

Interview Log

Interviewee: Norman Owens

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Melissa McLoud

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BEGIN SIDE A

C.B.: Start out - wait a minute. Let me back you up a little bit, please, and tell us who you are and when and where you were born 'cause we've got the recorder on now.

N.O.: You mean now?

C.B.: Tell me - yeah. Tell us your name, 'cause we're recording you now.

N.O.: I am Norman -

C.B.: You don't have to lean up. That's okay. It'll get you.

N.O.: Oh. You ready?

C.B.: Yup.

N.O.: I am Norman Owens. I -

C.B.: When were you born?

N.O.: I was born in Detroit, Michigan, May the 0, 1912. My father was a boatsman, and I enjoyed building with him. And in 1926, he sailed with his boat and his family leaving Detroit, and we sailed up into Long Island Sound, and then down to the Chesapeake Bay, and the children were all young and school age at that time, so we stopped in Annapolis, and he eventually started a small boat business, which floundered a little bit during the depression. And my brother and I started a new company in 1932 to make standardized pleasure boats. We were mainly interested in trying to get the mass market to buy boats. Boats were very expensive at that time, and we were very anxious to get the price down so that we could develop a production boat that would be of low cost and big demand. And we were very successful at doing this.

C.B.: How were you successful? How did you make yourself so successful?

N.O.: Well the main reason was a lot of hard work analyzing the market just to what boat would give us the maximum volume, and then at that time, we were interested in dollar volume, but not unit volume. So we decided on a small cruising boat, about 26 feet.

C.B.: How did you decide that?

N.O.: Well it was a market study, which was quite important to analyze what the boating public desired in a boat. And building a boat, wooden boats are quite a skilled labor job, and there isn't really too many skilled boat builders. So by having an assembly line, we could break the work tasks down to a repetitive thing where the worker would become very skilled in the job that he's doing so that he would actually be better than a boat builder that could do the whole thing.

C.B.: How many people, how many of these positions did it take to build a boat then?

N.O.: That's an interesting point. The assembly lines had to be steady to - so that the thing would flow continuously. And our - we were unique in making steel jigs for the various parts of the boat. And this way, the worker would be working at the floor level, which would save him time to go on up and down a ladder and whatnot, and then the sub-assemblies were uniquely assembled. You normally start off by laying the keel of the boat. That's a normal procedure for building one boat. But we had this analyzed to the point where we would build the deck at the level of the floor and then turn it over and put it in a jig, and then put the interior on the deck, and then the final thing would be the planking and closing the boat. And this saved a tremendous amount of labor. And the - we were pioneers in the mass production of wooden boats in the thing.

C.B.: How did you get the idea - you copied the idea of doing the assembly line from the automobile industry.

N.O.: Yes. That's -

C.B.: How did you get the idea to copy the automobile industry? Were you the first boat builders, motor boat builders to do that?

N.O.: Yes, we were. We started our business in '32, and one of the engine manufacturers was very friendly with us, and he invited me to go to the Chicago World's Fair.

C.B.: Wow.

N.O.: I think that was '33 at the Chicago World Fair, they had, Chrysler had an assembly line, a miniature assembly line, for automobiles. And you had the whole thing all laid out so that it gave us an objective to work to on the thing. But we built from the deck up rather than building from the keel up.

C.B.: Okay.

N.O.: And we'd make the component, we'd make the interior parts out of the boat and then place them into the mold, into the - on the deck. And this way, normally the worker carries a part up and puts it in the boat and then comes down again. So he spends most of his time non-productively. You do a time and motion study on an old process, and you know that this is so very much superior. And we were very fortunate. We had low-cost boats, and we were - we built more units of boats than any other builder in the thing.

M.M.: Do you credit the assembly line? Was the assembly line the reason that you were able to do it so inexpensively do you think?

N.O.: Yes. And not only do it inexpensively, but do it period. If you tried to produce this number of boats with boat builders, first of all, you couldn't find the number of boat builders to do it, and the -

C.B.: Might've taken years, probably.

N.O.: Yeah. It was the only way to do this thing, and it was one line of boats that we had a boat come off every 15 minutes. And this was including putting the parts on the engine to make a marine engine out of the thing. We made the - I guess the amazing thing on the assembly line on this 15-minute thing was the painting. The boat received three coats of paint, and three coats of varnish. And this was done by having a varnishing spray booth at one end of the assembly line. And then we had - the boat would go into an oven, or it would bake so that the finish would take much less time to dry. And at the other end, they had a paint spray booth, and then would, they would spray it there and then send the boat back to the varnish, through the oven, back to the varnish. And then it would be varnished again, and this would be repeated three times. And then it would go on the finishing assembly line -

C.B.: That's amazing.

N.O.: -- where the hardware and the finishing parts would be put on the boat.

C.B.: Was this, was your assembly line a little bit of trial and error? Did you have - what was it like when you first set up shop, first set up your assembly line?

N.O.: It was - it was a process of learning, yes, it was.

C.B.: And you were in charge, you were the production manager, so you were the one that had to make it happen?

N.O.: I was the production manager, and the designer and (laughter), and it was the only way that we could build the large number of boats that we built. It was the only way that this could be done.

M.M.: What were the - when you first put that assembly line together, what worked that first couple of years, and what was the really bad - what were the real mess-ups that happened in the assembly line the first years? Were there - did things work immediately in certain parts, and in others, you had to tinker with and re-think?

N.O.: Well, you know, we started in '32. My father's business went broke. He built boats and delivered them to the people, and they didn't have money to pay for them, and -

M.M.: This was -

N.O.: -- they got notes, and when the notes came due, they didn't pay the notes. So we started off very, with very little money in a very small way. And I personally did a lot of the work on the first boat we built, and the - I had the idea of building the boat upside down because it's easier to plank a boat in - hitting down rather than laying on your back and trying to push a plank up to the - it's very difficult. I had to do this on the sailboat, but it's very hard. And my first boat, I didn't have, I didn't put down the deck. I had - I just really built a boat, a hull of a boat. And then I rolled the hull of a boat over and put the deck on it, and did the work in an ordinary fashion that a boat builder would proceed. And I think our first year's effort and sails on the thing was very small. And the monetary reward wasn't very good. (Laughter.) And we weren't sure we were going to be boat builders. (Laughter.) We weren't sure that maybe this, maybe this was the wrong business to be in. But we learned through - I think our next stab at it was to make 10 units, and it would be 10 at a time rather than we were building one at a time. And so we made the 10, and this was encouraging to us. And then we started, we moved to Baltimore and made this an assembly line. And that was where we started making the steel jigs and the deck upside down, but there was a great learning process, yeah, in the thing.

M.M.: Okay. When you went - I've heard, Jack told me part of the story of the 1937 boat show, of going up to the boat show with your boat. That was when you were still in Annapolis, I think, and then you succeeded with that boat, and then you moved to Baltimore. Is that the way that it happened?

N.O.: No. We went to Baltimore in, I guess, the end of '35.

M.M.: Okay. So you took that - all right.

N.O.: And we started the - we bought a tomato field on the waterfront in Baltimore. We pitched a tent, and we made the building. And as we made the building, we started this boat.

M.M.: Okay.

N.O.: `Cause we had - the show was in January. And to get a boat for the show in January, it was, we had to make a building and a boat. So the first boat out was the showboat. And this was a unique design that - it's the first time that the cockpit of the boat was, it was enclosed to make it convertible for either daytime use or nighttime. And this was a big hit. And we built that boat right up to the time when the war production said we couldn't build anymore of those.

C.B.: So how did we - can you tell us a story about taking that first boat to the show?

N.O.: You mean -

C.B.: The boat under the tent. Your first boat. What - how did it get to the show?

N.O.: Well it was trucked up to the show. As a matter of fact, it was trucked to the - we finally got the boat together, and then trucked it up to the show in New York. And my brother, who was a crackerjack salesman, was set up to sell the boat at the show. And in putting the boat in the show, it was winter, and the room would be warm, and outside would be cold. He got the boat, and after we had the thing set up, he had to go to the hospital. And I had to come up and do the selling. (Laughter.)

C.B.: And what did you say about your boat?

N.O.: Yeah.

C.B.: What did you tell people about your boat?

N.O.: Well we had to explain. The boat had Venetian blinds so that if you're at a dock and you want to convert it into a sleeping area, you can pull the blinds and get privacy. But the people would come aboard, this was the first time they'd ever seen Venetian blinds in a boat. They'd shake the Venetian blinds. (Laughter.) Then you'd have to explain to them that was very important to have the Venetian blind for privacy. It was, it was very interesting.

C.B.: How many orders did you get that day?

N.O.: (Laughter.) The show lasts a week, and we got about 10 orders on the show. It was, it was - New York was our biggest sales area. We would sell 50 percent of our production within 100, about a 100-mile radius of New York. But we were selling, we were selling to California. We had a pretty good sales opportunity in California because we could put them on a ship to Baltimore and ship them around at a lower cost than trucking or shipping by rail. Rail was the worst way to ship the boats because they were abused so badly on the rail.

C.B.: So you went back with your 10 orders, and your tent is waiting for you. How did you get your 10 boats built?

N.O.: We just, we just started up the assembly line.

C.B.: How many stations did you have in your assembly line? How many stops?

N.O.: This-yeah. This varied depending upon the output of the boat. The one where we had planned to build her in 15 minutes, we would have about - well 40 boats on the assembly line. And half of this would be in the paint shop. The supervision of the assembly line, you had the hull superintendent, and it went from the hull superintendent to the paint, and then the finishing.

C.B.: Did you work, did they work year-round, 12 months a year?

N.O.: Well you, that's a big object in the boat business is to try to keep the, your operation together during the wintertime.

C.B.: Uh-huh (Affirmative).

N.O.: And this is also one of the big labor problems. The sales would fall off in the winter, but we always figured we could, we could build twice as many boats as the amount of later that they bring through the winter. We could double our employees. And Baltimore was a good labor market because there was plenty of labor available. And if you laid them off in the fall, there were other businesses that could pick them up, and so there employment was pretty good, where in Annapolis if you lay off a large number of people, there's no work for them, and you get a reputation of a job that's only a short duration. One of the other unique things about the assembly line is what they teach in

business courses in colleges now is material just in time. And this is the biggest thing in assembly line is to have the worker so that he doesn't have to look for something. What he needs is right by him handy so that he can put it in the thing without a lot of lost labor. So that material control became a very major function in our assembly line. The laying out of it is one thing, but the management of it required is material control. And we - this was another thing that we learned that by degrees, but I made friends with the management at the Chevrolet assembly plant in Baltimore whose factory was fairly close to our factory. And they showed us their system and said here, you could use anything that we got. And we took a lot of what they had, and this was very unique really that each individual part had a number, and a lead factor as to how much - when that had to be started so that it would end up in the boat at the proper time with the minimum amount of inventory in the manufacturing. And then we also managed to get some of the Chevrolet assembly line managers. The Chevrolet assembly line was very heavily unioned, and the union would, on a couple occasions, had some of their supervision relieved, and we were lucky enough to pick them up. (Laughter.) And these guys were pretty tough about, you know, seeing that the work was done, all that sort of stuff. But and then we had - we worked on what was called a standard cost system so that every function had a given amount of time that that part or - would take. And in the case of, say, the mill department which did the cutting up of the pieces, they would have an accumulation of hours that it would take to make a work order. And they had to stick to that, and the superintendent of the hull department, he had a certain number of man hours to do each individual job. So he was held responsible for doing the thing. It was a very efficient, very efficient operation.

M.M.: Could you - what I want to ask you to do is Ceres and I have never seen a boat assembly line before. And we have Nomad. Create from the beginning of Nomad, from the very first step in that assembly line, what are the - what are the steps. Lead us through how Nomad was built. What does it sound like? What does it smell like? What are the men who are doing it like, and what are the big steps? Like can you make a movie for us? Describe (Laughter), describe Nomad.

N.O.: My brother put together a booklet that sort of explains some of this thing. This was the beginning of - this is my father's. This is a boat that was unique as a sedan with the Venetian blinds. This was convertible into a bedroom at night, and a cockpit or cabin in the daytime, enclosed cabin. And this became very popular. It was very -

C.B.: Why do you think people like that? Were there no boats like that before or -

N.O.: No, this was our - we were unique in this design. This was a variation of that, which is sort of the same thing. We tried to standardize on - this is, this is the boat, the way the boat was put together, as you can imagine, upside down, the deck was put down, and then these interior parts would be put in the boat. And then the boat plank, it would be quite hard and expensive and also take a lot of floor space to make a miniature assembly line.

C.B.: How big was the assembly line that you saw when you were in Chicago? Was that a full scale assembly line?

N.O.: No. It was, it was very small, and it had maybe 10 automobiles in it. So they sort of covered the whole thing in very compact - the assembly lines, like the Chevrolet assembly line, they'd put a car out about every five minutes or so, the - this was relatively, relatively slow. This was - this is a story about -

C.B.: How did you come up with the word sedan to describe your boat?

N.O.: You know, I don't really - I can't recall how that word was chosen. But it was - it described pretty much the function of the - of our boat, and it was unique, the use of the word was unique to - they have a sedan automobile, which is sort of similar to it.

C.B.: How is a sedan automobile similar? What is a sedan?

N.O.: A sedan (Laughter) - a sedan car, of course, as you know, is - seats four, two seats forward and two seats aft, in back, with four doors. And while it wasn't convertible, I guess we picked the word up from the, copied it from the automobile thing. It was very little similarity.

C.B.: Since your company was a family company, did you all get together and say what are we going to call this boat? Or did - like who was in charge of making the decisions, or did you fight it out, or did you laugh it out? Did you vote?

N.O.: We would have - there were three brothers that were interested in this. Chuck, the oldest brother, he was in charge of sales, and I was in charge of manufacturing and personnel and design, and the other brother was in charge of purchasing and accounting and - but yeah, when it came to like advertising and choosing a name, well we all get together and throw it around, and hope we had a good - chose a good name. There was another name that we made, we called Seakind, which was trying to describe a boat that was friendly, or comfortable when you're out in the sea. And we thought we had a boat that was sea kind, and we, I think we sort of used that name, the first ones that -

M.M.: How about - two questions. Nomad. What does Nomad, where did the name Nomad come from, and what did it mean to you?

N.O.: I think I may have missed that meeting. (Laughter.) I don't think they had me on it. The - some of the naming of the boats was very difficult to - yeah, I don't think I was in on Nomad. (Laughter.)

C.B.: And how did you advertise your boats? How did you, how did your brother market them? You sold so many. How did that happen?

N.O.: Well he was very lucky that our father was the sales manager in Westinghouse, and he was an electrical engineer, graduate electrical engineer, and he was the one that really taught me how to design and build a boat, but he taught my brother how to sell. And his first thing was by direct mail, which was making a mailing piece - the selling of a boat is like a pyramid. You have the people at the bottom, and at the top of the pyramid is the sale. Well you can cover most of the people by advertising. That's your biggest coverage. So you have to do a little bit of advertising. And then as the number of people are reduced, say that they, some of them make an inquiry on the thing. Well then you have a level of writing a personal letter to them, and then you try to create a preference. And you have literature that explains the boat and so forth. And then the final one is the direct contact and selling. And my father was very good at instructing my brother how to sell. (Laughter.) And he was an excellent salesman. We were very lucky in the first part of the business to have him as a salesman.

C.B.: Did you ever, was there ever a moment when he came home and said I sold 100 boats, and you thought how are we going to make all these boats? Or did you always think no problem? (Laughter.)

N.O.: We were always anxious to hear of a big order. (Laughter.)

C.B.: What did that mean to you? What did you have to do then?

N.O.: Well that meant we had work to do, which was the object of this thing. The business grew. We doubled almost every year from '33, and after the war, we organized our sales department. We got a dollar year man that was working in Washington that was in the Chrysler sales department, and we hired him, and he set us up a national sales thing with dealers and broke the country down into districts, we had district sales managers, and sales managers. This was, he was also very good. And fortunately, my brother, he was a different style of selling. (Laughter.) He sort of took over advertising. But this fellow was really great. He was a terrific salesman. But it wasn't, it wasn't usually a question of, look, I got all these orders. The problem was we want a lot of orders. And sometimes we would have boats finished that weren't sold. And then we would visit him, and ask him what, how's he going to get rid of them. (Laughter.) And I've seen this fellow on a cold day, the sweat would roll off his face from the pressure of the thing. He was - he was a great guy. Name was Jack Frost. (Laughter.)

C.B.: Good name.

N.O.: Wonderful, wonderful person. Unfortunately, he passed on with heart trouble.

C.B.: What was your favorite boat that you built? Did you have a favorite boat?

N.O.: Well, yeah, I guess the Cutter was, a sailboat, was - I used the powerboats, but not to a great degree. The sailboats were something that we used to sail all over the Chesapeake Bay and the races, and win all the races. (Laughter.)

C.B.: Tell us about that boat, the Cutter. How many did you make? Or -

N.O.: Well it was very interesting. There is an association on the bay called Chesapeake Bay Yacht Racing Association. And they were - I don't now really when they started, but anyway, we were racing as crew with some of the people before the war. And after the war, we bought some racing boats. And we'd sail them for about a year and then sell them. And we had an R boat, and Q boats, and 8 meters. And it was a group in the association that wanted a standardized sailing boat, racing boat. And we said well we're, we'd be interested in making the thing. And so we designed this boat and built it, and it was an extremely popular boat. It won all the races. Here's a picture of me getting the top trophy for the year, winning the highest point. This was the Cutter. This is my crew. These are two of my children.

C.B.: Who's this?

N.O.: That's the girl that, one that lives here.

M.M.: Why was it such a great sailboat?

N.O.: Why?

M.M.: Why was it such a great sailboat? Why did it win races?

N.O.: Well that's - it's like a Mona Lisa painting or Gauguin. There's some degree of skill in designing the boat. And after we sold the company, I still had this lust to design a superior boat. And this class of sailboat that I pursued, the design was an important part of it, and it was fun for me to fiddle with the design. And then I would have the - most the racing was done in Europe. And the dollar was very valuable in the 60's. And so we could build a boat in Europe very reasonably, about half what it would cost to build one here. So I could design it and have it built there, and then go over with family and race it and sail it. And I can show you the pictures of racing with the King of Norway, and being invited on his yacht. (Laughter.) The King of Norway, he was a competitor and a friend, and the Prince of Norway, he also sailed, and there was Aga Khan, a cousin in Switzerland

that was part of the racing group. And it was a very nice way to travel in Europe because they'd invite you, you know, to their homes and parties and whatnot. So aside from having the fun of sailing, it was a nice way to travel.

C.B.: So was the Cutter an assembly line boat?

N.O.: Yeah.

C.B.: Did it become an assembly line boat?

N.O.: Yeah.

C.B.: It did.

N.O.: Yeah.

C.B.: And you designed it to go fast.

N.O.: That's right. It was designed to - and that had a unique method of construction also. We built that from the deck up. Don't know whether I have a picture of that or not, but that was done in the same manner of construction that we had for the powerboats. We didn't build as many of those as we did the powerboats on that end. And then the - we needed a plant facility, and we weren't really making a great deal of money on the sailboats, so we licensed Hinckley to make them. And Hinckley now makes them as Hinckley 41.

C.B.: Oh.

N.O.: He made a plastic boat. Took one of our boats and made a fiberglass mold and makes a plastic boat out of it.

C.B.: I lost my train of thought.

M.M.: Was the - talk about the workers in the plant that made the powerboats, and the workers that made the sailboats. Same men, different men?

N.O.: They were, the workers were trained to learn a specific job.

M.M.: Okay.

N.O.: And they became very good at this because it was a repetitive thing. But the - because of the breakdown of the jobs, it was fairly easy to take a worker from one area and put him on another one. The learning period was relatively small.

M.M.: Okay.

N.O.: And even we could take a man off the street, an unskilled person, and his training period would be relatively small.

M.M.: Were the workers in Baltimore a particular ethnic group?

N.O.: Yeah.

M.M.: There were a lot of immigrants in Baltimore. Talk to us about that.

N.O.: We were, our location of our plant was in Eastern Baltimore. We were right in between, the Bethlehem Steel was a little to the east of us, and the Chevrolet assembly plant was a little to the west. But it's a big -- ethnic workers in Eastern Baltimore are Polish. And they're very good workers. They were excellent, yeah.

M.M.: So you benefited from them being there.

N.O.: Yeah.

C.B.: Do you think that's because they have a history of craftsmanship in their own culture?

N.O.: Yeah. A history of, you know, getting a job here and learning that job, and performing it. And then maybe being relieved of that, having to go someplace else. They were very good factory workers. Very lucky.

C.B.: Did you get the same guys back each year after they got laid off? Would they all, or most of them come back again?

N.O.: Yes. A lot of them would come back. Most of the ones that stayed on were Polish workers. They were - we did, after the war, we made a plant in York, Pennsylvania. The biggest boat plant that's ever been built. It was, it was large enough to put the area of about seven football fields in the plant. And we had assembly lines in this plant. And the end assembly line had a swimming pool where the boat would go in, and had shower heads overhead to assimilate rain. So they got - they start the engine up, and - there's a pretty boat. But we went up there 'cause of the German workers. They had the Amish, and the German. And it was interesting that the Baltimore guys could pick up a job quicker, maybe a week training, they would have this thing learned, and skillful. And in York, it would take them a little longer because this might've been our plant was newer. But anyway, it would take them a little bit longer. But after they learned it, they would keep improving. And improvements would go on and on. The Baltimore worker, when he learned a job -

(END SIDE A.)

(BEGIN SIDE B.)

C.B.: I don't want to miss anything for posterity here.

N.O.: We made the sedan, and then we made a, we tried to build a boat that would be more economical for the average person to buy. And that was the model that we had the assembly line where one came off for 15 minutes. We had two models going in that particular plant.

C.B.: Do you remember how many of those you ultimately sold, the little - the ones you made every 15 minutes?

N.O.: I've built about 40,000 boats in my -- (Laughter). Personally, I think I made the first boat I ever - in 1932, I may have had 75 percent of the labor in. And this sailboat was, had almost all labor in that one. And then I made another fiberglass sailboat. But under direct supervision, I had about 40 boats. We made 2,500 landing boats during World War II. It was the one that took the boys ashore, and the front went down, and we started delivering that in Africa, and then it went into Italy, and then to France, and then that went in the Pacific. And then we made a Minesweeper for the Korean War. The Minesweeper was a little out of our field, but they stopped the pleasure boat business from using critical material. We went to the Navy and said what do you got for us to do? And they said the only thing we got is a Minesweeper. So we said oh, my gosh, we've never built a Minesweeper. But I knew how much it was costing us per pound to make a boat, and I took the weight of the Minesweeper and multiplied it by this thing, and the price was very close, but it was a renegotiated contract. And the Navy called us over, and we had heard that the other builders were about 10 percent higher than what we were. So we walked into the renegotiation group and said gee, we made a mistake in our bid. We've got to raise our price. They said well you might lose the business. We said well, we'll take a chance in it. We got the - we were awarded the contract, and we got a letter from the Admiral congratulating us on what a great boat it was. It was a very sophisticated boat because of the electronics, had a degaussing system so that the magnetic mine wouldn't explode. And this would vary as it went through the magnetic curve of the

earth. The earth - the North Pole sends out signals, and as the boat would turn, the degree of degaussing would vary.

C.B.: Did the Navy teach you how to build those boats, or did you figure it out?

N.O.: No. I'm an experienced boat builder. I'm one of the few. (Laughter.)

C.B.: Well I meant more like with the mines and the magnetic fields and stuff. That was not something you'd been doing.

N.O.: Oh, even the Navy didn't know about the - like General Electric engineers would come in, and they would do their sophisticated thing.

C.B.: Okay.

M.M.: You know, you were just talking about being an experienced boat builder, and one of the things that we haven't asked you is how did you learn to build boats? Did your dad teach you?

N.O.: Yeah. I started sailing with my father, and then when he started his business, he started building outboard boats, and he needed somebody to race the boats. And I was, I started when I was about 16 racing these little boats, and it was a lot of fun, and we were very successful. And there was a scarcity of labor in Annapolis in the springtime. So I would, I would knock off from school, and go help my father. (Laughter.) And I guess I started when I was about 18. (Laughter.) And the thing, the - we learned a whole, he taught me the whole thing from the drawing of the boats to the construction of it.

C.B.: And did you design all the Owens boats? Were you the chief designer on the whole Owens fleet?

N.O.: I thought I was. (Laughter.) I had, I had - at the beginning, that was the whole thing. But as it went on, I had an engineering department that was, I had like a project engineer for each boat. And he had responsibility of - his main responsibility was supplying the engineering for the material control. This was - and then, you know, see where, if a part didn't go in right or something, this sort of thing. The - I had project engineers. And then when it came to - we had loftsmen that where the boat was laid down full size and individual pieces would be made from the, from the loft. These people are very skilled, and I had good control over those people, and they would work from my drawings on the thing. But we had about, at one time, we had about 1,000 employees on the job.

M.M.: How long was your apprenticeship with your father? How long - you started when you were 18. How long before he thought you knew what you were doing?

N.O.: Well the - I would, I would sort of leave school in the spring, and I guess I started about 18. And then his business, his business got bigger, and when -- he developed prostate cancer in '32, and then he died in '33.

M.M.: Pretty young.

N.O.: So he - I used to help him, I was his helper up to that time. But after that, he was sort of disabled. And I, I inherited the responsibility (Laughter).

C.B.: Could we take you back to racing a minute? I was wondering just to talk to you a little bit about racing 'cause you said that was so much fun when you did the motorboat racing and then you talked about the cutter. What is it about racing that you enjoy, or what is it like to race one of your cutters? How many crew do you need, what do you do?

N.O.: Well sailing is a challenging - a very challenging sport. You can enjoy sailing just by going out and knocking around. But when you, the skill of trying to be able to do the -

set the sails better or something than your competitor, it becomes interesting. There are all kinds of variations that you have to consider. You got the wind and the tide, and the wind might be blowing better over there, or better over here. So you have to study the wind. And then the tide is different in different parts of the bay. The Chesapeake Bay is very unique in having a great variety of currents. And at one time, you could have like a flood tide, and the - in one part of the bay, the flood would be, the shallow water, the flood moves sooner and faster. And then in the latter part of the flood, the deep water keeps moving, and the shallow water may even be going ebbing, may be going the other way. So you have to study this thing. And I was quite a student of the tidal currents in the Chesapeake. I can remember one race up in Long Island Sound. They had the American Yacht Club, they had a race from Bird's Island over to Shelter Island, which was the outer end of the island where the island opens up into the Ocean, sort of. And this was - the race started in the morning, and it was the beginning of the ebb. And we had to sail out to a buoy, and the sail over for Shelter Island. Well I noticed in sailing out to this buoy that we were being set very badly toward Shelter Island. And this was shallow water. The deep water hadn't been moved as fast. The whole fleet went out to this buoy, and then they kept going. And I turned the buoy and took this current and went over the current, but this took us over a shoal. (Laughter.) And there was a competitor of ours that was designed sort of specifically to beat our boat. And this fellow sailing it, he followed me, and I went across this shoal, and I didn't know if I was going to hit bottom or not, but he came right by and said he had the same thing. Well anyway, when we got out where these other boats were, we were so far ahead of them that it was amazing. It was all because of this current that was in the shore.

C.B.: And you knew how to read it.

N.O.: Yeah. In the Chesapeake, we had a number of cases where I remember one of my competitors was, we were going up the Chester River. And it must've been an ebb tide, the tide was coming out. And this fellow was a little ahead of me, and he was on the starboard tack which has the right-of-way over a boat on a port tack. I was on the port tack, he was on the starboard. We were about the same. But I wanted to get in shore where there was less current, so I went under his stern, I lost distance to go under his stern, and go in shore. But when I knew when I did this that I had him licked because I'd be coming out on the starboard. He would have to - when we met again, he'd have to go about or else go underneath me. And I was - if he went underneath, I would've gone right about and followed him in. But anyway, the racing is just, it's a fascinating thing because it's so many factors involved. And then when the race is over, you know, you think well gee, I should've done this or that.

M.M.: Can you show us some of the pictures of racing in Norway?

N.O.: Yeah. I've got - let me see. This is, that's a Norwegian flag on this boat. This was, this is a rule. De Nosci Veritas, that's a European society that gives you your certificate of authenticity which you can design your boat to and race to. I don't know why that's in there. That's my brother. He passed on. This is Hungko (phonetic) where King Olaf has his - this is the King's summer home. We would race out in here in the Kattegat out in the North Sea.

M.M.: How is racing in the North Sea different from racing in the Chesapeake?

N.O.: You know it's entirely, entirely different. You've got to learn the peculiarities of every place where you race. It was, there was a race across a large expanse of water, over this way. This is the entrance of the Oslofjorden where it goes up to Oslo. And our boat was built in Fredrikstad which is this little town down in here. And the builder was late in building the boat, and he gave it to us, and I had to take my crew with my children, and we went from here over there. And it was in the North Sea, and it was a storm. And I thought this was going to be the end of - the water was about 45 degrees, very cold, so you know you'd last about a half an hour in the water. And the shores were rocks that were 100 feet up in the air, no beach, couldn't land the boat and sit on a beach. And there was no other boats around. It wasn't like the Chesapeake Bay, *full* of boats.

C.B.: Was the bay always *full* of boats?

N.O.: The bay is, the bay is so *full* of boats that - yeah, you know, they come out of every river that has stream. (Laughter.) But anyway, we managed to - the waves would hit the boat, and most of the sea would go over the boat. These were open boats, and I had a big bilge pump in there, and fortunately, we managed to keep dry, and then I got over behind the sea and went in. But I thought this was going to be the end of me and my family. But, yeah, the Chesapeake is just loaded with pleasure boats. And every river just pours the boats out into the Chesapeake Bay on the weekends.

M.M.: When did that start? Do you remember in 19 - in '32 when you were first -

N.O.: When we sailed, my father sailed down to Annapolis in '26, we had the only sailboat in the Severn River. The only other sailboats were the skipjacks, the oyster boats. And they would anchor in the harbor, and the Annapolis Yacht Club was a rowing club, they had shells, and my father had the first sailboat The - and then he built a boat in his backyard, and my brother and I used to take it out, and the Naval Academy had a little boat called a Half Raider. It was a very poor sailing boat. We would go circles around the sailboat. And the midshipmen would have their girlfriends in their boats, you know, and we'd sort of embarrass them. And the - somebody at the Naval Academy called my father up and wanted to know if he was the owner of this little blue sailboat. And he thought it was - we'd, of course, tell our father about our exploits. (Laughter.) And he said, yes, I'm the owner, and put - they said they would like to have some boats like that, and you could you make him some. He said yeah. That sort of started off in business. He made the first six - what's it called, knockabouts. And then he had a little business, little group of employees that were - so he kept building boats. And he didn't really pay too much attention to the thing. But anyway, this is, going back to sailing, this is a Jubilee Regatta in Copenhagen.

C.B.: Hundred years.

N.O.: Two hundred, I think it is. 1866 - oh, 100 years, you're right. Anyway, this was the course out here in the thing, and these are some of the invitations that went along with the thing. This was -

C.B.: The Danish Yacht Club.

N.O.: Yeah, that's the yacht club. This one is - farewell dance, I guess that's at the yacht club also. Now this was a charter. This was a book put out by the Danish thing. These were the guests of honor. It was about, about two-thirds of the royalty of Europe -

C.B.: Absolutely.

N.O.: -- that were in this.

C.B.: King of Spain.

N.O.: And here's a party ship from the -

C.B.: You're right. Denmark.

N.O.: These were, these were the other attendants in the - these were competitors. They had a tremendous number of boats in the thing. The - our class of boat, we had about a hundred boats that were racing. And then they had another boat that was just about the same size called a dragon. And we were on the same course, the same area. And our class, we'd be ahead of the dragons to the windward mark. They started them about the same time. And when you got around the hundred mark, you had to come down, and all these other boats were coming up. There would be 300 boats going this way, and you'd have to get through them. And, you know, they have right-of-way rules and whatnot so you have to, you know, you should be able to predict what the guy's going to do because it's like a car, you know, you go to the right. And the - but anyway, that was very exciting, just ducking the boats. And this was American Ambassador. This was somebody else. And then this was the Stanford Yacht Club. We used to go over on the Norwegian line, and this is my, one of my crew, son, he's winning the eating contest.

C.B.: He is. Great.

N.O.: (Laughter.) This is my youngest boy, this was a captain - this was a captain's party or something.

C.B.: What a wonderful experience you gave your family.

N.O.: Yeah, it was great. And this is my family here. That's me, and this is - that's the youngest boy.

M.M.: Is that Mitch?

N.O.: This is Mitch. This is Michael, and that's Norman.

M.M.: Okay. We know - we know Mitch. We never met the other two. Mitch looks like that now.

C.B.: Just like that.

N.O.: Yeah. This my daughter. This was -

C.B.: Beautiful. You have a beautiful family.

N.O.: And this was racing in Stanford. And that was one of the boats. This is -

C.B.: Uh-huh (Affirmative). Oh, yeah.

N.O.: This is putting over one of my boats in Norway. I designed - they built them over there. This was our class. This is some more invitations. King - Danish Yacht Club. This is, that's the guy that won the thing over there.

C.B.: You didn't win?

N.O.: You know, I won so much in the Chesapeake Bay. They did everything possible to have me lose or kicked out of the race or something. They called me professional, all kinds of things. So I thought it would be, I would de-emphasize winning.

C.B.: So you got invited back, right?

N.O.: Be a better friend. (Laughter.)

C.B.: Uh-huh (Affirmative).

N.O.: So I was a good friend of the - this is Loch Lomond in Geneva. Raced out there. The Aga Khan had a thing over - I built a boat in Korsfjorden, which is right around here somewhere. The French thing cuts through.

M.M.: Right here.

N.O.: Oh, there it is, yeah, right there. I built a boat there, and we raced it down in Cannes. But - and when I was visiting there, the guy said that there was a chateau on the thing that was up for sale, and he thought I should buy it. I should buy it. (Laughter.) I didn't buy it. But I missed a lot of opportunities.

C.B.: Now do you still live around the bay at all? Do you come up to the bay? Do you have a house there?

N.O.: You know, I'm 90 now. I can barely get around.

C.B.: Well you're pretty spry.

N.O.: I wish - I gave up sailing at the last World's Championship, which was '88. And I - this was a girlfriend of mine in Houston.

C.B.: Oh. Well, see, you got a girlfriend.

N.O.: And here I am.

C.B.: Oh, how cute.

M.M.: So you live in Houston.

C.B.: That is a great picture.

N.O.: This is a trip on the canal from the Thousand Islands up to Quebec. And it was put on by the Antique Boat people in -

C.B.: The Chesapeake Bay group? Or there's two -

N.O.: No, it's a very nice -

C.B.: Antique and Classic Boat Club? Is that it?

N.O.: Yeah. In Clayton.

C.B.: Uh-huh (Affirmative).

N.O.: Clayton, New York. And they had this tour on the thing, and we spent the night in a motel, and then when we got to Quebec, I ran into an Owens boat. (Laughter.)

C.B.: Sure did. That's neat. Well we've certainly run into people when we said we were coming to visit you, every single person we mentioned it to seem like said oh, yeah, my neighbors had an Owens, or my dad had an Owens.

N.O.: This is Cannes, France. We raced in Cannes. This was one of my crew. This was my wife. And that's a design, a competitive designer. He's a Swedish guy. This is Neufchatel Swiss champion of Europe. Here we're testing a boat in the Navy test tank over in Washington, D.C. That's - they were tank tested. This is one I made in -

C.B.: Oh, that's beautiful.

N.O.: Yeah.

C.B.: Wow. What a great picture.

N.O.: The spinnaker was made in Paris. Herbello (phonetic), famous spinnaker maker. This is construction drawing I had to have approved by the society I made up. And this is some more of the building of - this was the launching of the boat here. This was a young lady christening, breaking the champagne on it. That's Houston. This is in the Bahamas, we race down in the Bahamas. This was a good friend of mine. This was my oldest boy. I had twins first. Mitchell and Michael are twins. They don't look alike at all, but they - this is Norway. This is the boat - I don't think I have these pictures.

C.B.: Looks like this might've been for a little booklet or something.

N.O.: This was, this was a tank test for the Navy.

C.B.: These are the layouts for that.

N.O.: Yeah.

C.B.: That's what that is.

N.O.: I haven't really spent too much time organizing this thing.

C.B.: At least you saved it. Some people throw everything away.

N.O.: Well I've thrown most of mine away, unfortunately.

C.B.: But do you have drawings from your boats? Your cutter -

N.O.: I have some. I don't really have too many. This was a very interesting letter that - my mother died in 1919, and this was a letter from my father to his mother and his sister. It's a very -

C.B.: Is it about sailing?

N.O.: Here's one from my sister to - I mean to his sister.

C.B.: Aw, Charlie.

N.O.: I think you ought to read those.

C.B.: Okay.

N.O.: He was a very great letter writer.

C.B.: It's a lost art.

N.O.: This is the thing that my brother put together.

C.B.: Do you have any more of them, or could we get one of them?

N.O.: Yeah.

M.M.: We have one.

N.O.: I'll give you, I'll give you one of these.

C.B.: Oh, okay. I had one, but it disappeared from my bookshelf. But if you have it, I'll bet it was you.

M.M.: No, I had one five years ago.

N.O.: And here's one, boat's being built upside down again. Oh, here's an assembly line. See this was that York Pennsylvania plant.

C.B.: Uh-huh (Affirmative).

N.O.: And here are the interior parts, putting the ribs on it. This was the keel, that made the keel jig. You had a deck jig. This was a popular boat that was made every 15 minutes. Then we made a bigger boat, a 40-foot boat.

C.B.: Why do you think your boat's - how, let me ask you, how do you think your boats changed recreational boating? You made so many, it must've had an effect.

N.O.: Yeah. We were the low-cost producers of powerboats. And it was at a time that people were taking to the water, and our boats just had - we had more value in our boats. There was one boat, this was a boat that we made in 15 minutes. We had a break-even at about 1,000 boats, and we'd make 2,000 of them a year, and make maybe \$100 a boat on the thing. So the profit was very small. And there was one time that I instituted a free delivery. We would deliver a boat in California for the same price that we would deliver in Baltimore. And this shook up everybody. But it was, it was such an attractively-priced boat that anybody interested in a boat would say well we can't go wrong with this, let's buy it. And then after a year, you know, they'd get a little bit familiar with the boat, and they'd go back to the dealer and say maybe they'd like something bigger. So then we'd get into a more profitable thing. But it was a very good sales gimmick, come-on. Once a fellow bought this, we had it in the, on the line.

C.B.: When you talk about economy of building the boats -

N.O.: Yeah.

C.B.: We didn't ask you yet about the materials and about changing materials, and when you did that, because a wooden boat, I assume, is much more expensive than a fiberglass boat. Did you build fiberglass boats? What was it like to change materials? How did it change your boat?

N.O.: We, we didn't change. The thing that we did, we were very early in the fiberglass business. We build a plant out in Indiana, and we wanted a plant that was more simply located so that we'd have less of a shipping problem. You could ship to the Great Lakes for a little less cost than here, and we could ship into the New York area for just about the same cost as coming from Baltimore. And it was a good labor market. There were a lot of furniture people. Had a little town called Tell City that was a Swiss in Cincinnati wanted a Swiss community, and they started this thing, they named it after William Tell. And we bought one of our competitor's boats that was selling pretty well, and we also stole some labor from them, and we started this plant out there. And this was in '55. So we were early in the fiberglass business. But we were so, had so much investment in the wooden boat in Baltimore that the changeover would've been almost impossible. What we did, we built another plant in Baltimore that was a fiberglass plant, and we started in a small way building the bigger boats. And after we sold the business and got out of employment, the manager wanted to drop the wooden boat and make fiberglass. In so doing, they lost a lot of money. And they lost money until the plant was closed. But another interesting, we got into making engines. And I learned quite a bit about engines racing the power boats when I was a young man. So that the engine business was very attractive to us, and we made a very successful conversion of the automotive V-8. The chief engineer of Chevrolet was sent to Chevrolet to build a V-8, 'cause Ford had a V-8, and Chevrolet didn't, and he came from Cadillac. And he said now here, I'll give you a list of parts, and you pick them out, and we'll run this engine down the assembly line as an Owens engine. And the parts that I could choose were really wonderful things. So it wasn't a, it wasn't a passenger car engine at all. It was a special engine. And it came down the assembly line as Owens. And then it would go to our competitor. Owens, Owens engine.

C.B.: Who was your competitor?

N.O.: Chris Craft. We built more boats than they did, but they had a different method of construction. They would have a large number of models.

(END TAPE ONE.)

(BEGIN TAPE TWO.)

N.O.: It was economical to make 10 boats. That's the way Chris Craft made, 10 boats, and they'd sell out of them. They'd sell the production in, say, June or maybe even April. And so that does free - a person wanted delivery of a boat that summer, they'd have to go to us to get them. So Chris Craft would be sold out. They made more models than we did, but we made more units than they did.

C.B.: That's interesting.

N.O.: This is a picture of me with the Governor, the Irish -

C.B.: O'Connor.

N.O.: O'Connor. Right.

C.B.: Well, it says.

N.O.: Oh. (Laughter.) This is a drawing of the Cutter. This is a picture of the mobile loft where the parts were made.

C.B.: Very nice.

N.O.: These were some of the successful boats that were racing. And they were all over the West Coast, and Long Island Sound. Some of the sales literature on the thing.

C.B.: That's excellent.

N.O.: And this is where we licensed Hinckley to make them. Now this is the Minesweeper we made. They had gas turbines in it for generating electricity for rolling up the magnetic mines. That's a picture of the management.

C.B.: Look at that. Yeah, looks like somebody familiar.

N.O.: Yeah. Little bit younger.

C.B.: Same smile though.

N.O.: See, it was -

C.B.: Designer, Chief Engineer and Production Manager.

N.O.: That was 60 years, 60 years ago, yeah. Then we had, my brother had a sales outlet in New York on Park Avenue. You know where the road goes through the -

C.B.: The building.

N.O.: The building.

C.B.: Yeah, I know what you mean.

N.O.: We were in one of the side things. It had a very fancy -

C.B.: Pretty prestigious address.

N.O.: Yeah, we sent him up there to sort of get rid of him.

C.B.: So really, you took on boat building, it sounds like, manufacturing, as a business.

N.O.: Yeah.

C.B.: Just strictly as a business. And as a love, you were a sailor. But as a businessman, you had to build boats.

N.O.: Do you know that Baltimore County has written us up, and they wrote us up as an interesting business. It wasn't, it wasn't a boat story, it was a business story.

C.B.: Well that's what I'm - listening to you, I realize that. You're a business family.

N.O.: Our material control, we were so far ahead of everybody in material control. We used to have those IBM machines that had the punch cards, and had belts that ran the cards around, and the cards would - and we could decide on what model boat we're going to make, and this machine would give all the work orders and everything to the department heads, and we'd purchase the material, and it was all -

C.B.: Computerized.

N.O.: -- very scientific.

C.B.: And you were in charge.

M.M.: When you first got to Annapolis, there was very little recreation on the bay.

N.O.: Practically none.

M.M.: And now, as you said, it's everywhere.

N.O.: Yeah.

M.M.: Talk to us about what it was like, and how it changed during your lifetime, and what does that mean to you.

N.O.: Well, of course, it was from - we were happy to see people going to the water, 'cause it meant more sales for boats. The - but we had really no idea of the growth that

was going to come to the thing. I think 'Texaco had, they were interested in selling oil to the marine industry. They had a marine industry promotion. And somehow or other, they got us involved in it, and they at one time had a piece of property in Annapolis, they owned the thing, and they said that they would give us this property if we'd put a marine gasoline outlet. And we were stupid enough to say no, we're very sorry. We're - we're boat builders. We'll stick to building boats. And then the head of the Annapolis Dairy, he was a friend of ours, lived on our, the street where we lived in Annapolis. And he wanted, he wanted to give us property on the canal part. He had an old ice plant there that they weren't, you know, they had ice to put on the boats and shipped stuff around. The interesting thing about the Chesapeake Bay in the early part, they didn't have railroads, they didn't have trucks and things. The farm produce got to market by boat. And they had these piers all around where the farmers would put their tomatoes and things, and fish, and crabs, and the boats were taken to Baltimore or wherever they went. This was a very interesting. And then they - and then they had the side wheelers, Emma Giles and the thing that would go to Norfolk. Smokey Joe that went from Baltimore to Love Point. But to forecast how many boats would be on the bay was - you wouldn't dream of it. Had no idea that it would turn out like it did.

C.B.: Did you ever go to any - you just struck a thought in me, did you ever go to any of the resorts around the bay yourself, like Tolchester Beach or any of the places?

N.O.: I probably have been more places on the Chesapeake than any man living. (Laughter.) There's 3,000 miles of shoreline on the Chesapeake Bay. And I don't think anybody's been everywhere. But yeah, I've been, I've been on every river on the Western Shore of Virginia, and Potomac, and every, the rivers up to the Patuxent in Baltimore. And then I used to take a boat from the factory, and I could leave Saturday and be in New York Sunday evening. And I would run, I'd run up to the head of the bay and go through the canal. And then I would time this so it was just about dark. And then I would slow down the Delaware, because there was a lot of trash in the Delaware, and I didn't want to damage anything, and I wanted to be in Cape May in the morning. And then I could go up the coast and hit New York next day. Did that many times.

M.M.: What was your favorite river on the Chesapeake? Did you have a favorite?

N.O.: You know, they're all - the Chesapeake is absolutely beautiful. You can understand why people like it. There's so many of them that are - I think if it wasn't for taxes, I would be in, I would be back in Maryland. After we sold our company, the Internal Revenue had a big capital gains tax to pay. I paid about a million dollars capital gains tax. And that was a big up tax for me. And they had me on the list to examine every year after that. (Laughter.)

M.M.: Did you, did you ever go to the Nanticoke or any of those rivers down in Virginia, down on the Eastern Shore, the Nanticoke, or the Choptank?

N.O.: You know, I've been there by car, but I've never -

M.M.: You've never sailed it.

N.O.: No, I haven't. I've been up the Chester River, and I've been up the - oh, my, by Love Point. The -

M.M.: Patuxent? No, it's not the Patuxent.

N.O.: Let's see. Starting at the top, they have Chestertown. That's on the Chester River, yeah.

M.M.: And Sassafras, the Sassafras.

N.O.: Sassafras, the one above it.

M.M.: Right.

N.O.: I used to shoot ducks and geese in that area.

M.M.: Right.

N.O.: And the - and then the Chester, and then the one that Oxford's on.

M.M.: Miles.

C.B.: Tred Avon. Oxford.

M.M.: Tred Avon.

N.O.: Tred Avon. And then the one that Cambridge is on. The -

M.M.: Choptank.

N.O.: Choptank. I've been at those. I sailed over on the Eastern Shore, but in racing. I haven't really visited. But I have visited the Western Shore of Virginia.

C.B.: Uh-huh (Affirmative). Big rivers there.

N.O.: Yeah. And the most beautiful one, you know they're all so beautiful really and different, each one is a little bit different. I used to live on the Severn at Sherwood Forest, and I think the Severn is very pretty.

C.B.: Uh-huh (Affirmative).

N.O.: My father, when he was a boy, he learned to sail on the West River, and the Patuxent is interesting, the Potomac is interesting, and the rivers in Virginia are interesting. I would say any, you can't go wrong with any of them. (Laughter.) They're beautiful.

C.B.: Well, do you have -

N.O.: I think it's the prettiest water in, probably in the world and maybe - certainly in the United States.

C.B.: Do you have anything you want to make sure that we know or that you've told us that we haven't asked? You do have things here. I want to make sure that you've told us what you'd like us to know. Have we missed anything?

N.O.: Let me see. Oh, yeah, yeah. This is - the Chesapeake Bay guy, and he has history of yachting on the bay. And he features the Cutter. This is my boat that we built there.

C.B.: Let me take this from the microphone.

N.O.: I don't know what that is. (Laughter.) Marker.

C.B.: Uh-huh (Affirmative).

N.O.: This is, this is our boat also. It's about the Cutter.

C.B.: Okay. I have this book at the office, so we'll -

N.O.: And this is another book that he wrote. Somewhere in this thing, it's got a big write-up on us here. He was a sailor himself.

(OFF **THE RECORD.**)

N.O.: -- the next day, and I would make a pattern, say, during the night and take it to the foundry, and have the foundry cast it, and next day have it down there and in the boat.

My father was very successful. He started off as an engineer, and then he found that there was more money in the sales department. They transferred him to New York, and they needed a manager for the Michigan area, and they gave him that job. And so he got to know all of the - these are pictures. This is a little boat that he made in the back yard that we used to run circles around, the midshipmen's, the one that --

C.B.: The one at the Naval Academy.

N.O.: This was me at about 19.

C.B.: Dashing.

N.O.: (Laughter.) This is a picture of Annapolis from my airplane. I had a little airplane somewhere.

C.B.: You've done everything. Trains, planes and automobiles.

N.O.: I'm a pilot. My first job, I went to Maryland Institute as a nautical engineer.

C.B.: This is great.

N.O.: This is Western Union. They wanted, they had a promote - they wanted to spend some money on that.

C.B.: That's great. Western Union Telegram ad with Owens Boats in the background.

Uh-huh (Affirmative).

N.O.: This was - oh, here's a picture, my grave. That's where I'm going to be buried down in South of Annapolis. My wife is here. My brother's there. This is my grandmother and grandfather.

C.B.: Well you're not going to be there for a while.

N.O.: Won't be long. Won't take too much longer. (Laughter.) This was at the York Fair. This was a boat that was built in York.

C.B.: Uh-huh (Affirmative).

N.O.: Oh, here. Here's, this is Don Campbell, the one that holds the speed record on the water. This was the guy that built the Liberty ships during the war, and Bethlehem Steel. This was my brother Jack and me. This was the Hibernian Society in Baltimore. This fellow invited me. This is me, this is -- (Laughter) a bunch of Irishmen. (Laughter.) This is a friend of mine. We were up in North Dakota pheasant shooting. This is my airplane.

This is another picture of Annapolis that I took. This is Gibson Island.

C.B.: Uh-huh (Affirmative). You had an interest - did you live on Gibson Island ever?

N.O.: Yeah. Uh-huh (Affirmative).

C.B.: Interesting neighbors there.

N.O.: It's very nice. This was down in Bermuda.

(OFF THE RECORD.)

N.O.: Well that was very interesting. They had a fellow in the sales department that would study your product and make a report to you of the sort of things that they thought would be an improvement. And, of course, you were very conscious, or at least I was very conscious of things that might be improved. And so this rang a bell that this is great. Man, this guy's got something. And he, he said well let me make a couple of drawings, sketches portraying what we can do to solve some of these things. And we were excited about that. So we went along with them. And they said well now we'll have a showing of this in New York, and you come up and we'll, we went up Raymond Lowy's (phonetic) office, and he had these easels around the thing with canvas over them so you couldn't see them. And, of course, you're talking and we're all anxious to see what his work is. But this was about the last thing. And they pulled the canvasses up and they were terrible. (Laughter.) They didn't pay any attention to what this fellow wrote. They apparently threw that away, and they - the stuff that they did, we said we can't use any of that. They said well tell you what we'll do, we'll turn our model room over to you, and you can come up once a week and give the guys, lay out some work for them, and let them go ahead and

do this. And between me and the model room, we made a distinctive thing. It was a little different from the - that was our experience with Raymond Lowy.

M.M.: Okay. Can you see -

N.O.: Would never use him again. But then I did need a guy in the engineering department to illustrate, to make drawings and things, and I had a friend that was in the art department at Buick, and he was, he was - made these renderings for Buick automobiles, and he made, he made some stuff I had him do a little bit of artwork. And then I needed a guy that could do airbrush and whatnot. And so I went to Detroit, and got a room in a hotel and ran an ad in the paper for automobile artist illustrator, and I would interview them, call this number at the hotel. Well I had a whole lobby full of guys with their work. (Laughter.) And I had them scheduled about every 15 minutes. I talked to them 15 minutes, watch the clock and said well I'm very sorry, you're through, and the next one would come in. And the - anyways, I managed to hire a very good guy by the name of Darryl Fish. And he was, he did a lot of the artwork on the boats. I would, I would supervise him, you know, to see that what he drew was something that we could build, and build economically. But he was very good. He made, after we went out, he was the designer of the, of the boats.

M.M.: Did he work on Nomad?

N.O.: I don't, I don't think so.

M.M.: Okay. He was later than that. Was he later than Nomad?

N.O.: He was after Nomad.

M.M.: Okay, all right.

N.O.: Yeah. He was toward the end of the -

M.M.: Let's go eat.

N.O.: Okay.

C.B.: Thank you.

(END OF INTERVIEW.)