Jim Anderson: Hi, I'm Jim Anderson. [laughter] I'm a local fisherman. I keep my boat in Half Moon Bay, Pillar Point Harbor right here. I got to read the questions ahead of time, but I didn't really spend any time because I'd rather listen to your question. If you do have comments, please just stop me. I'm used to getting stopped all the time, so don't worry about that. I will tell you a little bit. This little area here in Half Moon Bay, there's a little town called Princeton right in the harbor. My father and his brother built a boat there. They called it the Miss Princeton. They launched it in 1946. So, most of my life, I grew up where I was able to have locals from that area help me out in the fishing business. My father's side of the family, since he liked boats, he did that. My mother's side of the family was into wineries. So, I had to take some time off and build a winery. So, I've done that. My father had to sell the boat when I was five years old, because I was standing at the front door every day with a sack lunch ready to go fishing. My mom would say, "No, you're going to go to school." [laughter] So, she made him sell the boat. Then later in high school, I got on boats and did jobs like that to make some money and do different things and so on. I ended up in the business because my father always wanted me to have a boat. So, I built a boat. I was into fisheries. So, I tried to do both. I tried to be a fisherman and a winemaker. Crab season is right when harvest of grapes is. So, I ended up in the crab business rather than continuing the winery. So, that's a little bit about what I've done. Most of the questions, they're really interesting questions. I'd love to talk to you about them. I've kind of gone in other directions. There are other interests that I have in the fisheries. So, that's kind of where I've gone. But I'll kind of let you know a little bit about what I like to do. I'd be more than happy to answer whatever you guys – did you have a question? Okay. Yes.

Female Speaker: What type of fishing do you do? Commercial fishing?

JA: Yes. My father was in the charter boat business where they take people out and do different kinds of fishing. I went on charter boats for long in my life. I wasn't really interested in doing that. So, I built a commercial boat. I fish salmon in the summertime, and I fish Dungeness crab in the wintertime. So, those are the two fisheries I fish. I was always supposed to get a third fishery, but I also got involved in the politics and regulations and management of the fisheries and other things. So, I just never had the time to do a third fishery. So, I just do those things instead. Yes.

FS: Do you live on the boat, or do you commute there?

JA: That was another thing. I lived in (El Granada, which is right here in Half Moon Bay, just north of Half Moon Bay. By the time I was eighteen months old, I had pneumonia three times. So, my parents sold the house and bought a house in Redwood City, which is supposed to be the best weather by government tests. So, I grew up in Redwood City. I commute to the boat. My boat is capable of living. My boat is capable of going to Hawaii. So, I can stay on the boat for 20, 30 days at a time if I wanted to. There are all kinds of accommodations for cooking and fuel and water and everything else that I need. But I truly don't do that. After ten days in the ocean, I want to go out to dinner or do something fun. I just can't do it. Yes.

FS: Do you have a name for your boat?

JA: It's called Allaine, A-L-L-A-I-N-E. When you build a boat, you're supposed to name your

boat after your mother. Because that's the tradition. I was very lucky because my mother and my sister both had a middle name, Allaine. So, I was able to name it after both of them. So, I did. Yes.

FS: Why did you choose to be a fisherman over doing the winery business?

JA: I actually chose to be a tennis player. [laughter] I kind of ended up back in the fishing business. What had happened is, as I did fishing out of high school, between college – I was going to college, and I'd fish for salmon in the summertime. I kind of got involved in it. When I came back later in life, it had changed so much. A lot of friends got me involved in the management aspect of it to try to deal with some of the changes. So, I kind of got into that. Because I looked at it as, "Here's an industry that's really having problems. So, what do we do about it?" So, I was able to run across some people that really do make a difference in fisheries. So, I was able to work on management ideas and things that we can do today that actually is changing the fisheries. So, that was kind of interesting to me. It was also nice that I was able to meet the people and get the help and be able to do those kinds of things. I didn't really want to give that up or change into another industry and start over. When I was in the wine business, they kind of put me on the Wine Institute. We did a little bit of that. But it was kind of really at the forefront. Whereas fishing was so much of a business that had been dealing with those issues for a long time that I was able to get into that a lot deeper. So, I ended up there. So, that's kind of what has kept me into fisheries. As far as the livelihood, some guys are doing really well. It's really interesting how one fishery can be making 10, 50 times what another fishery is making. So, we have guys in our harbor this year that it was nothing for them to make a million dollars in the summer in a month and a half. Other fisheries like us, we couldn't make a million dollars in twenty years. So, it's really interesting how one fishery compared to another fishery is quite, quite different. So, that's what's interested me most, is how one, for whatever reasons - we've tried to study and look at the different reasons, but it just doesn't seem to work. Some of the net fisheries are able to just catch that much more. Some of their stocks are doing that well that they can catch a whole bunch. So, they make a whole bunch of money. Yes.

FS: How is the competition between fishermen? Do you go, "Oh, no, this is my area," or -

JA: How is competition?

FS: Yes.

JA: It comes down to guns at times.

FS: Oh, wow.

JA: Yes. Competition is really interesting. [laughter] Competition in fisheries goes back a long time. There's a whole group of people in the fisheries that believes that it is their ocean, whether they've been in the business for a long time, or their family's been in the business for a long time, or they've set their nets in those areas for a long time or crab pots or something like that. Then some newcomer or somebody that doesn't understand how long those people have been fishing in that area comes and drops the net over the top of them or throws crab pots in between each of

those crab pots. It sometimes could look like there's a range war where guys would go out and actually cut people's buoys off. Pots today are \$250 a pot. So, it gets pretty expensive pretty quick when some guy has a brand-new Victorinox. That cuts through really quickly. So, they can cut a lot of pots. So, that happens. When somebody lays the net out in San Francisco Bay for herring and all of a sudden, three guys lay nets on top of that net, it becomes a real shouting match really quick. So, it's interesting to see how it goes. More people are getting a little bit more laid back. Today, there's so many threats of – you get into an interaction like that, and the police get involved. They want to take your permits away, and there's your livelihood. So, a lot more people kind of look at things a little bit more at a different perspective today just because you could lose so much more. In the old days, it was just kind of the way things were. Certain ports were different than other ports. You just didn't go do those kinds of things in their ports. So, that's changed quite a bit. Certain ports, you could come in and do anything you wanted in that port. Everybody understands that that's the reputation of that port. But it's changing, I think, over time. Yes.

FS: Did you say you built your boat?

JA: Yes.

FS: How do you go about building a boat?

JA: Well, for me, my father and his brother built his boat. They built it out of wood. So, he was a very good person to be able to construct things out of wood. He was very talented. But I didn't have that ability. I tried to build a box one day. It leaked. [laughter] So, I had to fiberglass the box to keep the rain out of it. So, I ended up building a steel boat. I was able to do some school. Mostly what I did for learning is pretty much the way most of us have learned in the past, was to go find somebody in the industry that is really good at what you're trying to find out, what they could do. In that case, I had met a man – or I had known a man for years that was really talented. He was fifty-eight years old. He built himself a backyard project that was a boat. But his true job was he built elevated trains and monorails. So, he thoroughly understood construction and steel and everything else. So, he just kind of built a little backyard project that was worth, at that time, \$150,000. He built it for \$20,000. So, he was a very talented man. So, I went and lassoed him. He taught me a lot about construction and running the operation and trying to get the right people. We got the right people that taught me how to do it properly. So, over a couple of years, we first built a little boat in a yard with him so that I could learn the techniques. Then we went and found a starting of a boat. We hired guys that were welders and fitters and stuff. We actually put the boat together. So, I learned how to do it. At the end, I ended up building the rest of it myself. Whether it had been building all the fuel tanks and putting all the electronics in, putting the engine in, putting the transmission in, putting the steering in, wiring the whole boat, I did all that. So, I learned a lot about building boats. Same thing with fishing. As you try to learn about the different fisheries - Monterey, I guess, is starting to do some classes for high school kids. If you're interested in fisheries, you could go find out about some of their classes. We were working with one of the school board members in Half Moon Bay a week or so ago trying to put together classes. If you want to be a fisherman, you could go do a class on welding for a boat or wiring electronics or engines, because you have a couple engines inside the boat, and you have hydraulics on the boat. Then you have your steering and all of those other things.

So, after you're done with all those classes, then you go find somebody that can teach you how to fish. Over my life, I was really lucky growing up in a harbor that my father was in that harbor for so many years. I had very nice local people come up and look after me as a kid. So, I learned a lot of the traits in a very short time in a number of years. Where a lot of people would have spent eight years, maybe I learned it in four years because I was able to talk to the right people. They can tell you how to do something. But that doesn't mean that you can then go out on the ocean and do it. That's a whole different thing. So, that takes time and experience also. It's nice to be able to go to somebody that actually has done it for many years and has worked out all the tricks and all the bugs. You learn a lot by doing it that way. So, that's what most of us have done. Yes.

FS: Do you tend to train other people to come to you?

JA: We do. I'm training a person right now to crab fish with me this year. But over time, I've trained a number of people to crab fish with me over the years. Most of them have moved on to their own boats and are now fishing in the fisheries. The difficulty in training is the spectrum of people that you're training. Some people just want to be deckhands, just want to be a crew. Some people want to be captains. So, they're both learning the industry. So, we're training them. But they have different insights of where they want to go with the fisheries. So, you'll find that they are interested in different things. Some people want to learn how to run the boat and make sure the boat's operational and also how to take care of the gear and also where to put the gear and also how to catch crab, where other people just want to show up and do whatever the work is and then move on to another boat at some other time. Yes.

FS: You are saying that "We train them." So, is that you and your crew? So, do you have a crew for your boat?

JA: I do have a crew. What was the beginning of the question?

FS: You said that "We train." So, is that when your crew train?

JA: Yes. There's a number of things that I can train the crew, and the crew can then train the rest of the crew. Most of the guys in the fleet will be training somebody for the boat. As the different fisheries go on, we notice that there's constantly turnover. Some guys can make a lot of money. Guys that make a lot of money usually have a tendency of wanting to get their own boat. So, they want to do that in the future. So, we find ourselves retraining people. Some people don't mind finding a certain niche in the fisheries and staying there and then taking the extra money that they make for the family or for houses or whatever else they want to do with it. But it kind of depends on the person. It's whether he wants the responsibility of owning a boat and taking care of the boat or if he just wants the responsibility of making a decent living. So, we find that it's different from that aspect that we train different types of people at different times. Yes?

FS: What fishing methods do you use, and how do they affect the environment?

JA: Yes. Fishing methods have changed a lot. In the [19]70s and that period of time, trawlers

used to use roller gear which would drag right over top the reefs and devastate the coral in the reefs and catch the fish and never worry about there being fish there ever again. Fishing today pays a lot of attention to targeting certain stocks. So, what we've tried to do, like in the salmon fisheries, we've done things like a genetic stock identification program on the ocean where we catch a fish, we do a little fin clip of the fish, and we are able to analyze that fin clip and tell us where that fish came from, what river he came out of. We give a GPS location of where we caught that fish and a depth in the water column of where we caught that fish so that we can actually see the different stocks. There are certain stocks that are stocks of concern. There are certain stocks that are very robust stocks. So, what we're trying to do with the genetic stock identification is to be able to see where the robust stocks kind of come together at certain parts of the coast at certain times of the year, so we can target those. But if there's a California Coastal or if there's another weak stock over here, it's in ten fathoms and shallower than he is, stay away from those areas so that we are not targeting the stocks of concern. So, we're actually trying to do things like that. In the trawl fisheries, they've actually taken the net, turned it upside down from what we were doing in the [19]70s and [19]80s, and they put little panels in the top of the net so that certain fish of stocks of concern can actually swim out of the net and don't get caught in the thing. The newest thing that they're working on is there's a little rope that kind of goes along the bottom. It's called a tickler rope. Well, they're actually coming up with a new type of doors which spread the net and a new type of tickler rope that doesn't even touch the bottom. So, it's able to go close enough the bottom to stir up the fish so that they raise up and get caught in the net. So, they can actually target the species that they want to. But it actually doesn't touch the bottom so that it doesn't cause any problems with the bottom. So, I think fishermen are working really hard to try to be as sustainable and also not hurt the environment. Most of us look at it as we'd like to have fisheries for our kids and our kids' kids. Of course, there's a couple guys that want to catch the last fish. There are a couple people in every business that want to do things differently than other people. But that's what we're trying to do. Yes?

FS: How much fish or crabs do you catch each season?

JA: Yes. Quantities is relevant to your markets. We have people that will catch half a million pounds of crabs in a month and a half season. So, they're very productive boats. They're very hardworking people. I took it the other direction where I helped start the off-the-boat sales in Half Moon Bay. So, I'll go out and catch a quantity of crab and bring it in and sell it in the afternoon or sell it on the weekends direct to the public. They come down. They walk up and down the docks. They can buy my crab. Sometimes I'll bring in different things like maybe hermit crabs or something like that or sea urchins. They're able to see these things and touch them and play with them. So, we've gone to the route of trying to work with the public and allow you to have some kind of an outing and come over and pick your crab that are in my live tank. You can point right at them and say, "I want that one, and I want that one." So, we've gone that route. So, I surely don't catch as much as somebody else. But as far as dollars, it takes X amount of dollars to survive in the fisheries. So, when it comes down to the end of the season, I can do on my boat about the same amount of dollars as a typical small operation that is a very good fisherman. They catch a lot more pounds, but they're getting half as much money as I am. I'm able to work on the marketing and work on the consumer base and those kinds of things. It's always been, to me, more about dollars in your pocket. Because there's been some fisheries in the past where you catch a gazillion pounds, but you don't make any money. So, if you're doing

something like that, how good is it for the fisheries? What is the product going to if they're just grinding it up and making fish meat out of it or something? We're looking more at trying to produce products that people could enjoy. So, I think that's kind of more the direction of where things are going. Yes?

FS: What is your current stand on overfishing?

JA: I think overfishing is something that everybody is hearing about on a global level. If you look at it globally, overfishing is quite an issue. If you look at us here in California about overfishing, we've done things like in the trawl fisheries this last year that started their new type of management where they have to bring in every fish that they catch. Every fish that is caught in a net is accountable towards their total. So, what we're working on now is what are the stocks of concern. What are these stocks and where do they live? So, we're trying to do some different research projects out there now to distinguish, "Well, if this is such a stock of concern, not only what is the true biomass of that stock, but where do they normally live? How can we stay away from them? How can we fish somewhere else and allow the guys to make money, allow us to serve you with different types of seafood products, but also not have an issue of the overfishing?" So, so far, recently, in the last couple of years, we've never really had a problem with overfishing. We've worked very hard and adjusted either season structures or time area management on the ocean or where we're allowed to go so that we don't deal with overfishing. Because we all believe that overfishing is an issue. The difficulty we have here in California with overfishing is truly understanding the biomass of the stocks. I mean, how do you count fish in the water? It's a very difficult thing. There's a lot of formulas, and there's a lot of models that are speculating how much fish there are. The last couple of years, there's been some people that are driving side-scan DIDSON sonars under the boat. So, they tow them under the water, and the side-scan sonar can actually see the bladder in most rockfish. Because each type of rockfish has a different sized bladder, they can see on the computer what fish is there. Right behind the DIDSON, they run a little rover which turns on the lights and actually visually sees those fish. They're trying to work on the computer programs together so that the computer can see that this is the bladder size, and the film will tell them that that's a black rock cod. So, then they can start to understand biomasses of black rock cod because that's what's going on under the water. It hasn't really worked yet. They haven't got the software to match the two things. So, they're still in the process of working on that. But truly understanding biomass is very difficult. We've worked for years. I got involved in the mid-[19]90s on trying to count fish in the ocean. It's a very difficult process. It has its ups and downs. Depending on what happens through Mother Nature can depend on a whole lot. We've had some real problems with that, where management has, say, turned off the lingcod fisheries because they said, "Oh, we just did a study. There's no lingcod in the ocean. So, you can't go fishing for lingcod." Then the next year, say, "Well, we did the study at the wrong time of the year. So, there's a lot more lingcod out there than we thought there was. But we're not going to allow you to go fishing yet on them." Then by the second year, all these lingcod are about this big. They're going, "Where are all the baby rock cod going?" Well, to a lingcod, it's lunch. So, when you start looking at the whole predator-prey understanding of what's going on in the ocean, which they don't know a whole lot about, that makes it very difficult. We don't know if it's a predation problem. We don't know if it's a natural phenomenon. We don't know if the ocean changed a little bit, and the fish just kind of moved out of the area. We had a thing happen a few years ago where all of a sudden, there were

sardines in this whole area here. The sardines hadn't been here for sixty years. We don't know why it changed, whether it was ocean conditions or weather or what it was. But all of a sudden, sardines are back. The question then became to us, when we went to the management, was, "Is this a sixty-year cycle? Does it take sixty years to have the ocean change enough that sardines were here and now sardines are back?" Because most of all our data is like twenty-five years or twenty years. A whole lot of management is done on five-year studies or one-year studies. So, to us, it's incredibly frustrating to try to manage on such data that's only recent, where we don't truly know how long a natural cycle is. So, we're trying to deal with that too. Yes?

FS: How many women are in the business?

JA: Women are really interesting. [laughter] The reason I say that is because there are a couple of traits about women. We have a number of wives that fish with their husbands on salmon boats. It's incredible. Because the women do so much and they do such a good job at taking care of the fish, that probably the best salmon that come off the West Coast are on the boats that have women on them. We have a number of women that are also boat owners and fishermen. Most of the time, they come from fishing families. We have a couple of young gals that are fishing up north. They go all the way to Alaska and fish everywhere on the West Coast. They're incredible fisher people, women, whatever you want to call them. [laughter] But they do a wonderful job. So, that's interesting. We don't have a lot of it. I don't know if it's just because of the lifestyle. I have one friend that says that a salmon fishing family is kind of like gypsies because they go all the way up through Alaska and all the way down here. Depending on where the fish are the best or the right size for the markets, that's where they go. So, I don't know if it's that or if it's just traditionally a guy's thing or whether it's difficult. My boats, it's like 50 feet. I built an area in the foredeck where I could go be private. But most of the boats aren't that way. They're not real private. You can't really get away from each other. So, if you're doing a thirtyday albacore trip or something, by the tenth day, you wake up in the morning. You look the other person in the eyes. You know he wants eggs and bacon for breakfast because you've talked everything out. You've done everything. So, you don't even communicate after a period of time. You just kind of know what's going on. So, I don't know if it's part of the lifestyle or what it actually is, but we truly don't have a lot of women in fishing as fishing. Maybe it's just the work. My crab pots are 90 pounds without ropes and buoys and bait jars and everything like that. I ran 140 in a day by myself. I don't work that many in a day. I could do maybe twenty in a day, throwing 100-pound pots around. I don't know if it's the physical or what it is. I've had a couple girls come and help me from high school, the local high school. They came down and helped me work on gear a couple of times. I don't know whether it's just physical or what the real reasons are for it. Yes?

FS: Do you believe in old wives' tales like mermaids and stuff like that? Or did your dad ever tell you stories about them?

JA: Of course.

FS: Can you tell us one? [laughter]

JA: The one I believe in?

FS: Yes.

JA: Okay.

FS: Yes, stuff like [inaudible]. [laughter]

JA: The only one that I kind of believe in is it's been a tradition to not start a fishing trip on Friday for whatever reasons there is. But in my course of my fishing, there's been a number of times where I've started trips on Fridays and had them just be disasters, I mean, disasters in epic proportion, almost ripping the anchor winch off the boat or almost sinking. For whatever reasons, maybe it's mentally. Maybe after being a baseball player – I'm pretty superstitious as it is. So, maybe I was looking at the things to happen. I've actually had to start trips on Friday and had them go reasonably well. But that's about the only one that I truly have been faced with that has had some reality to it. So, I don't know a lot about it. Yes?

FS: Have you had to make any sacrifices to be a fisherman?

JA: I think so. I'm not married. My mother basically said that when I built a boat, that's who I got married to. [laughter] I think the way the industry is run – and I've worked hard for years on this aspect. Because unless you end up taking your wife on the boat with you and your kids and I know people that have done that. It's really been interesting because they and their kids were really neat people. But it's very difficult for a family life, especially for different fisheries. Some of the fisheries where you could be home every night and run a smaller boat out of a port or something and be home every night works well having a family. Some of the traveling fisheries where you're gone for a couple months at a time makes it very difficult to have a family stay at home and those kinds of things. So, I think it's part of that. I think what I've given up is that. The other thing that I think that is given up is choosing the fisheries that we've chosen didn't allow us to be in those fisheries where you make a lot of money in a short period of time. Most of the fisheries that I'm doing, you make a reasonable amount of money in a reasonable amount of time. Probably some of the fisheries, we make a whole lot more than you would make in other jobs. But the difficulty is maybe it's only a month long. So, what I make in a month and a half has to last me for a year. So, that is kind of the difficulties as opposed to having some kind of business. Then by having a business on the beach or having some other kind of business – some of the industries today, you can create a program or something which can make you a lot of money in a short period of time. So, I didn't see those kinds of opportunities in this industry, where, in a lot of industries, you can create something in that industry that can make you a lot of money over the course of your life. There are fishermen that have owned multiple boats and have made plenty of money. I know them and grew up with them. I see them make a lot of money. If a man in his sixty-five had done it most of his life, has \$5 million in the bank, I don't see that as a problem. That's one of the difficulties in fisheries in general. When you look at the amount of money in fisheries in California and you compare it to Hollywood or the chip industry or farmers, we're just a drop in the bucket. So, it makes it really difficult when we go talk about laws or go to the Capitol or go knock on Jerry Brown's door or something. "You're who?" [laughter] So, it makes it a little bit different in those respects. It's not a thriving business. It's a very nice business. The camaraderie and some of the friendships and some of the things that

we've gone through – I have a number of friends that if anything ever happened, they would break down whatever they needed to get you the help. So, some of those things is pretty interesting and amazing that we have those kinds of things. So, it's a juggle. You make choices all your life, don't you?

FS: Yes.

JA: Where do you want to make the choices? Yes?

FS: What do you do with the data that you collect of the fish from the scales? Do you have a relationship with Seafood Watch or any of those other programs?

JA: Two questions. The data that we use from the scales, we're always trying to look at all the data that we're looking at. Scale dating is pretty interesting. Scale dating is sort of telling you how old a fish is. It's kind of like the rings of a tree. So, they actually look at scales, and they kind of confirm that that's a two-year-old or a three-year-old fish. That's sort of helpful. There's actually another thing called the otolith bone in a salmon, up in between the ears of a salmon, where they actually take the otolith bone out. They cobalt it. Then they slice it. It looks like a tree. It's got rings also. But the otolith bone actually forms a ring every day. So, you can actually look at a young salmon at his beginning rings. If all the beginning rings are the same size, then you knew he was hatchery fish because he was fed every day. If he has a couple of small rings and then a fat ring, then he found some food. He's a natural fish, found some food, and gorged himself on the food. Then a couple of days afterwards, you can actually see the ring size get smaller again as he uses up the food for energy. You can also take that ring and actually withdraw the water out of that ring. You can analyze the water. In Central Valley, we have sixteen different systems in Central Valley. But if you look at the mountain range from the top of Central Valley to the mountain range at the bottom of Central Valley, as you go down the mountain range, the mineral content in the mountains changes. So, as you extract that water out, you can look at the mineral content, and you can tell which river system the fish actually came out.

FS: Can you send that information over, or do you just -

JA: You can actually find some of that information online. Fishtrack.org, I guess it is. We have a number of sites that we do things like – or if you're interested, I actually can give you some sites to track what we do in the fisheries and see what's going on. The latest one, you not only can find out and analyze where the fish are. You can find out who caught the fish, what day he caught the fish. What we did with this GSI project in Oregon is we actually put kiosks in the restaurant. So, when you walk into a restaurant, if you wanted salmon for dinner, you could punch salmon on the kiosk and a picture of who caught that fish, where he caught the fish, what day he caught the fish, how deep in the water he caught the fish, you could see all that stuff right there. Then you could go to another page and get a quick bio on him, show a picture of him and his boat, and where he's from and those kinds of things. So, you can actually connect to who the fisherman was and when the fish was caught. We tried to do that in California. A lot of the processors said, "Fresh is fresh." They didn't want to specifically tell you that the caught fish was caught ten days ago rather than three days ago. So, they stopped us from doing it in California. But Oregon's working on that. It's a really nice marketing tool for them. As far as the Seafood Watch, we've had some issues with that in the past because we actually turned the season off a couple of years ago. Everybody was telling us that we were overfishing, and the stocks were very low. They were blaming us on overfishing. So, we actually turned the season off totally and didn't go fishing for a couple years. Therefore, we're able to show them that the stocks continued to go down, and we weren't even fishing on the ocean. So, it was not about overfishing. The Seafood Watch put us in the red category for a period of time. I've heard recently that they've moved us into a yellow category or something. Part of the reason is Seafood Watch covers quite a bunch of fish from all over the place. Our California troll-caught salmon is kind of a small piece of the pie. So, it's very difficult for somebody that large to advertise about us globally and nobody ever even sees the fish. So, it's kind of an issue with them on that also. As far as other products, whether they're Dungeness crab or Petrales or black cods or stuff, it kind of varies from year to year. The black cod last year was incredibly valuable. We were doing a lot of marketing in Japan after the tsunami because they needed a lot of fresh fish, where this year, they had bought a whole bunch of fish, and they had a whole bunch of small fish. So, the market kind of collapsed. The fish weren't all that big. So, people just didn't go fishing for it. So, it kind of is on a year-to-year basis, which is quite different in a lot of products. It's not like you're just going to your farm and picking this roll of melons for this market. We truly try to pay attention to what's going on in the ocean and try to guess what kind of a biomass there is. But it's not as easy as you'd like it to be. It's not like driving down a row and seeing if you can kind of count them up and say, "I know how many melons are in this field." Yes?

FS: How has pollution affected your fishing?

JA: A number of things. Say the crab fisheries in San Francisco Bay, they have worked for years on pollution in San Francisco Bay. For the last couple or three, four years now, we've had incredible harvest out of San Francisco Bay, San Francisco area, on the crab fisheries because they've really dealt with pollution. It wasn't that long ago that there were some real issues on pollution coming out of the bay, and we had some very terrible crab seasons in the area. So, pollution, it's interesting. We actually are doing a study right now inside Half Moon Bay, inside the harbor. The report a couple of nights ago, they're actually finding out that most of the bacteria that's actually coming into the harbor is coming from – there's a couple creeks that run up the river. We found out that the new analysis procedure that they actually have, it can actually diagnose that it was actually a horse that it came from or a dog that it came from or whether it's people that that came from. So, they're able to actually look at the different bacteria and tell what the source is. So, now, they're trying to go upriver and put more sites of testing upriver, so they can distinguish that it's that far and those horses that are causing the problem. So, I think that we're going in a good direction on working on pollution. I think pollution has always been a real issue. We had some real problems with the sea otters. The sea otters were dying off in Monterey Bay. They finally found out it was from cat litter that was being rained off into the water. The cat litter was causing problems with the sea otter. So, as long as they can find out now what those issues are and what's causing the problems, I'm all for it. Most fishermen are really for all that stuff. We all want to live and die on the data. As long as it's good data and as long as it helps the fisheries for the future, we're all for that. Like I say, there's a small group of fishermen that want to catch the last fish. But the majority of us really want to

make better fisheries. Yes, you.

FS: What was your most interesting catch?

JA: [laughter] I didn't catch it. But how about if I tell you my shark story?

FS: Oh, no. [laughter]

JA: So, we were fishing squid at the time. There's a main boat that holds the net. There was a small boat that is a light boat or a net boat. I was driving the net boat. So, what I would do is we would light up an area, and the squid would form in a school. I'd go out and sit on top of the area with lights on. Then the main boat would wrap around us. We'd pull the net together. I would drive the little boat over and tie up and hold up the outside of the net. What happened one evening was we had just wrapped on 10 or 12 tons of squid. So, we were about to the point of picking the squid out of the net and putting them in the boat. So, I was about to get off the little boat and climb on the large boat. I looked up, and I thought it was Moby Dick. I thought it was a white whale. It was that big. My first job was to go to the stern and lift up the motor and climb onto the boat. As I looked up, he seemed to be, I don't know, 50 yards away from me. I couldn't believe that the whale was all white. Then as he got closer, I realized that it wasn't a whale. It was huge.

FS: Oh, my God.

JA: So, I stood in the skiff, holding onto the motor. He swam right underneath the skiff. The guys up on the boat are jumping up and down going, "Dude, dude, dude, dude, dude." [laughter] So, he turned around, and he came back underneath the skiff again. I watched him swim off. He got to about the stern of the boat. There was maybe a 300-pound sea lion. In one bite, it was gone.

FS: Oh, my God.

JA: Just gone. At that point, I just decided I was going to stay in the skiff for a little bit longer. I didn't need to get on the boat. He swam off. The crew guys ran to the stern at that time when they saw him eat the first one and said that he went a little further. There was another 300-pound sea lion that he took another bite and half of it was gone. Then he swam off.

FS: Oh, my God.

JA: The guy that fished in this boat actually was the one that put large white sharks in Steinhart Aquarium and stuff. So, these guys really know white sharks. It was amazing to be that close. It's incredibly humbling when a critter that large comes up and just kind of pokes his nose around what you're doing and says, "This is my home, not yours." It's really interesting to see. You just kind of sit there. It's the same thing with whales when they pop up when we're working gear or something. It's just really humbling to watch a large animal like that. Yes?

FS: Do you have any other close-call stories? Earlier, you were talking about on Fridays, you

had some incidents. Do you have any sort of close calls?

JA: Close calls meaning operator-error close calls or just interactions with the ocean?

FS: Have you ever had any life-threatening experiences?

JA: My father always taught me as a kid that you can always come in and tie the boat up today and go back tomorrow. I'm trying to live by that. The other thing that's really difficult is a lot of guys that are either new to the fisheries or have – we have some crab boats that run five-man crews, and they run around the clock. So, when you're trying to support five families and a fairly expensive operation, they end up doing things that they shouldn't be doing. They work so hard to fill the boat up. A lot of them, at times, will get into situations that they don't want to be in. They run the boat up on the reef or what. We had that just this last week. We had a guy, a newcomer who had only been fishing a couple of years. He was albacore fishing, and the albacore were far enough away. He was running back and forth. He was trying to sell during the week and on the weekends. He did it for, I don't know, over a month, six weeks, maybe. Your body can work hard for a period of time but at some point in time, it just kind of shuts down. He was doing trips where he was going as many as 100 miles away by boat, catching a bunch of fish, and driving 100 miles back. When was it, two weeks ago or so? He was outside the Farallon Islands, somewhere out in here, and then fished up to here. When he came down to here, he fell asleep and just put the boat on the beach right below the radar station there at Pillar Point. So, he got off the boat with quite an interesting story. The other story was there was a man that spent most of his life building a boat. He was from Norway. He had built the boat by hand. It was a beautiful wood boat. He had just sold it to the guy just a month and a half, two months before. They ran the boat up on the beach. The boat today is just – there's only a couple little pieces left. It just came apart. His interesting experience – which I thought was interesting - was when he sort of woke up on the beach. He knew the boat was on the beach. So, he kind of said, "Well, I'm on the beach. So, I'm not going to get into the survival suit. I'll just put a PFD, one of the flotation devices on." He, being half asleep, kind of thought it was no big deal. So, he kind of walked to the stern of the boat and jumped in the water. I guess he stood on a rock. So, he felt, "Well, heck. Here's the beach. I'll just walk ashore." The next wave came in, and he went to step on the rock. It wasn't there. Then at some point in time, he started to wake up and started to swim to the beach and started to realize that the water was a lot colder than he thought it was. He lost a lot more energy than he really had. Luckily, by the time he got close enough to the shore, there was a sheriff that had walked out and grabbed him by the hand and dragged him ashore. But he said it was definitely a rude awakening to realize that you're in that kind of situation. We take classes. We have programs where we not only take the classes, but we train everybody on the boat. Where are the survival suits, where are the escape routes, where are the fire equipment, all that kind of stuff. We do monthly drills to make sure that everybody knows where all the stuff is. But that's usually the case is when you're in the water, you find out that the water takes a whole lot of energy out of you. Because it's fairly cold in this area around here. So, that's usually what happens is the guys have to deal with that. So, it's quite different. Yes?

FS: What are your thoughts on shows like *Deadliest Catch*? How real are they?

JA: Yes, I love them. [laughter] I really like the one back in the beginning when the guy was

jumping up on the deck and the boat was falling out below him. Did you see that one? He would go to the mid-deck. He'd jump up in the air. The boat would go down. He'd be like, oh, I don't know, 10, 15 feet off the deck. The boat would come back up to him. We had a number of people see that film. They ran out on a charter boat. They were standing on the bow of the boat. The bow of the boat went down. So, they all jumped up in the air. When they came down, they came down on the rails. One guy broke all his ribs. [laughter] So, the Deadliest Catch is really interesting. [laughter] At times - since we do supply you with Christmas crab or New Year's crab or Thanksgiving crab, we do, at times, go when it's not really nice. I fished on the ocean where there was just two of us, our boat and another boat. Nobody else would go out. When we left the harbor, we had our survival suits between our legs, standing on the flying bridge in case we rolled the boat over going out. So, we've done those things. I was younger, and the guys I were with, we had a really good boat. I knew the man that built it. He built it for his son. I took the kid out when he was in high school, and we fished all the way up into Oregon on the boat. So, I knew that it was a safe boat. The other boat that was out on the coast was – the man built the other boat also too. So, they were both really good boats. We fished. We came home. It was – I don't know, it was blowing forty-three knots and 23-foot swells. You couldn't see the buoys or anything. So, when we got into the harbor, you kind of feel good about what you've done because you did it safely. When I got into the harbor, I saw a new truck on the dock with a Caterpillar power truck. There were these 6'4" blonde-haired kids that were on there, running around. I asked what they were doing. They were getting on a tugboat that came from Los Angeles and going out when we were coming in, because a large crane barge had turned over in the lanes where the ships needed to go. These guys were going out to jump in the water to put charges on the crane barge and blow the barge up. So, as good as I felt, instantly, I felt like it was nothing. [laughter] Those guys were amazing. They went out. They grabbed that barge. They towed it as far offshore as they could tow it. Then they jumped in the water and put charges on it and blew it up and came home. So, as tough as I felt, I felt like nothing after seeing those guys leave. [laughter] They were amazing. So, it's pretty cool. We do the best we can. We do fish. There are times where it's not really nice. I have a whole bunch of people that want crab for Christmas or something. If the weather is doable, I'll go. I'm surely not going to risk my life for a few thousand dollars' worth of crab or something. But we try to do our best. Some guys fish a whole lot tougher than other guys. Some guys have some really new boats. So, that's what's changed in the fisheries more recently is the amount of money invested in boats. There are some boats that are just incredibly 24/7, fish in any kind of weather kind of boats. There's a lot of boats that actually came down from the Alaska king crab fisheries that have moved down into our area to fish local Dungeness crabs. In fact, one of the buddies that I have actually tried to bring over 100-footers down. The state of California actually wrote a law and told him he can't bring 100-footers down. So, there's actually now a law that says you can't bring 100-foot boat into our fisheries. But that's what's really changed is the fishing potential of some of these operations. They harvest a lot of crab in a short period of time. So, we just spent a bunch of years, and we actually wrote a new crab law. We're just having it go into effect January 1st. We'll try to work on some of the issues of the crab fisheries so that we don't have so much fishing potential in it. We're reducing the pot limits to five hundred pots in the top tier down to 175 pots to the small tier. So, we've actually wrote the laws. They're going in effect this next year. We'll deal with that. Like I said, most of the fishermen are trying to make it as sustainable as possible and not influence the biomass or the resource. So, we're trying to do that too.

FS: How would you define sustainable fish?

JA: That's an interesting question. Because we've been to a lot of meetings for years on the whole term "sustainable." It seems like everywhere we go and every group that we talk to has a little bit different definition of what is sustainable. In the salmon fisheries, how do you declare sustainable? We have a group of people that want to say sustainable is all-natural fish even though we don't have any natural fish left really in Central Valley. So, where do you determine what the term "sustainable" means? We're trying to raise fish in hatcheries and release them in different places so that we can have fish in the industry and on the ocean, so that everybody can keep their jobs and people can recreate and go out and catch fish. But as to going after and creating natural fish again, it's very difficult when you're down to 10 percent of your natural habitat because of dams and diversions and different things that have stopped the fish from going to where they really are. How do you create a natural fish? So, as far as sustainable, it kind of depends on the fisheries. It kind of depends on the stock. There's just been a whole bunch of different definitions on what people want to feel sustainable really is. So, it's hard for me. Because I sat in a bunch of meetings, and I saw people define it differently. We would like to have fisheries where there's fish for us, for our kids, and for our kids' kids. We'd like to adjust harvest rates so that we don't overfish a certain stock. So, the fisheries, I think, has taken on the challenge and tried to use different gears, try to stay out of certain areas, try to work on sustainability. But the term "sustainable," it's interesting to see who defines it the way you defined it. How do you define sustainability?

FS: Me?

JA: Yes. [laughter]

FS: Sustainability within the ocean or just sustainability?

JA: You're right. Because we worked with California Grown, which sustainability was also with the forestry people. Forest lands and everything else, what is their definition of sustainability? What was our definition of sustainability? Like I said, it kind of changes a bit in whatever meeting you're in, with whatever group you're dealing with, and whatever type of product you're dealing with is to see how it changes a little bit. That's what became difficult for us on the term "sustainability." Because if I was talking to the forestry people, and we were talking about how do you log properly, or how do you raise the forest properly? Those are completely different questions than how do we harvest properly on the ocean. So, it's interesting to see the different concepts of what truly the word meant. So, that's kind of where we went with that. Yes?

FS: What is a stereotype that people have about fishermen that is not true?

JA: There are stereotypes about everybody, isn't there?

FS: Yes.

JA: I don't know. Being in the industry, I think that every stereotype that you ever said about

anybody, you can weed through every fisherman that I've known my whole life, and you'll find each stereotype. You'll find somebody to fit that. Now, whether that's across the board, that's really hard to understand. But if you want to say that this guy is that stereotype, yes, you can find that one person. But the majority of the guys are a bit different in that we have some kind of a gypsy-style life where we do travel for different things. So, that makes it a little bit different. But as far as a real stereotype, like I said, every business I've ever been in, I've found people in that industry that fits whatever stereotype you want to tag to somebody. So, that makes it very hard. Yes?

FS: So, how do people react when they find out that you are a fisherman? When you tell them, "Oh, I am a fisherman," what is their reaction?

JA: That's interesting. Because a few years back, I was chairman of the California Salmon Council. So, what we did is all the marketing for salmon in California. I was also on the California Grown or Buy California Marketing Board. So, we wrote a grant. I actually went to Japan and said that if we go to Japan and deal with the importers in Japan, we'll learn where we need to go in our fisheries and how we need to market and what's going on. Because the Japanese are the most critical people for quality of seafood. The people that we were able to meet with were incredible about their abilities to what to look for and how to pay attention to what's actually going on. So, we felt if we could go to Japan and go to four of the five major importers in Japan – these are billion-dollar businesses – and sit down in their boardroom and learn how to sell to them, then we could go to anywhere in the world and sell our salmon to anybody in the world. So, I went to a vice president of a billion-dollar seafood company, and I asked a question of him. His first question to me was, "Well, who are you?" My response was, "I'm a fisherman." [laughter] He stuck his nose up and looked away. He said, "Next question." So, it took forty minutes of me asking questions to this man before he finally realized that I was a bit more than just a basic fisherman or the stereotype of what a fisherman was. After forty minutes, he started to smile about things. When the first hour, which was supposed to be – we only had an hour with this man. He turned around and said, "Wow." He said, "Why don't I invite in the director of new marketing, the director of new items, and why don't we do another round of tea and sit around and talk about this a little bit more?" So, we got into a whole another hour of conversation on different issues, and I was able to ask a whole bunch of questions. When it was all over, he turned around. He says, "It's almost lunchtime. Why don't you guys come and have lunch with me?" That was what was fun. This is the Tsukiji Fish Market in Japan. So, he took us downstairs around the corner in some back alley and went into some place. Since he was the vice president of this business, we went into a back room and had lunch. They sat us around a large table with lazy Susans. They'd put everything on the lazy Susan, and they would just spin around. They made some tofu food, a tofu type of food. I wasn't really into big tofu. I had five helpings of that. It was so good. [laughter] So, this was pretty impressive, the food that that man gets, since he is a major importer of seafood. The food that we had was just so much fun. That was really interesting. I think a lot of the time, it is that. We deal with people. If we get a chance to talk to them and find out who they are and let them find out who we are, we can do quite a bit. But people in general are that way until they know who you are. Most people realize that they've done a lot to get to where they are and become who they are. Until you can respect them for what they've done - if you can get that mutual respect, you can conquer a lot of ground and do some really interesting things. Yes?

FS: Was there ever a point in your life where you considered giving up being a fisherman?

JA: There was. There were times where I've always thought that there were other fields that I could have gone into to either make more money or have a more home type of life and those kinds of things. So, I did think about things. More recently, it's been more difficult because of my involvement in management and making things change in the fisheries. After all the years to get to where I am now and meet the connections and the people that will listen to me and help me accomplish some of these goals, I kind of hate to give that up. Some of these people are really neat, really helpful people. They have a lot of clout in whatever agency that they're in. I hate to give that up and try to go start over somewhere else. That's kind of why I stay where I am. Yes, it's not the lifestyle that everything that I wanted it to be. It's not the family life that I wanted to have. But it's kind of nice being able to make as many people happy as we do. There are some really neat products. Selling off the boat during the holiday times, when you see people come up, and they get a sack of crab. It's a fair price. They walk off. Either they're going to go cut down a Christmas tree and go home and cook crab and decorate a tree, or whether they're going to go home for their Christmas dinner or their New Year dinner. It's really neat to see them walking off the dock with a smile on their face and going home to a family event. It's nice to be a part of that. I was also on a production boat where we did 7,000 pounds a day. I came in one morning at 6:00, and we were doing the unloading. I asked the buyer. I said, "This is 7,000 pounds. We did 7,000 pounds yesterday. We did 7,000 pounds a day before." I said, "Where is this going to?" He looked up to me, and he laughed. He said, "Every bit of that will be eaten that night in restaurants." So, it's kind of a neat product. It's well-liked in the area. People like it. We've got people now buying cargo planes and shipping it to China. So, it's kind of going global. It's pretty interesting to see how this whole market is developing and how our value is going up on the product as more people enjoy it. I have a question. There was somebody here that was actually with the sanctuary and with a fisheries program or –

FS: Maybe not the sanctuary. He just said that somebody was going maybe to a Monterey fishing program.

FS: Yes. The immersion? Are any of you going to be doing that?

JA: You're going to do that?

FS: Yes.

JA: Could you tell me a little bit about that?

FS: Well, I went on it last year.

JA: You did?

FS: Yes. We went to and interviewed some people from Seafood Watch, a few people from NOAA, and – who else? Some fishermen, a crab fisherman, and another person.

JA: Where did you go to do this?

FS: We went to Santa Cruz and Monterey Bay. The whole point of it was to define what sustainable fish was. Every person we went to, we asked how they would define it. We tried to connect the fishermen to Seafood Watch. Because they do not have the best relationship that we found out. [laughter] We tried to put pieces of it together. Our teacher just went to -I do not know, out of state to present all of our interviews.

JA: Oh, really?

FS: Yes.

JA: Oh, cool.

FS: She went to the National Oral History Association's meeting.

JA: Oh, wow. So, did you go to the NOAA lab there in Santa Cruz?

FS: Yes.

JA: Isn't that cool?

FS: Yes, it was cool.

JA: [laughter] Who did you get to talk to? Do you remember?

FS: I interviewed Karin Stratton – oh, that was from Seafood Watch. I cannot remember her name.

JA: Questions?

FS: Oh, and we went to the Monterey Bay Aquarium and interviewed two historians, Bob (Enaya?) and Tim Thomas. They just told us a bunch of history about the bay and how, over the years, it has really changed.

JA: So, you got to go through the aquarium?

FS: Yes.

JA: Did you get to go through (Hobbs?) right next door?

FS: Through what?

JA: Hobbs?

FS: No, probably not.

JA: If you go to the aquarium again, try to get in there. It's a lab right next to the aquarium. They actually raise albacore and tuna fish there inside. You can actually go in when they're feeding the fish, and the fish are swimming around. It's really cool.

FS: Oh, yes. We did go in there. In the big blue buckets or fins?

JA: What's that?

FS: Yes, I think so. They come in big blue tubs.

JA: Sweet.

FS: Yes.

[end of transcript]