: It lived a long time. It was a very profitable program for General Motors.

Q: Was the Berlinetta part of this program?

A: No. When we did the second-generation Camaro/Firebird, we did a base car and a performance car. It came through to us that there were a lot of young ladies driving the car, and maybe we should tailor an auto-mobile somewhere in between base and performance that women would like.

Q: ...going to bring it along gradually?

A: No, we're not going to gradually bring it along. We are doing, and almost have completed, the next generation of Camaro/Firebird. We've got a fiberglass model out there that's set to move for this car. As a matter of fact, Dave, much like the second-generation car, this fourth-generation car will be introduced in the Fall of '89. It was done about the time we had just released the car that's out on the street. The assistant chief designer in Chevrolet Three, off on his own, just created a full-size rendering, and I walked in the room one day, and I thought, "Damn. That's a dynamic-looking thing." So I went to the chief designer--Jerry Palmer--and I said, "Jerry, have you got any resources to model that?" He said, "I'll find them." So, within four to six months, we had the vehicle outdoors several times, and we refined it. I liked what I saw in clay, so I elected to use some finan-cial resources to build a fiberglass model. I wanted that around to live with it to see how well it works. And we had it around this building for probably two years before the bell rang to start the '89/'90 program, and it had lived well. Everyone who came in here, and corporate management said, "Jeez, that's a dynamic car." And that sets the mood for what we're doing in '89, and we're taking a step with this car that goes beyond anything we've done with past Camaros and Firebirds. However, you will know it is a Camaro.

Q: It still maintains the identity?

A: Yes. It has many innovative features, its performance will be equal to or better than. It's rumored in the newspapers it may be front-wheel drive. I'm not at liberty to say what wheels will drive the car, but it will be an interesting package, and I think our Camaro/ Firebird customers and followers out there are going to enjoy this one.

Q: The other end of it, the Corvette. The new '85 Corvette is a suc-cess story plus the design is quite striking. [The public] is quite taken with the new generation Corvette. Some of the purists--and I know you've had to contend with these Corvette purists all these years....

A: They're out there.

Q: ...will say that you've bastardized it--that you've succumbed to the recent design mania for a Euro look. Can you tell me what kind of a considered decision that was in your area? How that came about?

A: Sure. The purists, and a lot of other people who are not necessarily purists, have told me that you messed up the Corvette. But the Corvette before this one, in our view, was right in that time frame but over-stated for the '80's simply because a Corvette like any other car has to have sound, aerodynamic numbers, and you could not have jumped the fenders up off the body as high as the Corvette preceding this one. And, as we did aero studies, we tried as hard as we knew how, within the aerodynamic framework, to keep that subtle balance in the silhouette of a car. We got as much as we could without upsetting the aerodynamic numbers. Now the Corvette, aero-wise, its coefficient of drag isn't quite as good as I expect because it's at .35, and there are a lot of cars out there a .35, but what pushed the number up that high is the footprint. We've got some very wide tires on that car for ride and handling, and if you take and put a standard set of rubber under that vehicle, the coefficient of drag drops under .3 into the .2 area. So, it's just a wide footprint that pushes us up to .35. But these are tradeoffs you have to make between aero and ride, handling and perfor-mance. So aerodynamics was an important factor in designing that vehicle. I personally believe the car is correct for this time frame.

Q: I seem to recall hearing somewhere that the designer on that pro-ject was a local product out of Homer LaGassey's show.

A: Yeah. Center for Creative Studies--Jerry Palmer. Jerry Palmer was chief designer, then he was involved in the current Camaro and Z-28, and Jerry's team put the Corvette together. You'll see a coupe that'll be introduced in the Fall of '86 that's a part of two sedans that was done by Jerry's group. It's the Berretta, and Jerry's team did that. They're a very aggressive, far-out group. They do some damned interesting cars.

Q: It must be fun working with a group like that.

A: Oh, yes. Jerry is a very good designer and totally involved with automobiles.

Q: The other anecdote that sticks in my mind, which may not be impor-tant, but I'd love to hear your version of it. The original Seville was a personal and sales success, and then somebody decided to give it a new look. How did that come about?

A: Are you talking about the second-generation Seville ?

Q: Yes.

A: Yeah, that's an interesting story, Dave, because when we knew we had to start the second-generation car, I was working on that with Jack Humbert and Wayne Kady, who is the chief designer at Cadillac, and what we had started was taking that original and projecting it out a step or two farther, and we were into the program for about two or three months.

Bill came in one day, and he said, "Now fellows, that's not it. You haven't got it. Now, I'll tell you what I have in mind." And he made a little sketch, and it was very much like a Rolls of the 'Thirties with this....

Q: His old obsession.

A: Profile in the rear, and we didn't think too much of that--the design team--but he insisted. He said, "You're going to do that damned car that way, and don't give me a bad time, Irv. That's how I want it, see?" So we got up on the boards and taped it and retaped it and ren-dered it, and wiggled it, and tickled it, and refined it, and then we thought we're pretty close, let's model. We got it in clay, and Bill was delighted with the results all the way through. There were many of us who felt that the word profile wasn't working well with the face of the vehicle, but the face of the vehicle had to be a Cadillac. You couldn't drop the nose down as you're doing the Riviera(?) in that time frame. So we went with it, and I think we had a little trouble in the first year or two convincing the customer that that was the right state-ment, but in recent years it seems to have caught on, and the volumes are increasing.

Q: The instinct was correct even though you had had some detractors.

A: Yeah. And in spite of where the volumes have gone in recent years, I would not have moved in that direction, personally. But he was the boss, and the car we were doing, I thought, was pretty dynamic.

Q: Still got a sketch of it?

A: We have photographs of the clay model. It was a car I really liked. I really enjoyed it, but, being number two, or three, or whatever I was at the time, they didn't give me the opportunity to push that one through.

Q: Bill has retired, then, at this point?

A: Oh, yes.

Q: And he probably retired somewhat reluctantly, don't you think?

A: I don't know. I suspect, but it's hard to say. When a man has been in the business for forty odd years, he may be ready for another challenge. Bill never did open up to me, nor I don't believe to anyone else around here, as to how he felt about walking out the door in the later part of July in '77. He never admitted to me that it was a hard thing to do.

Q: It was against his nature?

A: Yes.

Q: He told me that Harley Earl called him in his office and said, "You're going to succeed me." And then he tells a hilarious story about Jack Gordon calling him in and saying, "I don't like it one God-damned bit what Earl is doing."

A: Yeah. I think they sat right on that couch when Jack Gordon told him, "I'm not on your team. I want you to know that." I think those are the words Bill used on me.

Q: What did Bill say to you when he...?

A: He told me that the President of General Motors, at the time, flat out stated that he wasn't on Bill's team. "I would not have voted for you to run this place." That's getting off to a pretty hectic start, isn't it? If the president isn't on your team....

Q: Jack Gordon?

A: Yeah. This is what Bill told me. I wasn't there. I didn't hear it. It's heresay as far as I'm concerned.

Q: What did Bill tell you when he was retiring? Did he call you in and say, "Irv, it looks like I'm leaving in six months, and we've got to work a succession."

A: He didn't, no. We never had any kind of conversation. I'm not even sure that had Bill had the final choice, that I would have been his man. I personally don't think so. He would focused on someone else in the organization. I believe the decision to move me into this job was made downtown. But I can tell you this, I probably was in this office two days when Pete Estes walked in and he said, "Well, are you settled yet?" I said, "I'm all moved in and ready to go." He said, "Now I want you to know, Irv, if there's anything you need, if you need any help from me, you just call me anytime you want." If Bill's story is true about Gordon, then I got off to a beautiful start with Pete Estes and Tom Murphy.

Q: Will you correct or affirm a story I heard that with Harley Earl and Bill Mitchell--fifty years of an adversarial situation with top management--do you think that Estes and the rest thought that Irv will move in a different sphere? That you'd handle things differently?

A: I really don't know, Dave. Perhaps thoughts like that crossed the table at the board room when they were trying to make this decision. I have no idea. No one downtown has ever said to me, "We have put you in this assignment for these reasons." I suspect we're very visible here where the corporation management is concerned. They spend a lot of time with design staff, and they know us very well, and they probably made the decision based on what they had observed here in the building, and I did operate differently than some of the other executives in the building. I never used a baseball bat on anyone who reported to Irv, and I don't today.

Q: I suspect that story's true. I think they found in you a person who would work well with the staff and would not, as you say, use a baseball bat.

A: I'm quite a bit different than the other two people in this way, Dave. How do I say it without sounding like I'm patting myself on the back. I don't mean it that way, but I'm totally involved in every facet of this operation, not just the design studios. I deal directly with the comptroller on the budget problems we may have and how we spend money, because, whether I'm spending General Motors' money or my own, I want a dollars worth of value for every buck I spend here. I'm not going to throw a penny down the sewer. I get involved in labor rela-tions problems and personnel problems and just about every facet of this business. I wouldn't feel comfortable in this office, if I didn't know what was going on, totally, within design staff.

Q: That's a new breed of design [directors].

A: I don't think it was done in the past. We always had administra-tive assistants. Earl had one, and Mitchell had one, and they ran the business end of design staff and concerned themselves totally with the studios. My approach, to let the people run in the studios, buys some time to do these other things, but I couldn't sit in this office and rely on someone else to handle the budget and decide where the dollars are spent. I've got to know and control those things.

Q: This may have contributed to your success in the last ten years.

A: Perhaps it has.

Q: That you're totally involved, totally engaged, and then let the people you select run the divisional studios.

A: I'll say this, Dave, we've hit the budget right on the head every year since I've been in this office. That takes attention to detail and control.

Q: And commitment.

A: And commitment, absolutely.

Q: You're moving in to the electronic and space eras very rapidly at General Motors. How do you see the design role in these situations today?

A: You're talking EDS and Hughes?

Q: Huges Aerospace, EDS, the Saturn Project--the whole mix of electronic systems. How the design center fits with that matrix?

A: Remember, we're new at it with EDS....

Q: There have been some problems?

A: There have been minor problems--nothing serious in my view. I suspect, over the long term, we will gain a lot working with EDS and their knowledge of computer systems. In this building, I'm not a com-puter expert, but I'd always asked a lot of questions about buying a new piece of equipment. I just had a meeting yesterday with the EDS team that services the Tech Center , and they were laying out their plans about what is going to happen here at design staff, and I'm confident that within the next five years efficiency will increase tenfold in this building. These people know what they're doing. We don't have computer experts of that nature in this building. We have people who are designing new systems for us within the building, but not system people per se.

How we relate to Hughes, I have no idea at this time. I think everyone in the corporation is feeling their way, and the relationship will probably be stronger between advanced engineering--Bob Eaton's staff, or research staff--Bob Fosher's group with Hughes than with design staff. We had a luncheon here the other day when the Hughes team came out to visit General Motors and the Tech Center . The luncheon was held in our dining room, and we had the Chairman and the President of Hughes here, and I got to chatting with Mr. Puckett, the Chairman, who was sitting at my table. I was hosting this luncheon, and I reminded him that we were bargaining for a piece of land in California that overlooks the Pacific, and when I turned my back on the ocean, I'm looking right up at the Hughes Research Center . I said, "You know, it might be interesting in the future if we get the building in there to do some business together." He said, "Yes, it might be."

Q: Have you since finalized that?

A: No. Nothing has been done along those lines because I don't believe the final purchase of Hughes is yet complete. We haven't issued any stock, so I would imagine it's not completed as yet.

Q: Saturn appears to be in your orbit.

A: Saturn's been with us for several years.

Q: Without revealing any trade secrets, can you give us a rundown on how Saturn began, how it evolved, and how you sold management on...?

A: We did an S Car some six or seven years ago that was supposed to replace our Chevette. It was a front-wheel drive car, it was three door, and the program was completed. It was a handsome, little vehicle. We've got photos of it here. When the engineering and the cost people got into it, General Motors discovered that we're way over the mark relative to the Japanese,

cost-wise. We were something like $1800 to $2000 more expensive than any Japanese car of the same rate, same carrying capacity, same wheelbase and power.

So the program was stopped, and that's how this new approach evolved. I wasn't a part of the planning process downtown, but, apparently, the decision was made to start with a clean sheet of paper, form a new corporation, and attack the processes to take the cost out. You couldn't build this little car as we had been building cars for the last seventy some odd years. That started a team here at the Tech Center that was called the Saturn Task Force reporting to Alex Mair, who is the group exective here. And it was largely a Tech Center team put together, and they had manufacturing people and engineering, people and the skills and the cost people. When they had done enough spadework, they came to us and said, "Now, we'd like a body for this program we're working on." We started working closely with them to understand their goals, where the costs might be, how we might have to go about designing this car.

We put one together quickly, and they took our surfaces, and they were going to build the first prototype. We had a fiberglass model, and then Roger Smith, our chairman, decided that he was going to announce this Saturn project to the press, show the car, and we did that. This past January, he announced the Saturn Corporation. Prior to that he announced the Saturn project, and he made the decision that he was going to show that fiberglass model to the press. We weren't all that happy with that first effort, because it went quickly. When the car was on stage, the press was there, and Roger gave a speech about the Saturn project. When he finished and the press were milling around pho-tographing it, I went over to the Chairman, and I said, "You know," because it was an opening for me, "Now that you've shown this to the press, we're not going to let our competitors see what we're going to do in the late 'Eighties, so I'm going back to work. I'm going to do another car." He said, "You are?" I said, "Yes, I am." He said, "Fine. Do it." So we started what we called the second-generation Saturn, and we finished that about a year ago. But, as time wears on, and we do other programs, Saturn can age right here in this building. So, within the last few months, these cars that we thought were very exciting, are being changed even now as I talk.

Q: It might be of interest to future students of design if you could review what seems to have been a turning point in both General Motors design and the automotive industry design: the '80's being a turning point from the old days, and that the new era in design technique and philosophy is upon us and how that might fit in with your own concept of what design should be in the rest of the 20th Century.

A: Sure, Dave. Earlier, you used the word "evolutionary" rather than "revolutionary". I believe that we did both in the '80's. I think our products were revolutionary in that we took a lot of size out of luxury sedans and Toronados and Rivieras , and everything we've done in the '80's. There was a cultural shock involved in the marketplace due to size differential. And because we were taking as much as two . feet, in the case of our luxury sedans, off the length of the car, we felt it necessary to maintain all the cues involved in those products which was a Cadillac Sedan DeVille or Buick Park Avenue.

You have to retain that personality when you make that drastic a change in size. I'd like to point out a basic philosophy that permeates General Motors design staff that hasn't changed from the

days of Harley Earl right up until my tenure in this office: that we maintain the divisional personalities through the years. We try to project those forward without doing a 180 degree turn on the customer. I think it's important from a marketing point of view because the people who were driving our vehicles today that are one to five years old are still, and feel like they are, members of the General Motors family. An Olds is an Olds is an Olds. If you want to talk about a '78 or '80 or an '85, you recognize an Oldsmobile on the street. Some of our competitors have done a 180 [degree turn]. They have very harsh, stiff-looking automobi-les, and then suddenly in one year, they bring out what the media calls a jelly bean. I probably wouldn't use that term, but that's how they refer to it. Well....

Q: I suspect they were forced to do it?

A: Well, perhaps. Their share of market was slipping, and they had to make some drastic change. I think if we faced that, we would have done it in a different way. Where do we go next?

Q: You were about to talk about the evolutionary approach in General Motors design of the '80's. .

A: I was covering that, Dave, when I said when you make drastic changes in car size, you've got to maintain the cues that telegraph a Cadillac or a Pontiac or whatever brand name you wish to discuss. And as we march into the future, and I just left the patio a half hour ago looking at some vehicles we have out there for the '90's, and while they are radical in form, you could walk out there today and identify each and everyone of them. You'd look at it say, "My God, that's a Buick. I know that." They don't have labels on them, but you'd know a Buick, and a Pontiac, and a Chevrolet because that is our basic philosophy. We will continue to do that. Take that personality and project it forward into the future. It protects the customer. It protects the used car value if you don't make a radical turn in appearance. That's essen-tially one of the ground rules we live by, and I don't see any change to those rules. That could happen, but I don't see that anyone will change that approach around here.

Q: The divisional identity, then, will be preserved at least through the end of the 20th Century.

A: As far into the future as I can see.

Q: What do you see in terms of real change in automobile design, including mechanical and electronic design?

A: The cars out there that reflect my time in this office, are cars from '80 on. Although I did influence many vehicles in the '50's, '60's and '70's, from '80 on we were pursuing a course of far less chrome than anything we've done in the past. If we did chrome, we were using finer sections, smaller in size to mirror accents to body form and not decora-tive pieces. I think the future says that you'll see far less chrome--more functional automobiles. Not necessarily round cars to achieve low co-efficients of drag. It isn't necessary. You can do formal, harsh automobiles and get them at .3 or below. And there are some vehicles coming in '87, in '88, '89 and '90 that will be, for us, projecting the personality of the car divisions involved in these programs. But it

will be a far more adventuresome step than we've taken in the past, plus the fact you're going to see a lot more differential between our car divisions. They will not necessarily share upper structures across three or four divisions.

Q: As you've done in the past?

A: As we've done in the past. They may not necessarily share door panels which essentially telegraphs the side of the car. A quarter panel--the front fenders are merely reflections of the sections that are in the door. So, we're going to have a great deal of differential in our products beginning with '87 and moving on out. We will not only have a difference of appearance, but we'll have different automobiles such as a two-place Cadillac and two-place Buick, and something we are currently referring to as a Space Machine that we will introduce somewhere in '89, that, I think, the public will find a very interesting vehicle. It'll do about anything they want to do with it. It'll carry eight people, you can make a van out of it, you can do just about anything you wish with it. So the variety of products at General Motors will bring to the market in the '80's and early '90's will go beyond anything this corporation has ever attempted.

Q: It must exciting to think of it.

A: It has been an exciting time the last four and five years. And it has been a busy time. We haven't had a chance to go fishing around here. But, hell, the business of creating new products for the consumer is an exciting profession. I've been in this business for 40 years, and to see something on the street that we had been working on five years before and see the numbers grow in sales is a very rewarding experience.

Q: I take it the question of consumer acceptance is paramount in design?

A: Absolutely.

Q: In other words, you're out to sell cars.

A: Absolutely.

Q: It's the bottom line. In this approach to the late '80's and the early '90's, do you feel that the consumer is ready for the electronic revolution?

A: I don't doubt that for a moment. The electronics we use today are essentially used in customer-convenience items such as radio and heat and air, but the automobile of the future will become an electrical, mechanical vehicle. Steering would be electrical. Transmissions will be electrical. The engines are largely controlled by electronics today, and you may even one day have electrical power to the wheels rather than mechanical, so while everyone may think that this product is a mature product, that is by no means true. I only wish that I were a young chap starting today because the excitement I see up the road is going to be something to behold.

Q: Do you foresee in the near future a situation where the driver is now the passenger and that, while he'll give the commands, the actual motion will be conducted by a computer?

A: I don't know what you mean the near future, Dave.

Q: By the end of this century.

A: We're talking about before this century runs out. No, I don't see that. I think the driver will control the vehicle on the street, but I do believe that the driver will not necessarily have to reach for this switch and that button and flip this and punch that. Long before this century is out--the year 2000--I see the driver walking to the car and asking the door to open, and it'll open, and he'll ask for music, and he'll get music, and he'll ask the engine to start, and it will start, and if you're running up the road and it starts to rain, you just ask for wipers and you get them. With a voice-command automobile in modern computer technology, it will probably be impossible for someone who has had four or five cocktails to start his automobile. With a slurred voice, the computer isn't going to react, so there is a safety factor involved in this approach as well. I see this coming within the next ten years. As a matter of fact, I have driven a car that the Buick Motor Division has with this system, and, of course, the computer can be programmed so that if you have two or three family members driving the same automobile, it will react to your wife's voice or your daughter's voice or sounds. That's entirely up to the owner of the vehicle how many people he wants to permit to run that machine.

Q: So the timbre--the tone of the voice--will indicate whether everything is normal or not?

A: That's correct. If you're slightly intoxicated, you're not going to get that automobile started. You'll have to take a cab home, which is a darned good thing for everyone.

Q: So can you say at this point, in the next two decades, General Motors is leaning toward a voice command approach?

A: We are, we are. We're involved with people like Hughes. They are now part of General Motors, and some of their technology is going to filter into what we do here. We're establishing closer links with that group now to understand what they have and how it may be applied here, and I see them making a strong contribution to our future products.

Q: Is this something that you could have foreseen twenty years ago?

A: I don't think any of us thought that we'd be moving this heavily toward electronics in our vehicles twenty years ago.

Q: This quickly?

A: Yes. Perhaps a lot of it was brought on by the oil embargo. You look at the modern automobile today, and even the cooling fan is driven by an electric motor which takes the burden off the engine and gives you better fuel efficiency. All of these things have changed the way we build automobiles.

Q: Did the oil embargo push you, perhaps, faster than you might have into downsizing, into a lower co-efficient of drag, into customer conveniences--ergonomics?

A: Yes. You're correct when you say it pushed us in the downsizing which we may not have done at all had the price of gasoline remained somewhere under a dollar. The American consumer was demanding large automobiles with big engines, and the oil embargo and the government's approach to fuel economy standards with the law out there forced every domestic maker to downsize and lighten their cars. As far as quality and customer convenience items, we're running down that road as a result of the competition we feel from our import friends. They have done a lot in the way of little change pieces in the car where you can keep money and places to put coffee cups, and on the strength of these 250 items, they sell a lot of automobiles. So, naturally, you look at what the competitor is doing and look at your product and--forget the strengths of the product--find the weaknesses and correct those, and that's what we have embarked on in the last five or six years. But now the game is to jump ahead of our competitors--not follow them or be equal to them, but lead them. That's what we're doing for the late '80's and the '90's.

Q: It's remarkable that you always were leaders in many respects--everybody else were followers. And yet, you'd gotten a little stodgy and self-satisfied in the late '60's and early '70's, and now you seem to be out in front of everyone in terms of innovations, creative devices for the consumer. Your market research is no longer saying, "What's good for General Motors is good for the country," which is a cheap shot, but you understand what I'm driving at.

A: Yes, I do. Yes, we were always leaders for a great number of years in our history, but I believe in the late '70's and the early '80's, our competitors started to close the gap. You probably could look at General Motors in that time frame as a sleeping giant, and when we realized that this gap was closing in innovation and appearance, we took it upon ourselves to jump ahead. We weren't comfortable with that. There's a margin we like to maintain relative to competition, and I think we're moving in that direction now.

Q: In that period, were you startled by Ford's coming out of the dark ages, in the sense of design, and deciding to make, as you said, a 180 0 turn and come up with something [more] aerodynamic?

A: No, Dave, we weren't startled because the word travels through [the design] community. We had no idea what the cars were, but we understood that Ford was going to move in an entirely different direc-tion. I don't know how the rest of my team might feel about this, but I, frankly, am delighted that they took another course than following General Motors two or three years later because everything in the country looked alike, and it gives the consumer wider choices. Now they can measure, "Here the Ford product doesn't look anything like General Motors, and Chrysler doesn't look like Ford or G.M., and isn't this the proper way to do business?" And over the long term, this will all sort out as to who has the greatest appeal to the public--what approach are they buying. I don't for a moment believe that we're going to appeal to everyone out there--that's impossible to achieve--but if we can appeal to 60% of the domestic market, we'll be very happy with that.

Q: The whole tradition of General Motors' styling from Harley Earl on down has been a triumph of aesthetic and consumer comfort over the tra-ditional engineering approach to make a solid automobile. In other words, you've successfully merged the two traditions of aesthetically--pleasing and comfortable automobiles merged with a good, solid engi-neering tradition. Earl was able to bridge that gap, and, to some extent, Mr. Mitchell. During your tenure, you don't just design something to look alike, you design something to bring the consumer to the showroom, but when they get there, they've got to get a quality pro-duct.

A: Yes. There are people in our profession, Dave, who look at that 3-dimensional, clay model as created in anybody's studio, not just our own, as a clay model, but there are many of us who look at that clay as steel and glass and plastic and rubber. And, it's got to work, and the glass has to drop, and the engine has to start, and it has to have the proper clearance, and you've got to cool that engine, and you've got to seat those people comfortably. It isn't a piece of art that's going to stay in 'the Detroit Art Museum . It has to be functionally sound. We've got a lot of people who believe exactly that, and we may have a few who look at it as clay, and I can do about anything I want with it, it's pliable. Hell, I can go out there and defy the laws of physics if I want with this particular material, but a professional designer doesn't attack it that way. We have appealed largely to the consumer through aesthetics because the greater majority of consumers do not know a great deal about what is under the hood and how this car is propelled. As long as you put the key in the ignition and it starts, that's fine. That's all they want, and that's what we should give them. We should give them a trouble-free automobile that runs for a 100,000 miles with replacing only a few things, and, if we don't, we're going to lose the ballgame. That's what they're looking for.

Now, how are we able to lead over all those years? You can go back to Harley Earl's time and still live by this approach: it is the young talent we bring in this building that determines what that end product is going to be. When we tour the industrial design schools, our standards are so high--you can go out to Art Center or CCS here in Detroit (Center for Creative Studies), and they may have a graduating class of ten, and we'll select one--only the one who fits our standards. That's the fellow we'll bring aboard even though the need in the building may be for four or five designers. We won't commit to filling those four other spots. We'll take this fellow that meets our stan-dards. We always run light in this organization. We really never achieve the staff necessary to create all the products that General Motors has, but I'd rather have one .300 hitter than five .190 hitters. It keeps the staff strong.

Q: It would be helpful to future students of design, if we could take a case history of a recent, successful General Motors automobile, and, from your standpoint, bring us from the beginning to the conclusion.

A: Something like the Fiero?

Q: That crossed my mind--the Fiero. How that started. Where it began in terms of concept. Did it begin in the engineering department or the product planning department? Did it begin in the design studio, or was it a combination of all three? Was it a team approach?

A: The Fiero was a team approach, and, I guess, you could go back as far as 25 years, and we tried to sell the two-place car for the Pontiac division.

Q: Sell it internally?

A: It was internal--we called all our products XP that weren't in the marketplace, and we're trying to sell something new like a four-place, personalized coupe called the Riviera . It would have an XP number before it had a name, and the Fiero had many XP numbers over the last twenty years. As we came up into the '80's, the opportunity seemed to be right for Pontiac to get into a two-place commuter for a variety of reasons. One, the new Corvette was going to move into a new price structure and a very sophisticated car as far as running gear and appearance--second to none. We believe it's second to none in the world. You can use the name Ferrari, it's a very important name, but this car will do everything a Ferrari will do. As a matter of fact, it'll run a little hotter. So the opportunity was there to do what Pontiac Motor Division was referring to as a two-place, commuter car. It would be extremely difficult to get any group in this building to do a commuter because we believe that if the car is youthful in appearance, you're going to do one hell of a lot better than if you do some stodgy, two-place, little commuter machine, and when we started, we started in one of our advanced rooms.

Pontiac was just putting their team together. They had a fellow named Hulkey Eldicotchi who was in charge of the engineering program. He visited with us many, many times, and we talked about the goals. He was telling us about what power he'd use. It should be mid-engined. We wanted mid-engine, they wanted mid-engine, so we started downstairs in our advanced rooms. All our advanced studios are on the first floor. All the car divisional studios are on the second floor. We had several false starts, admittedly, and then this vehicle started to evolve from a sketch. As time wore on, perhaps, a year in that studio, we refined this form--a very distinctive silhouette. And that's what we were looking for, Dave. We wanted something running down the street that you'd never miss. It had a silhouette that, with one look at it in a crowd of cars, you'd say, "That's a Fiero." We had the silhouette, but we didn't have the face of the vehicle or the tail of the vehicle--the graphics that would telegraph " Pontiac ."

The Pontiac group had now received approval from the corporation to go ahead with the engineering on this car. Not, necessarily, that we were going to market with the vehicle, but to go ahead with the engi-neering. You could spend X number of dollars, and we'll take a look at it again in another six months. When they got that okay, we decided that the program ought to move into our divisional studio, rather than advanced, because those individuals are skilled in creating the Pontiac personality. We move a car upstairs, and with people like Jack Humbert and John Schinella, we went to work and started refining this vehicle--finding the graphics for the rear and the face. The interior group, we cut loose to do the instrument panel and the interior environment. And another six months had passed when Pontiac got the okay to go into pro-duction. Then we dotted all the i's, crossed all the t's up in Pontiac 2 Studio, and the vehicle was released.

Q: Where did this final go-ahead come from?

A: The go-ahead comes from the corporation--the executive committee. They look at our clay, and they look at the cost of doing the vehicle. Then you've got to project volumes to determine if there's any profit in the program. It was called a commuter car all the way through its deve-lopment, but it's anything but a commuter car. It's a two-place, youth-ful, sporty machine.

Q: How did you come by the midship arrangement?

A: Essentially, to produce a two-place vehicle that in no way would mimic the Corvette, and there were two-place vehicles out in the marketplace like the Fiat X-19. It was a mid-engine car and a pretty attractive automobile, but we were confident we could bring out something that was better than that--more distinctive than that. This vehicle, in the year and a half it's been out there, has really appealed to young women. If you note, as you drive down the street and see Fiero's, you'll see a lot of young ladies driving them. My daughter owns one. She's very delighted with it.

Q: Someone in product planning seemed to have decided that you hadn't tapped young, female commuter market.

A: If that was said, I didn't know it. But everyone was involved with developing the concept of the program--the planning people at Pontiac , the planning people in our building, the engineering design community. It was a real team effort. The Pontiac engineers were in our studios more than I'd ever seen on any program, because here was a whole, new machine and a whole new opportunity to give birth to a new personality. That's exciting to a creative team, and it's far easier to do a car that has never existed before than taking a personality you've had for fifty years and projecting it forward. That's a far more dif-ficult assignment.

Q: The Fiero came on strongly as a dashing image, but, apparently, the engineers were a bit conservative about the powering of it.

A: I'm not sure that the engineers were conservative. I think they were being careful, because, in no way, could this car nudge the Corvette. So, to sell the program, you talk about a four-cylinder engine with this kind of performance from zero to sixty, and Corvette is that much better, so they're really not related. They're two different automobiles. This is in the $10,000 field. That's in the $20,000. They're completely apart, and on that basis, the program was filled. But, if you notice, this year we have a V-6 in it, the performance is exciting. And once you've got the car on the marketplace, you can put in more power and go.

Q: It's hindsight, but I wonder why it was underpowered.

A: I don't like the word underpowered. Let me put it this way, the appearance of the vehicle suggested it should go a hell of a lot faster than it did the first year.

Q: The expectations were there.

A: Yes. It just didn't do what it looked like.

Q: So this approach is unique with you. You were able to come up with a completely new concept in a very short time to fill a gap that you previously didn't know existed in the market.

A: That's right.

Q: Did you have any trouble selling the program?

A: Yes, there were some hitches in there, because at that time we were developing the Fiero in '81 and '82, the market went flat. The car actually would have been brought to market a lot sooner had the market remained strong. But the capital wasn't there to invest in the new program, and when the market started moving forward and getting stronger, that's when Pontiac got the okay. We were confident that we could probably beat all records for two-place cars in the first year with that automobile, and we did precisely that. We almost sold 100,000 of them in the first year, and no one has ever done that with a two-place automobile. And we expect to continue to do that.

Q: Do you see General Motors, stylistically, going toward the wedge?

A: Not entirely. We'll use that form in certain segments of the market, and we'll use other approaches in other segments of the market. That's a very diversified market out there. You will not see all General Motors cars being rounded, as an example. The upper level will be more formal than we will be at the lower end of the market. Sports machines may be wedged, and, then again, they may not. You've got to be very flexible in this business. You can't lock in on one approach and say that's the answer. My personal view of what an automobile should look like isn't good enough, because we're not designing for Irv, we're designing for the 15 million customers out there that buy automobiles every year, so our approach has to be diversified.

Q: Could you sum up Irvin Rybicki's career at General Motors, his own personal design philosophy, and what lies ahead for you, personally, in the next ten years.

A: My career at General Motors--a fascinating subject. Damn stimu-lating and exciting. Often, Dave, when I go to some of the industrial design schools and talk to the young people, since my career is winding down I say to them, "If, the day I have to walk out the door, because it's mandatory that officers retire at the age of 65...."

Q: That's still in effect in General Motors?

A: Oh, yes..."and I could walk downstairs into the personnel depart-ment and hire in as a junior designer, I would do precisely that. Because the future is going to be exciting. It is an exciting business. It's never dull, and when you think you know everything there is to know about it, some outside force changes how you approach a design of a vehicle, and you're off with a learning process once again. That's what makes it an exciting profession."

I've served in every studio that General Motors has--Chevrolet, Pontiac, Olds, Buick and Cadillac. I've worked in advanced areas. I found each step along the way stimulating. I learned each time I made a move working with different personalities, different approaches to design. I

tried, in almost every case, to absorb the strengths of the individuals I was working with and forget the weaknesses hoping to build a better Irv Rybicki when it came to becoming a professional designer. I was fortunate enough to move through the ranks from designer to assistant chief designer and chief and up into the front offices--finally in this office. I can't say that any one step or period was better than the other. I enjoyed them all. Being in this office has been exciting in that it's taken me beyond design, because there were the problems of running the total organization from a budget point of view, from a labor management point of view, a personnel point of view. I got involved in all of them, but it was stimulating, nevertheless. Yes, if I could do it over again, I'd stay in the business. I would suggest to any young man who loves automobiles and has some creative skills that it's a good profession to go after. What am I going to in the future?

Q: Yes.

A: I'm not going to sit around in a rocking chair and swat flies, and I do not intend to stay in the profession in spite of what I've just said about going into the personnel office. If I had that opportunity, I would naturally do that, but I'm going to move off into other areas and new challenges and keep myself young and alive and vital and involved.

Q: One more question. Following two rather forceful personalities in this office--Harley Earl who was an incredibly formidable character to many people....

A: Yes, to say the least.

Q: And Bill Mitchell designated heir apparent [because he] was somewhat of the same cut.

A: Yes, he was.

Q: Although these people were marvelously creative, and they hired good people, they were adversarial, in the sense that they were strong personalities, and they were not respecters of authority--they thought their views should be followed, not only by their subordinates, but by the officers of the company. Then a person like yourself comes along, and I have a feeling that the corporation said, "Enough of the adver-sarial relationship. We want someone who will come in with a team approach--who'll work with the whole corporation." Do you think that you have filled that role in your tenure as vice president of design?

A: I do not know till this day, Dave, why I got the job. Whether it was because they were looking for someone who would follow a team approach--that they'd enough of the other--or what the circumstances might have been. I do know this. Over the years, as I watched the two men operate, I believe they were shortchanging themselves because the staff wasn't permitted to really run free. And having worked in all the rooms with a great many creative people and viewed the ideas they had--some were magnificent and never got to market--I've said to myself for a great many years, "If I ever wind up in that front office, I'll let them run, and if they are off the mark, I'll get them back on." But I wasn't going to hold anybody's hand and steer anybody's pencil. I have some pretty strong ideas about what an automobile should look like, but, at the same time, if we talked about the Buick studio and the personality running that room, I want the

cars to reflect what that group believes within a certain General Motors framework. I think it's my job to keep them within that framework but to cut them loose so that what they're doing isn't a Chevrolet or a Pontiac or a Olds--it's pure Buick. I believe that is what has happened in my 8/ years in this office, and we'll see a lot of that in the '80's has produced some very different--looking cars. For me, it's the right approach. I have no idea what the next man will do, and he'll run it his way, and I will wish him the best of luck when I walk out of this office; and he absolutely has a right to run it his way. I did it my way, and I'm delighted with the results.

Q: Thank you. Something you said I very much admired. You said, "I fear no man."

A: That's true.

Q: And that you--while you're not dogmatic in your opinions, you're flexible--you feel that your approach has been the right one over the years.

A: I certainly do. If I had to it over, I would do it precisely the same way.

Q: What final word would you have for young designers coming up in the next couple of decades?

A: Final word for young designers--make your presence felt.

Q: In what way?

A: If you're in a professional design house, such as General Motors design staff, make your presence felt by what you put up there on the wall as a seed of an idea. Communicate--communications are vital in this business. You can sketch ideas, but if you're not talking to your neighbor designer in front of you or behind you or in small meetings in the studios--out of these conversations come a great many strong ideas. I know when I ran studios, Dave--and we work a lot of overtime in this building--overtime hours, after the fellows have had dinner in our dining room, are not all that productive. Now they're fed, and they're a little slow, and I would create meetings in the room and talk about the car we were working on all day long and get them to express their ideas. I found that far more beneficial than getting 45 minutes of work--physical work--out of three hours. I didn't think that was a good buy, so we chatted about the vehicle, and a lot of great things happened out of those little meetings. So that's why I say, "Young men, make your presence felt. Make yourself heard. Don't be afraid to speak up."

Q: Thank you very much.

A: Thank you.

Q: We've been speaking today with Mr. Irvin W. Rybicki who has been for the last 8h years Vice-President of Design for General Motors Corporation.

END