NATIONAL TRANSPORTATION SAFETY BOARD

In re:

THE MATTER OF THE INVESTIGATION
OF THE ACCIDENT INVOLVING THE
GROUNDING OF THE EXXON VALDEZ,
MARCH 24, 1989.

OFFICIAL TRANSCRIPT OF PROCEEDINGS

Volume III - Morning Session

Thursday, May 18, 1989 - 8:00 a.m.

Anchorage, Alaska

NATIONAL TRANSPORTATION SAFETY BOARD

In re

The Matter of the Investigation of the Accident Involving the Grounding of the EXXON VALDEZ, March 24, 1989

_____/

OFFICIAL TRANSCRIPT OF PROCEEDINGS,

taken on behalf of The National Transportation Safety Board, at the Hotel Captain Cook, Discovery Room, Fifth & K Streets, Anchorage, Alaska, reported by Diane M. Preece, Registered Professional Reporter for Executive Reporters, Official Reporters for the National Transportation Safety Board.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A P P E A R A N C E S

Board of Inquiry:	Lou Colucciello Lee Dickinson Terry Armentrout Jim Danaher
Technical Panel:	William Woody Leon Katcharian Richard Johnson Merritt Birky Eric Sager Ronald Battocchi
For State of Alaska:	Robert LeResche
For U.S. Coast Guard:	Cmdr. Darryl Waldron
For Alyeska Pipeline Service Company:	William Howitt
For Exxon Shipping Company:	Captain William Deppe
For Lloyd LeCain:	Robert H. Wood, Jr.
For Jerzy Glowacki:	Thomas P. Mannion
Reported By:	Diane M. Preece, RPR

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

I N D E X

WITNESS:	EXAMINATION BY:	PAGE
Lloyd LeCain	Mr. Colucciello	745 803
	Mr. Johnson	746 812
	Dr. LeResche	772
	Cmdr. Waldron	778
	Mr. Howitt	801
	Mr. Armentrout	806
	Dr. Dickinson	809
Jerzy Glowacki	Mr. Colucciello	813 880
	Mr. Woody	814
	Mr. Sager	841
	Dr. Birky	862
	Cmdr. Waldron	866
	Dr. LeResche	872
	Captain Deppe	880
	Mr. Danaher	882
	Dr. Dickinson	883
Frank Iarossi	Mr. Colucciello	884
	Mr. Katcharian	885
	Dr. Birky	915

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Anchorage, Alaska, Thursday, May 18, 1989, 8:00 A.M.

DR. DICKINSON: Good morning. It's 8:00. We'll begin the third day of Safety Board hearings.

I'd like to call to the witness stand Mr. Lloyd LeCain, second officer on the EXXON VALDEZ. Mr. LeCain, please step forward.

Mr. Colucciello, will you swear in and qualify the witness, please.

LLOYD LeCAIN,

called as a witness, having been duly sworn upon oath, was examined and testified as follows:

MR. WOOD: Chairman Dickinson, my name is Robert Wood from New Orleans. I'm an attorney representing Mr. LeCain.

DR. DICKINSON: Thank you.

EXAMINATION

BY MR. COLUCCIELLO:

Q. Mr. LeCain, please state your full name.

A. Lloyd George LeCain, Jr.

Q. Who is your employer?

A. Exxon Shipping Company.

Q. What capacity are you employed in?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Second mate.

Q. How long have you been in this position?

A. About ten years.

Q. All right. Sir, how long have you been aboard the EXXON VALDEZ?

A. About 45 days in two segments. One segment approximately 30 -- oh, for the EXXON VALDEZ. I'm sorry. The EXXON VALDEZ, I was on there 78 days and then just got off after 55 days, and that's it.

MR. COLUCCIELLO: Thank you. Mr. Johnson will continue with some questions.

EXAMINATION

BY MR. JOHNSON:

Q. Good morning.

A. Good morning.

Q. Good morning, Mr. LeCain. Can you hear me okay?

A. Yeah.

Q. Mr. LeCain, have you been assigned to the EXXON VALDEZ prior to this voyage?

A. Yes, I was.

Q. And could you describe, please.

A. I was assigned as second mate for 78 days approximately four months ago.

Q. And was this under the command of Captain

Hazelwood?

A. Partially under the command of Captain Hazelwood and partially under the command of Captain Greg Stalzer.

Q. Do you recall how many trips you have made on the bridge of the VALDEZ or any other Exxon vessel through the Valdez Arm?

A. I'd say about eight trips.

Q. And can you recall whether they were daylight or nighttime transits?

A. Both.

Q. During these transits, can you recall what the ice conditions were? Did you -- you have any special recollection regarding the ice conditions at that time?

A. Only on one, one occasion we did have some ice, and we had to -- just one occasion we had some ice.

Q. Have you ever had the occasion of leaving one lane and going into another lane because of ice?

A. No, I haven't.

Q. Mr. LeCain, could you describe what your perception of the role of the Vessel Traffic Service is in your opinion in Prince William Sound?

A. Monitor the position of the vessel, to give the vessel pertinent information. That's about all.

Q. During the time you've been running into

Prince William Sound, have you been under the impression that the Coast Guard has been plotting you or tracking you all the way through?

A. One time in the arm up there we were advised we were slightly off the track by the Coast Guard. So they must have been plotting us up the Valdez Arm.

Q. Do you recall what portion of the Valdez Arm that was?

A. No, I don't.

Q. Mr. LeCain, as second officer, are you the navigating officer aboard the EXXON VALDEZ?

A. That's correct.

Q. Would you please describe your watch standing duties and responsibilities.

A. Okay. I stand the twelve to four watch. While on watch I run the watch, I assign the ABs their jobs, I do the navigation while on watch. When I'm not on watch I take care of the charts, make sure they're maintained, brought up to date. I lay out the courses under the direction of the master. If anything is unusual in the local corrections to charts, I'll point that out to the master. I maintain the bridge equipment, make sure that the gyro and everything is working properly, as well as the course recorder. If there are any malfunctions of equipment while I'm on watch, I report to the master.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

While not on watch, if I'm aware of it I'll make sure the captain knows about it.

Q. I would like to have you describe the navigational equipment that was available to the watch standers aboard the Valdez on the night of the 23rd.

A. Start from the chart room. We have a course recorder, we have a Loran C, we have a satellite navigator, we have a depth sounder, recording depth sounder which tells the depth of the ship, depth of the water under the ship. We have two radars, collision avoidance system. We have a Fathometer. Regular Fathometer reads out with a reading, has an alarm feature. We have radio turn indicators, we have rudder angle indicators, we have telegraph to control the engine speed. We have gyro, give you the heading of the ship. We have a steering scan.

Q. For the purposes of the Loran and the satellite navigation, could you give that in a little more detail, please.

A. Okay. Loran is a device which takes hyperbolic lines and -- radio waves, I guess you call it, and interpolates them and gives you a latitude and longitude position.

Q. How accurate is the satellite navigation system?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Within half a mile in my experience.

Q. In Prince William Sound, do you have a number of satellite transits? Do you have fixes updated periodically?

A. Most of our navigation time in Prince William Sound is done by radar or visual bearings, because it's more accurate, as far as I'm concerned, it's more timely. Satellites only come in every hour or so. So a prudent navigator would use visual bearings.

Q. How is the Loran coverage in Prince William Sound?

A. It varies. Some places it's very good, some places it isn't.

Q. Could you further elaborate on that?

A. Not really. We don't usually use Loran. We usually use, we use bearings. The Coast Guard set up a system of lights on points of land down there, and we usually use these lights for our navigation.

Q. Now, you mentioned the Fathometer. Where is that located? In the chart room?

A. There's a Fathometer in the chart room and there is another Fathometer outside in the wheelhouse.

Q. Could you describe how you would set the alarm on the Fathometer?

A. You just would set it. There is a dial on

there you just turn and put it on what you want to, what you want to have it. We have to consult the manual. I don't set it that often because it's set by the officer that's going to make arrival or departure aboard ship, leaving or entering port. So whenever I've had to use it, I get the manual out and check it to make sure it's set properly. A very important item.

Q. For leaving Valdez, what would you set that Fathometer alarm at?

A. I set 40 fathoms.

Q. Now, the course recorder. Where is that located? That also in the chart room?

A. It's in the chart room.

Q. Would you please describe the course recorder, how it's maintained.

A. The course recorder is a mechanical device which records what the gyro heading of the vessel is at any time, place. It's a constant readout. I wind it. It has a mechanical wind-up. So I wind it every two days, which is really more than you need but that's how much I wind it up. It has ink pens. I fill the ink and I set it at the beginning of my watch and when I get off. So I make sure it's always within, you know, eighth of a degree or quarter of a degree. It has to be right on. It's a very important item.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. You're saying that the accuracy is within approximately one-eighth of a degree?

A. Well, it could be, depending if you're -- you know, we'll say a quarter degree. Depends how careful you are when you set it. I'm very careful with it. I usually make sure it's right on.

Q. Now, the course recorder has an internal chronometer; is that correct?

A. You wind it up and it runs a clock. Okay. The clock mechanism is -- as the pens move, they move along a sheet and the sheet has times on it. So you set these times. When you put the recorder paper on the roll, you set the time at what time it is GMT, and it continuously goes along and it segments along the roll over elapsed time. So it's a constant readout on the paper. And we set that every watch too, the time, make sure that's right on.

Q. Have you observed while you've been on the VALDEZ whether that course recorder has been running fast or slow?

A. Right on. I've never had to really fool with it.

Q. Mr. LeCain, during the last several days there has been a great deal of discussion involving the steering gear aboard the VALDEZ. I believe it's the SRP

2000; is that correct?

A. That's correct.

Q. As navigating officer, are you responsible for the data that is input into the system?

A. Yes.

Q. Would any other officer be putting in this data?

A. Not supposed to. If anyone did, I want to know about it immediately.

Q. Other than changing the helm from automatic to hand and back, would there be any reason for anybody to be using the SRP 2000?

A. No. The master might do something but he would inform me immediately. It's not something to fool with.

MR. JOHNSON: Mr. Chairman, I have an exhibit I would like to enter. I believe it's being distributed at the moment. I don't have a number for it yet.

DR. DICKINSON: We'll give you one, Mr. Johnson.

MR. JOHNSON: What it contains is some --

DR. DICKINSON: Mr. Johnson.

MR. COLUCCIELLO: This will be Exhibit 12C.

MR. WOOD: What was the number, sir?

MR. COLUCCIELLO: 12C as in Charlie. This is

the ship control system, control console of the steering gear.

BY MR. JOHNSON:

Q. Mr. LeCain, just take a moment and look through these sheets. I think it will help you. I would like to have you describe the basic features and operation of the SRP 2000. Just take your time.

A. What would you like me to do exactly? How to turn it on gyro or --

Q. First of all, I'd like you to just give a basic description of the type of information and what the system, capability of the system, wave points, manual input data that you put in, and then I would like you to describe the controls for switching from hand steering to gyro, from gyro to hand, and the steps that you would take to do that.

A. Yes. The system -- I would like to tell you it's a sophisticated system. You have the capability here of putting in different geographic wave points on a trip. The vessel steer from point to point. You can go anywhere with it. It's automatic, does the whole thing itself. It's a very excellent system. It has many features in it, such as it has self-adjusting modes for different weather conditions, it will adjust itself; it has ways to, for emergency steering immediately right available to you on

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

the system; it has a series of alarms. It will tell you what's wrong right away with the steering system. It's just quite straightforward steering gear system. This is one of the best ones I've ever seen.

You can change the, from port to starboard pumps just with a switch. There is no -- without having to call the engine room. If you have to get hold of the engine room, you can switch down to the engine room, make the steering engine room right from the system, there is no problem. It has a video screen on it which tells you your heading, tells you the rate of turn. It also tells you the rudder, what way the rudder is going. It's all right there straightforward, right in front of you. It's a nice little system.

Q. Would you please describe in detail how you would change from hand steering to gyro mode.

A. Merely press the --

Q. I would make reference, just make reference to the page numbers at the bottom of the page if you're looking at a diagram, please.

A. Page 2-3. Merely press the gyro button, and at that point the ship's in gyro, automatic pilot. It will be steered by the system. If you want to go back into helm, you press helm, the button; and it's Figure 2-3. Press helm and the system goes back to helm. There

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

is also lights above the buttons here on 2-3 which light up to show you what's exactly happening with the system. You have a helm light come on so that you know right away. Also on the video screen --

Q. That was page 2-5, Figure 2-3; is that correct?

A. Yes, sir, that's correct. Also on the video screen there is an indication -- page 2-14. It tells you what mode it is in. There is a letter N, shows you it's gyro mode. If it was in helm, it would say helm mode; if it was in navigation mode, meaning navigating from the wave points, it would say navigation mode. So it's immediately apparent in a number of places what the system is in and what mode it's working on.

Q. If you want a course of 200 and you were altering course, let's say to 180, if I interpret you correctly -- if you were in hand steering and you wanted to maintain the course, how would you put the course in? Is that manual input or just have to steady the vessel up?

A. You'd press -- you're talking automatic pilot? Changing course automatic pilot, sir?

Q. You're in automatic, you're in gyro and you want to alter course without getting out of gyro.

A. Okay. You press gyro again, you press one of these arrows here to go either direction.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

MR. WOOD: What page?

THE WITNESS: This is page 2-3. Okay. You press the gyro button again, even though it's in gyro. And we're going from what? 230 to --

BY MR. JOHNSON:

Q. Just for sake of example, 200 to 180.

A. Okay. You could press either the left-hand arrow or the bottom arrow, and that would decrease the course. You would get a reading across the video screen indicating, you know, the course you're going to. It would move there. I think we have it back here. Here it is, figure 2-14 is a good example.

Q. Page 2-14?

A. Figure 2-8, page 2-14. I'm sorry. You'll see on there there is a, on the top of the diagram there is a representation of a compass, and right now the arrow in the middle, shows what, middle bottom, shows what the ship is steering. It's 359.9. Okay? All right. Depress gyro button again, bring the arrow on top over to ten. Do you see that? Okay. Shows you how much of a course change. And then you would press the accept button, and this would bring the ship over to 9.9. Very simple.

Q. Now, while you're performing all these functions, the vessel would have remained in gyro on 200 in the meantime?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Till you press the accept button, yes, it will.

Q. Is there another manner of changing course using the gyro by switching from gyro to hand, steadying up on a course and then pressing gyro? Would that do the same?

A. Yes, sir. You would press the helm button and then you would have it. You would change course manually by moving the wheel, steady it up and then press the gyro button again. There again, you're in gyro.

Q. When the vessel is in gyro and you want to put it back into hand steering, would you describe those steps, please.

A. Just press the helm button. That's page 2-5, Figure 2-3, press the helm button.

Q. Would you describe that button, please. What I'm getting at is it's not just --

A. It's not --

Q. As Mr. Cousins made a reference to, it's not a microwave button, it's spring-loaded?

A. Spring-loaded button that has to be pushed. You have to know you want to push it and push it. It's not something you can just touch. You have to actually push this button.

Q. So if you were in gyro and if you were in a

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

rush, is it possible that it might not have, is it possible to not press that button hard enough? I'm making reference to the incident just before the grounding when we were discussing whether or not the vessel was in gyro,

A. Sir, that's possible but I wasn't there so I really don't know what they did up there.

Q. Have you ever had the occasion of pressing this button and realizing that it didn't come out of gyro and there was --

A. Never.

Q. When the quartermaster is at the wheel and you're going from gyro to hand or hand to gyro, could you describe the steps for -- would the quartermaster be permitted to make those changes or is the watch officer responsible for that?

A. Watch officer is responsible for it. If I had somebody that would like to learn how to do it, I might do it at sea under my direct supervision. But when those buttons are touched, I want to be right there. I want to do it, so I'm going to do it. I might let them all see how to do it in case I have a situation where, emergency, but they would never touch that unless I touch it. I mean, I'm going to do it. That's what I'm saying.

Q. So as far as you're concerned, you're the only one that would change the vessel from hand?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. That's correct, yes, sir.

Q. Hand to gyro? Is that a practice throughout the Exxon fleet --

A. Yes.

Q. -- or is that your personal --

A. That's a --

Q. -- practice?

A. That's a practice. Good seamanship too. That's a very important item, is steering gear.

Q. Mr. LeCain, I'd like you to describe the events which occurred that you recall between 1200 on the 23rd of March until the time of grounding, please.

A. Well, I got up around 11. Let's see. I got up around 9:00, sat around and read till 11, went down and had lunch, and then I went on watch. I stood cargo watch the afternoon, which involves sitting in a chair and just controlling the cargo. It's a series of buttons. It's all automated there. I hung over a little bit to give the chief mate a hand at 4:30.

I went down to the galley. One of my jobs on the ship is I run the steward supply. I went down to see how everything was going down there, and I stayed around talking to them till approximately five. Had supper, went up to the bridge, erased the charts for the southbound voyage, made sure that navigation equipment, the way it

looked to me was all right. I wasn't making a gear test at this time. I was just making sure the course recorder was wound and things such as this.

Then at around 7:30 they called everyone out, and I went out on deck, stayed out on deck letting the ship go till around 10:30, let's say. Went to bed, and the next event I can recall is the ship running aground. I could feel it bouncing along on the bottom for less than ten seconds.

Q. That morning you said you were up around 10:00. Did you observe the master leave the vessel?

A. No, I did not.

Q. Did you observe the master return to the vessel?

A. Yes, I did. He came aboard, he asked me a few questions about when we were sailing and what was going on and asked me to come up to the bridge before we left just to go over how we wanted to let the ship go.

Q. Do you recall what time that was?

A. I can't recall sitting here, no.

Q. At that time did you detect the scent of alcohol or beer on his breath?

A. No, I didn't.

Q. What time did you report to the bridge? You said shortly thereafter you went to the bridge?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Right.

Q. And met with him again?

A. It must have been around -- I can't say. It was all in a sequence between 7:30 and 8:30. Somewhere in there. It was within a half an hour to an hour sequence. It wasn't a long time at all. I'm not sure what time the ship was let go in all this. I believe it was around 8:15, possibly, I talked to Captain Hazelwood.

Q. So you retired to your cabin at 10:30. What happened next?

A. Next thing I remember is the ship running aground. That's -- I went to sleep, okay, and then the next thing I remember is the ship ran aground. The chief mate woke me up, said: Lloyd, we've got a problem. Please come to the bridge. So I went to the bridge, and I saw where we were and just didn't know what to say. It was something unusual. I didn't expect to be where we were.

And I went in and saw Captain Hazelwood on the port side of the bridge by the radar, I saw Mr. Kagan by the wheel, and I saw on the starboard side Mr. Cousins standing by the telegraph. I asked Mr. Cousins what happened, and he said, he said: I changed course and the ship slid up on the rocks. Slid up on the reef, something to that effect. So -- he said: We were dodging ice and I

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

changed course and we slid up on the reef. That's exactly what he was saying.

Q. What did you do next?

A. I saw they were doing something with the engines. So I went over to Captain Hazelwood and said I want to go down on the deck and help the chief mate. He said go ahead, Lloyd. So I met Mr. Kunkel. I went out on deck, and we proceeded to try and do the best we could to maintain stability of the vessel. We were very concerned about the ship. We could see oil going out and we were trying to do the best we could to fix things, and that's all. Just making sure the deck was all right, and that's about it.

Q. Before you left the bridge, did you have the opportunity to look at the radar?

A. No, I did not.

Q. You stated that you went down below and stood by with the chief officer. What happened next?

A. He just dispatched me to -- wait a minute. When I walked in there we both took a look at the control board, and we could see through the Saab gauges that the oil was rapidly going out of the vessel. I mean, you could see it. It was just flying out in all the starboard tanks and the center tanks. So then he just dispatched me to different places to do various duties, just try and,

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

you know, save the ship and maintain stability. It was just checking things out on deck.

Q. Did you have any conversations with the master after you left the bridge?

A. No, I did not.

Q. Mr. Kunkel mentioned that you were dispatched to the bow. Could you describe what you did?

A. I went up and engaged the starboard anchor, walked out two shots. I don't know what time sequence this was. You have to understand there are many things going on right now. In an emergency, everyone's very cool but time, to keep track of time is very difficult. So I don't know what time -- I went to the bridge sometime in this -- excuse me. I went to the bow sometime during this sequence. I lowered two shots on the starboard anchor and I put the fore anchor down to the water, and this was at the directions of Captain Hazelwood over the radio. He told me what he wanted to do.

Q. What happened next?

A. Well, I ran into Mr. Kunkel, and he said: Lloyd, why don't you go up and relieve the third mate on the bridge. This was about 5:00. So I said: All right. I'll head up to the bridge. And that's what I did. I headed up to the bridge to relieve Mr. Cousins, excuse me, on the bridge; and that was it. I stayed by then off and

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

on on the bridge for the next 36 hours during the emergency.

Q. Subsequent to the accident, did you have an opportunity to speak with Mr. Cousins?

A. Just a few things, but I didn't really want to get into it with him because, you know, I feel it was his problem at this time, and I was just friendly with him. He's a friend of mine and I wanted to offer him any support that I could offer, you know, any friendship, that type of thing. I felt very sorry for him.

Q. Were you present in the control room when the chief officer made his initial damage assessment?

A. Through part of it but I wasn't, I wasn't really into that. That was Mr. Kunkel's business. He was really just using me as a person to go do things as necessary. I had to pull some hoses out of forward to get ready for possible cargo transfer if we were going to lighter the ship. So I, you know, was about that, about the deck supervising people. Luckily the ABs stayed in their rooms, luckily, so when we needed people, just pick up the phone, say I need you and they would come right out. It was worked out fine that way.

The telephone system is excellent to get a hold of people immediately anyplace in the ship, and we also have a loud speaker system which goes throughout the

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

house of the ship and the forward deck there. So it's very good and it was fully operable.

Q. And there weren't any PA announcements to the crew. How was the crew notified?

A. By telephone. You know, making PA announcements in an emergency can cause problems but telephone calls can get people going. And also the ship was intact, you know, on deck and everything. It wasn't necessary to start motivating people into modes so they have to be running about. Telephone calls could handle everything. People were dispatched radios when necessary, hand-held radios. So everybody was in contact with people right through this. We could get people when we needed them.

Q. You stated that you walked around the ship with the chief officer shortly after the accident. Could you describe the level of fumes or did you feel it was a danger of fire or explosion?

A. Yes, I did, to a certain extent. It's always a concern when handling petroleum products. We -- that's one of the reasons we kept people off deck. We didn't want people out there smelling the stuff. Whenever we needed people, we dispatched people. If we didn't need them, we kept them in the house. There was a lot of vapors outside, plus the oil was going in the water, it

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

was all around the ship. We were greatly concerned.

Q. Was there any discussion between you and the chief officer regarding the life boats?

A. No, I wasn't in on that. I don't know what occurred on that.

Q. Were the life boats prepared at any time?

A. Yes, they were. I don't know what time in the sequence.

Q. So you were on the bridge relieving the third officer. What happened next?

A. Nothing. I just stood by up there. I had communications immediately started, the Coast Guard calling us. I had -- within a short period I had Mr. Delozier from the Coast Guard come on the bridge; I had a man from the ADEC, I believe it's called; I had a Trooper Fox come up to the bridge.

They did concern me because they brought their boat right up through the oil to get alongside the ship, and I was slightly concerned about this but luckily we didn't have a problem. I know they were concerned about it too, and we tried to bring people over the port side but the wind and wave condition was such over there that it wasn't a good idea. So -- we could see most of the oil was underwater. So they came up and we didn't have a problem, thank God. It worked out fine.

Q. Were you on the bridge during anytime when there was a discussion with the Coast Guard regarding booming of the vessel?

A. No. I was running communications. I didn't pay attention to that. I wasn't in on that. That was the XO, the Coast Guard station and other people. That's all I can say. I have no recall on that.

Q. So what were your other duties while you were standing by?

A. Running communications, sir, it quickly worked out that I was handling two radio calls a minute, and that went on for almost eight hours. It was absolutely mentally exhausting. I learned a lot of radio and telephone skills in a hurry, I'll tell you.

Q. I just have a couple questions on the steering gear that have come up. If you're in an emergency situation, in your opinion, would it be faster to change course manually by the helm or feeding in the new course and -- in other words, we described the two ways of changing.

A. By the helm, sir.

Q. By the helm?

A. Yes.

Q. So if you were in an emergency situation, you would just --

A. You want to go into helm. I mean, at helm you've got control of everything. When you've got it in gyro, you've got a machine doing it. Helm, you've got men actually, human beings doing the process and they're doing things, and you've got to -- if you want to stop doing what you're doing, you can immediately stop. You know, when you change course in helm, too, you look at the rudder angle indicator so you know what's happening. So it wasn't -- at least I do. Whenever I change course, the first thing I look at is which way that rudder angle indicator is going because that's where people can make a mistake the quickest. So that's -- the helm is the best method.

Q. Looking on at the Exhibit 12 Charlie, page 2-8. When the quartermaster is changing course, is this the rudder indicator that you would be using?

A. No. We would be using -- there is three of them there. There is one that's right inside the video screen on the recorder, on the steering gear; there is one that's right over the starboard radar; and there is another one on the forward bulkhead; and these tell you which way the rudders go.

Q. And where is the rate of turn indicator located on the bridge?

A. There is one right into the video screen and

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

there is one forward there on the forward bulkhead you can see.

Q. Which one would the quartermaster habitually use?

A. I would say, to the best of my knowledge, they would use the one inside the video screen because they can look right at it when they're changing course.

Q. With the rudder in the gyro mode and if the quartermaster turned the wheel, would there be any indication or is there anything that would lead the quartermaster to believe --

A. You're saying --

Q. -- that he was actually changing course or that he was actually turning the rudder?

A. No, sir. There is no alarm. If you change course with the vessel in gyro mode, in other words, you change the wheel, not change course, there is no, there is no alarm. I experimented. I found that to be the case.

Q. The course -- with the steering SRP 2000 in the gyro mode and if the wheel was turned, is it a free-wheeling move, wheel?

A. Free-wheeling.

Q. So there is no way you can tube lock it at all? It just spins around?

A. I don't know if it's, if you get all the way

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

over to 35 degrees it would stop. Okay? I know that it just moves and there is no, there is no alarm telling you that you're moving the wheel in the gyro mode.

Q. And if you eventually put it into the manual mode, would the rudder go all the way over in the direction that you turn the wheel or would it start out amidships?

A. No, it would go over and meet the control. At least that's what my experience with it is. I don't know.

Q. Just for clarification. If you had turned the wheel all the way to port or starboard and it was in the gyro mode, nothing would happen; but if you pressed the helm button --

A. It should go right over and meet it.

Q. Go right over to meet it.

A. Um-hum.

Q. I just want to have one additional question regarding the course recorder. How long does the paper last in the course recorder? Is that a --

A. Oh, about 28 days. Sometimes it varies just how Sperry cuts the roll, but it's 28 days; and near the end of the course recorder there is a red line that comes on the course recorder roll put there by Sperry, and it gives you about a 24-hour notice to the end of the roll.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

So you've got plenty of time to change it.

MR. JOHNSON: Thank you, Mr. LeCain. I don't have any further questions.

DR. DICKINSON: Thank you, Richard. Dr. LeResche?

EXAMINATION

BY DR. LeRESCHE:

Q. Good morning, Mr. LeCain.

A. Good morning, sir.

Q. I'd like to clarify your last couple of statements about the steering alarm.

A. Yes, sir.

Q. It's been our understanding that if the helm, if the wheel is turned to indicate a heading different than the rudder --

A. That's a different --

Q. -- is indicating -- that's what I'm trying to clarify. That an alarm does sound within eight to twelve seconds.

A. You're talking about two different alarms, sir, if you're talking about a nonexisting alarm, an alarm. The nonfollow-up alarm is what you're talking about. If you change course, if you put the wheel over, let's say, to ten degrees right and the rudder does not come over to meet the wheel within, I think it's eight and

a half seconds, you will get an alarm. It's on the bulkhead behind the quartermaster. But from what we found, if you change course -- you don't change course. If you put the wheel over with the vessel in gyro there is no alarm. You just -- that's it.

Q. Well, that's -- I'm still confused. If you put the wheel over for eight seconds with the thing in gyro and the rudder doesn't respond to that wheel, do you get the alarm?

A. No.

Q. So the gyro silences the alarm?

A. No. It's a different alarm.

Q. I understand that.

A. It doesn't silence an alarm. What it is, there is an alarm. If you put the rudder over -- excuse me. If you put the wheel over any direction and the thing, the control is in helm and the rudder does not go over and meet your command, you will get an alarm, non-follow-up alarm. If, on the other hand, the steering is in the gyro mode and someone just inadvertently turns the wheel, there will be no alarm because you're not doing anything. You're not sending a command. The wheel is disconnected. The gyro compass is steering the vessel.

Q. So that alarm does not function if the ship is in the gyro mode?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. There isn't an alarm, sir. It's a different system.

Q. I'm sorry. There is a bell there. Does it ring if the ship is in --

A. There isn't, there isn't -- we're talking apples and oranges, I think.

Q. Yeah. I think you're saying that it's not connected to the helm when it's in gyro?

A. What I'm saying is when the ship is in gyro mode, you do not get an alarm if you turn the wheel. I'm not saying what -- I'm not saying there is an alarm. I'm just saying there is just no, no alarm.

Q. I think we understand each other. I appreciate that. Thanks.

What was your opinion of Bob Kagan's abilities as a helmsman?

A. I felt he was all right. I had him on the wheel coming out of San Francisco in a light condition and the man did okay. I haven't had him in a loaded condition so I can't say loaded.

Q. Would you say you're confident of his ability to steer this vessel in congested waters?

A. Sir, I steer the ship. I tell him what to do. I'm confident that Mr. Kagan would do what I told him to do, and if he had a problem he would tell me. I've

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

worked with Mr. Kagan before, and whenever he had any kind of problem, no matter what it was, on the ship, he would come and tell me what it was. So if he was on the wheel of the ship and I told him to do something and he was having a problem, he would tell me.

Also be aware that I am watching, for every man steering the ship, the rudder angle indicator. So if I told him to do something, I would be watching that, and if it didn't move I would immediately correct the error that was made so there would be no problem. And I think besides steering the courses, I can just have Mr. Kagan steady up using the wheel, right and left rudder. Okay?

Q. Okay. Let me refer you to the NTSB interview of yourself of March 29th. That's Exhibit 6C, sir. And we just need to clarify --

DR. DICKINSON: One second.

MR. WOOD: It's in this package here? Six Charlie?

DR. LeRESCHE: Yes, sir.

Q. Mr. LeCain, on the first page of that interview under the heading grounding, the underscored word grounding, the interviewer wrote the following in the summary: According to Mr. LeCain, he was not confident of Mr. Kagan's ability to steer the EXXON VALDEZ while the vessel remained in congested waters.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Is that the same thing you just said?

A. I think that might be a slight misquote because this is just sort of a review of what we said.

Q. Yes, it is.

A. What I was referring to was that at midnight there is a lot of things going on, people are changing up on the bridge, and Mr. Kagan had told me that he felt he could steer but he felt slightly nervous, and I thought to myself, well, we can -- I decide who stands the wheel watch, so I would just put Miss Maureen Jones on the wheel while this, you know, transfer is taking place, people on the bridge at midnight, and then at 1:00 I would bring Mr. Kagan in and I would handle it in that manner. I would supervise him, and I'm quite sure he would have been okay for me but I wanted to have a situation where I have my attention on him until he felt confident, and I knew he would, and then he would take over.

Q. Okay. Thanks. I understand that. Were you aware that Mr. Cousins intended to let you grab a few extra winks this evening?

A. No, sir, I wasn't. What -- we have a tradition in the merchant marine where you call people when you need them. Nobody called me. I later found out from the captain that they intended to let me sleep until around 1:00. So no one called me and because of that fact

I didn't get up. As soon as I was awakened by the chief officer, I was on the bridge by ten after twelve ready to go to work. So I was set to go when anyone called me.

Q. Would it be a practice in the fleet to discuss ABs like Mr. Kagan with other licensed officers regarding any shortcomings you felt they had?

A. If I really knew something, I might go to the master and talk about it; but I don't believe -- and I think they call it the Pygmalion effect where you talk about people before you -- you give everybody a chance, and I would give him a chance under my supervision and I could probably give him the confidence he needed to do the job, and if he didn't, then we would take it from there. But I had never had Mr. Kagan on a loaded ship so --

Q. Fair enough, sir. You were handling communications for a large part of the time after the grounding, as I understand.

A. Yes, sir, I was.

Q. Do you recall, did you talk with Cmdr. McCall on the radio about 0200 that morning?

A. I wasn't up there till around five a.m., sir. So that would have been Mr. Cousins.

Q. Would have been Mr. Cousins.

A. Yes, sir.

DR. LeRESCHE: Okay. Thanks, Mr. LeCain. No

more questions.

THE WITNESS: Yes, sir.

DR. DICKINSON: Thank you. Cmdr. Waldron?

EXAMINATION

BY CMDR. WALDRON:

Q. Good morning, Mr. LeCain.

A. Good morning, sir.

Q. As the navigating officer, I have some questions concerning, some additional questions concerning the navigation equipment.

You mentioned the Fathometer alarm may or may not have been set and that ever who is departing with the vessel generally sets the alarm; is that correct?

A. I didn't say whether it may or may not be set, sir. All I said is it's a practice to set the alarm. You just set that.

Q. Yeah. The standing orders for the operating procedures for the vessel for departing port, one of the items is setting the Fathometer alarm?

A. Yes, sir. You know, if I had any questions on it -- I know I hesitated before when you asked me what to set it on. If I had a question, I would ask the master and see what he wanted to do. It's not something -- you know, it's something I would do normally but -- and if I was in a port, it's different to me. I would ask the

master, or if I had any question at all, I would have asked the captain.

Q. The Fathometer reading is the amount under the keel; is that correct?

A. Right. Up by the, I believe on the fo'c'slehead, there is a transponder up in there.

Q. So the vessel was drawing about ten fathoms; is that correct? Nine fathoms?

A. Yes, sir, that's correct.

Q. So if you had a reading of 30 fathoms under the keel, it would actually be, you would be in a depth of water of 39 fathoms?

A. That would be correct, sir.

Q. Going out of Valdez, what depth of water would concern you when you saw a reading on the Fathometer gauge?

A. I don't recall, sir. I've been, I've been in the Prince William Sound 25 times, most of it was years ago. I've only been in there around four times since I've been on the VALDEZ, and I would have to go look at the chart and speak to the master what he would want me to be concerned with in that situation. It's a very important alarm. It needs to have consultation, I think, just -- you know, or set a policy. It's something that I would go talk to the captain about.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Is there a policy aboard the EXXON VALDEZ concerning the Fathometer alarm?

A. No, sir. I would just speak to the captain. There is a policy, sir, that we would set it; but at what depth, this would be, you know, up to the master. What I'm saying is it would be set every time but the actual depth on the Fathometer would be, you know, you'd either do it or talk to the captain about it if you had any doubts. I would probably talk to the captain, see what he wants to do.

Q. And to clarify one point, it's the responsibility of the departing watch officer to set these alarms or is it the responsibility of the navigating officer to set the alarms?

A. Departing watch officer, sir.

Q. Thank you. Some other questions about the steering system. When you're in gyro mode and you turn the helm, does the rudder angle indicator turn at all?

A. No, sir.

Q. It should still remain at zero?

A. Yes, sir, because the gyro has it.

Q. The third mate testified after the first helm order of right ten degrees he had called the captain and talked to him. Where in relationship to the telephone to the captain's cabin is it to a rudder angle indicator?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Right on top. There is a, telephone would be right here in front of you and there is a rudder angle indicator right up there. There is a couple telephones on the bridge but you could see it from anyplace on the bridge. It's not any kind of --

Q. Is there one in the chart house, chart room?

A. Only the course recorder roll, which would -- no, no, there is none, no.

Q. There is no telephone in the --

A. Oh, yes, there is. There is a telephone in the chart room. I didn't know what you were talking about. You got me confused, sir. There is a telephone -- there is two telephones in the chart room and there is two telephones out in the wheelhouse, sir.

Q. The telephone in the chart room, if the third mate was using it could he see a rudder angle indicator from there?

A. No, sir, because it was nighttime. Now, I wasn't up there but the usual policy at nighttime is to close the curtain between the chart room and the wheelhouse so that people's eyes don't get disturbed by light. But I wasn't up there that night, I can't say what they were doing.

Q. Going into some policies concerning navigation since you were the navigation officer.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Concerning navigating near shoal water or dangerous navigation such as shoals and reefs, et cetera, what is the ship's policy as far as distances to navigate close by?

A. I believe it's spelled out in the company manual, sir. I can't recall what those policies are at this time. I know that they are -- I've been off the ship 46 days and it slips my mind, but we had a policy.

The courses are all laid out in advance to anyplace we're going, usually by myself under the direction of the master, and, you know, you'd know right away if you were setting up on a shoal. I certainly wouldn't want to get within a mile or two of a shoal. I'd say a mile anyway. And I've never had occasion to get that close to a shoal.

Q. Sir, I'd like for you to refer to the chart behind you there and read out the course in the outbound lane in Valdez Arm.

A. In Valdez Arm. Well, there isn't one --

MR. WOOD. Wait. Wait. You're going to need the mike.

BY CMDR. WALDRON:

Q. It may not be on there.

DR. DICKINSON: Mr. Colucciello, could you perhaps help the witness with a microphone?

MR. WOOD: Can he get hooked up to a microphone?

BY CMDR. WALDRON:

Q. Would the course in the outbound lane be 219?

A. It's not on there, sir.

Q. It's not on the chart. Okay. It is on the original chart.

A. Yes, sir.

Q. 219. The master stated that he was going to come left to 200 to avoid ice and then he was going to fare up into the inbound lane. He did come right to 200. I'm sorry. He came left to 200. What course change would he have to make to fare up in the inbound lane from 200?

A. From 200? I don't know, sir.

Q. He was at 219.

A. Where was he at 219?

Q. Going in the outbound lane at 219. Came left 20 degrees to 200. He told the VTS that his intentions were to go to, divert to the inbound lane to avoid ice. Coming from a course to, from 200 to fare up into the inbound lane heading out, what course would he have to come to?

A. I'm sorry. I still don't see where he would change -- where is he changing course from?

Q. When he gets into the inbound lane he would

change course to head back out again.

DR. DICKINSON: Mr. LeCain, if you can't answer the question, that's --

THE WITNESS: I can't.

DR. DICKINSON: Can't answer the question?

THE WITNESS: I can't answer.

BY CMDR. WALDRON:

Q. From the 2339 position there in the separation zone, he's heading at 200. What course change would put him in the inbound lane heading outbound?

A. When he got to the lane he'd go to 219.

Q. To 219. And that would be right 20 degrees course change?

A. 200?

Q. Right.

A. That's correct, sir.

Q. But instead he went left 20 degrees to 180?

A. I don't know that. I wasn't there when he did all this.

Q. I have some questions about the duties of a lookout. When you assign people lookout duty coming in or departing a port, what kind of directions do you give to lookouts?

A. I don't give them directions every time. Usually when I get on a watch, like if I'm on the ship, I

have a talk with my people, and I expect a lookout merely to observe things, listen for things and to call me if they see something or hear something that doesn't sound right. That's the only duties they have. They're just, they're just lookouts.

Q. You stated that you made one trip when you encountered ice. Did you give any special directions that you can remember to the lookouts during that transit?

A. Master was on the bridge was Captain Stalzer, the other captain on the ship, and he told him he wanted to know what he was seeing up ahead, and we maneuvered through the ice at that time.

Q. Did you have to make course changes to move through the ice or did you --

A. Yes, sir, we did.

Q. Where was the lookout posted during that time?

A. On the bow, sir.

Q. Thank you. When entering or leaving a port, is it customary to have a lookout on the bow?

A. That depends on the weather conditions. We, most times we will put a person on the bow for a number of reasons, but occasionally if it's really severe, we'll have a man on the wing, weather is really severe, but his duties again are the lookout.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. You were on deck shortly after midnight. Did you consider the weather conditions there at that time too severe for a lookout?

A. At Bligh Reef you're talking about?

Q. Yes.

A. In my judgment, no. I mean, it was pretty mild weather.

Q. Questions about the night vision. We talked to some other licensed personnel concerning night vision. Could you explain what night vision is and the effect of white light on night vision?

A. I'm not a doctor but I can give you my experience with it.

Q. Your personal experience.

A. Night vision is your ability to go from a lighted, lit room into the dark and be able to see things in the dark. If you were to turn a white light on, you get into a bright white light or something, it would take a little bit longer to readjust to the dark again so you could see. Okay.

Q. My experiences with it as a deck officer required the use of red lights in the wheelhouse. Is that the customary custom?

A. Well, I'm a naval reserve officer myself and I know how the military does things, but in the merchant

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

marine we don't, we don't have red lights. And I've gone from the chart room where I always keep the light turned down and gone out into the wheelhouse in a matter of a minute and I have night vision, I don't have that problem.

Q. So it takes a minute to get your vision from going from the chart room --

A. That's me, sir. I can't say an average individual, how a person, you know, would do things. The person's eyes -- everybody's different is what I'm saying. Human beings are all different. Some people might be faster, some people might be slower. Depends how long you're in the light, depends how bright the light was. I always keep the lights turned way down in my chart rooms.

Q. Am I understanding you correctly, if someone goes in and out of the chart room several times with a white light on in there, that their night vision may be affected for up to a minute after leaving?

DR. DICKINSON: Commander, I think what Mr. LeCain just said is he's speaking for himself, bingo.

CMDR. WALDRON: Okay.

Q. After the casualty, did you have occasion to go up to the wheelhouse and look at the radar?

A. I went to the wheelhouse, sir, but I didn't look at the radar.

Q. Did you have occasion to survey the area

around the vessel, and did you see any ice?

A. I looked around the ship, and I didn't see any ice, sir.

Q. The following morning during daylight, did you see any ice at that time?

A. I saw some far off across the bay there. There wasn't any over by the ship.

Q. Could you indicate on the chart where you believe the ice was at that time? Would you mark it also, please?

A. This is just visual now. I can't actually -- the mark would only mean where I perceived it to be.

Q. I understand.

MR. WOOD: Excuse me. Is that permissible with the Board for him to mark the chart?

MR. COLUCCIELLO: Well, yeah. It is all right to mark this one if it covers the proper area.

THE WITNESS: Here's Bligh Reef here. I saw some ice over in this area here. Okay?

BY CMDR. WALDRON:

Q. Okay. It's hard to see from here. Is that in the TSS or above the TSS?

A. It's above the TSS. But like I said, what I'm telling you is what I'm visually seeing. I didn't have any radar contact. It could very well have been over

in the TSS.

Q. I understand.

A. I'm just, I'm just -- I mean, this really doesn't mean anything, what I'm telling you. It's just, I'm telling you I observed ice over there.

Q. Okay. Would you just mark that and put your initials on it, please.

A. Okay. Let's now understand, this doesn't mean anything.

Q. I understand.

MR. COLUCCIELLO: Just put the date over here, today's date, and write --

THE WITNESS: What's today?

MR. COLUCCIELLO: Today, 18th.

THE WITNESS: Eighteenth.

MR. COLUCCIELLO: May 18th. And Exhibit 12D just about here. Exhibit 12D.

BY CMDR. WALDRON:

Q. Would you also put the approximate time that you saw the ice because it was several hours later.

A. 0700 I would say. Let's not say that. I don't know. Okay. When it got light in the morning.

Q. Say a.m. Would a.m. be appropriate?

A. A.m. Let's also remember again this is just guesstimate and the ice very well may have been over a

little bit from there. Okay?

Q. As a navigating officer, when you went to the bridge did you have occasion to look at the chart to determine where the vessel was?

A. Yes, sir, I did.

Q. Did you see any marks on the chart?

A. I saw marks for the position of the ship and a number of fixes but I didn't really -- I just saw where the ship was. That's what I was concerned about.

Q. Did you notice any aids to navigation from the ship --

A. No.

Q. -- right after the casualty?

A. Can I look at the chart?

Q. Sure.

A. Are you talking right after the casualty?

Q. Yes.

A. A couple hours later on this side right here.

Q. Okay. A couple hours later which aids to navigation did you see?

A. I could see Glacier Island, I could see Bligh Reef, I could see -- what's this light back here? Bixby Island?

Q. Yeah.

A. As a matter of fact, I was using visual

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

bearings off Bixby Island and some radar to answer off some of the land to determine position, to see where we were. Okay.

Q. Okay. What's the approximate distance to Glacier Island light from the vessel, from Bligh Reef?

A. Five miles, sir. That's a guesstimate again.

Q. In the standing orders or watch operating procedures, there is a statement that when navigating close to shore, that position of the vessel must be frequently verified. What does frequently verified mean to you?

A. Every three to five minutes in that situation. When you're close to shore, you want to know immediately if anything is happening.

Q. What does close to shore mean to you?

A. If I got land within four to five miles, even closer, three and a half miles, let's say, I'm getting my position quite quickly. I want to know where I am, you know. I mean, I'm not talking about up here in Valdez Narrows where, in the arm there where it's very close, but when you get further down, let's say, let's say three miles, I would be getting a position every five minutes, just checking where the ship is.

Q. Would you explain the procedure for taking a fix and how long that it would take, let's say a fix using

a visual bearing and a radar range?

A. You would go out on the bridge wing, you would -- first thing you do is set the radar up with a distance off the light, okay, or what you're getting the bearing, the distance off of. You'd go out quickly to the bridge wing, you'd take a quick bearing on it and you just, you take a bearing off the light, whatever it is, you would remember what that was, you look at your watch, you'd come inside, and you would have a distance off already, and you just go right in and plot it. It should take no more than a minute.

Q. Okay.

A. Or less.

Q. I'd like for you to refer to Exhibit 2 Echo. It's a course recorder log. First -- attachment A would be the first attachment, please.

A. Okay, sir.

Q. This is a photograph of the original log. Do you recognize this as being the type of log that's on the vessel?

A. Course recorder roll, yes, sir, um-hum.

Q. I'd like to refer first to -- and I'm going to use the Greenwich mean time for ease here. About 7:50 to 8:30 a.m. Greenwich mean time. The course there. Would you describe that course as far as the smoothness of

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

the helm, the helmsman?

A. I could only describe the line, the line that's wiggly. It's not a straight. It varies back and forth slightly.

Q. Would you describe the line between 8:50 and nine a.m.?

A. That's the same. It's not exactly straight. It's got some deviation in its back and forth movement.

Q. Could you compare the two.

A. They're very similar, sir.

Q. I'd like for you to look at the next page, which is attachment Bravo. This is an expanded version of the same chart in both height and length. Would you compare the two courses at 0850 to 0830 and 0 -- I'm sorry. 0750 to 0830 and 0950 to 900.

DR. DICKINSON: You mean 0850 to 900, Commander?

THE WITNESS: Well, it's -- what are you telling me? You want me to compare the course between 0745 and 08? Zero what? 0830?

BY CMDR. WALDRON:

Q. Right.

MR. WOOD: With what?

THE WITNESS: With what, Commander?

BY CMDR. WALDRON:

Q. With 0950.

DR. DICKINSON: 0850 or 0950?

CMDR. WALDRON: I'm sorry. 0850 to 0900.

THE WITNESS: Okay. They're the same way. They look like they're, they're not straight lines. They deviate a little bit.

BY CMDR. WALDRON:

Q. Okay. The course at 0850 was steered by Mr. Kagan. In your expert opinion, is it possible that the course from 0850 to 0900 was not hand steering but automatic pilot?

DR. DICKINSON: Commander, we discussed this yesterday, and I think we found out that by looking at this chart one cannot tell in a fact finding forum without doing some analysis whether or not these lines were indeed hand steering or on gyro.

MR. COLUCCIELLO: Your next question?

BY CMDR. WALDRON:

Q. I have some questions concerning company policy, especially concerning alcohol use and personnel with Exxon that have in the past abused alcohol. Your opinion whether -- do you know if anyone at Exxon Shipping knew or should have known that Mr. Hazelwood continued to have a drinking problem?

MR. WOOD: Excuse me. Mr. Chairman, I'm

going to object. Knew is one thing, if this witness knows of his own knowledge, but what others should have known or could have known is beyond the scope of this witness' knowledge, and I would instruct him not to answer in that form.

DR. DICKINSON: If that is your instruction, so be it. Mr. LeCain can only answer his own experience.

BY CMDR. WALDRON:

Q. Have you ever been asked about prior alcohol arrests or alcohol-related misdemeanors for drunk driving, et cetera, when you have applied for a position by Exxon?

A. No, sir, I wasn't asked.

Q. Do you have any personal knowledge of Mr. Hazelwood drinking or having a drinking problem?

A. No, sir, I don't.

Q. Have you ever observed alcohol use on board this vessel or other Exxon vessels?

A. No, sir, I haven't.

Q. Do you know of anyone who has been denied employment for previous alcohol abuse?

A. Sir, I wouldn't have knowledge of that.

Q. Do you know of any Exxon personnel that have been reassigned to other duties because of alcohol problems?

A. No, sir, I'm not privy there.

Q. Couple of clarification questions on the gyro. If the vessel is in gyro mode and the helm is turned right ten degrees, right twenty degrees, and right full but yet it's still in gyro and is removed from gyro to helm, what happens with the rudder?

A. I believe this is the case, I'm not sure, I believe that the, when you put it into automatic -- I mean when you put it into helm it should go right over immediately. I would have to, you know, go to the manual on it and check on that. I've never had an occasion to do that because whenever I change course I make sure the rudder is exactly in the middle and the controller is exactly in the middle. I don't -- you know, professionally that's what you do. You don't just change course or put things into manual steering without checking these things.

Q. Would you describe for me any postgrounding conversation that you may have had with the master concerning the casualty.

A. There weren't any concerning the casualty, sir.

Q. How about with Cousins?

A. Just the one I described to you on the bridge that morning.

Q. Mr. Kagan?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

MR. WOOD: Are you talking about discussions with Mr. Kagan?

CMDR. WALDRON: Yes, discussions with Mr. Kagan.

THE WITNESS: Just one remark he made to me. He said that he turned the wheel and for an instant nothing seemed to happen, for a moment nothing seemed to happen.

BY CMDR. WALDRON:

Q. Did you find that unusual or something that would be expected?

A. I didn't find it either way. It was an offhand remark he made to me, and it really didn't register. I didn't know what was going on on the bridge because I wasn't up there. I don't know what the sequence of stuff was going on up on the bridge. It may have been he just took -- you put the rudder over, sometimes the ship doesn't move right away, depending on the speed or, you know. So I just figured it was some remark like that. He put the rudder over for a couple seconds, nothing happens in there, then it would go over.

Q. We've had a variety of answers concerning how long it takes for the vessel to start turning after the helm is moved. In the loaded condition of the Valdez that evening at 12.3 knots, what would you, how would you

expect the vessel -- how long would it take before the vessel would start moving at ten degrees right rudder?

A. Sir, I really don't know, sir. I'd have to check with something. If I change course myself, I would see if the rudder went over and I would expect the ship to move in a very short amount of time. I can't say what the time is. I never timed that. I'm not an expert on that.

Q. Did you have any postcasualty conversations with Miss Jones?

A. No, I didn't.

Q. Do you know of anyone -- did you have any conversations with anyone else on the vessel concerning the casualty that may be of interest to the Board?

A. Since I wasn't there when the vessel went aground, anything I might have said was what I might think, and that doesn't mean anything. I wasn't on the bridge. I don't know what occurred up there. So I don't remember talking to anybody about it except possibly just small talk on the bridge, wondering why we were on Bligh Reef, but it was -- I don't know because I wasn't there, sir.

Q. What do you think happened based on the small talk that you heard?

A. That small talk doesn't mean anything. I mean, the only people that know exactly what happened on

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

that bridge that night are the captain, third mate and Mr. Kagan, and anything else is irrelevant.

Q. Did you have occasion to position, to identify the position of the vessel while aground? Was that a routine procedure while you were grounded there and on watch?

A. About every 15 minutes I would get a position to make sure we were, position was okay.

Q. By taking a radar range at Busby Island, what is the echo that you received? Is it on a point of the island or is it up on the mountain behind it?

A. May I take a look?

Q. Sure.

A. The radar echo we were getting is right here where the light is. We would get like a form, shape on the radar, get a visual bearing. You get right on the end of that form, you'd know where you were, or leave you a position anyway.

Q. And when you took these numerous positions, they all fell fairly close?

A. Yes, sir. We were right about the same place.

Q. When was the first opportunity that you -- when was the first time that you took an actual fix on the vessel?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Right after I assumed the watch at around five a.m. Really right before I went up and made a quick cursory look and got a, made my -- I made myself feel secure that that's where we were. So I went and I checked the radar and everything because I wanted to relieve Mr. Cousins. I knew we were there, where we were, and so it's -- that's customary. You always find out where you are before you relieve a watch. You don't just --

Q. Do you recall looking up at the heading indicator when you came up to the bridge to see what the heading of the vessel was?

A. I -- let's see. I can't recall looking at it but I did within an hour, you know, within a few minutes of being up there. I didn't look exactly when I walked on the bridge. I looked up there. I can't recall within a degree what it was. It was somewhere around 285 or 289, somewhere in there.

Q. Did the vessel appear to be settling at that time or did you have any --

A. I didn't have any feeling on that, Commander.

CMDR. WALDRON: I have no other questions.

DR. DICKINSON: Thank you, Commander. Mr. Howitt.

/ / /

/ / /

EXAMINATION

BY MR. HOWITT:

Q. Mr. LeCain, I understand from your testimony that you were handling communications for some time after the incident.

A. That's correct, sir.

Q. And could you repeat from what time on that was?

A. Okay. I was on approximately five a.m. on but I was dispatched at different times to do things. I was there for awhile, till around 10:00, and Mr. Cousins came up for about an hour, hour and a half, and then I relieved again at noon; and during the afternoon I was on the bridge but I was off the bridge at different times to do things. So I ran communication during this period, yes, but at different times I was in different places.

Q. During that time did you receive any communications over the marine VHF channels from Alyeska?

A. I can't recall. I know I made a couple calls to Alyeska to request things, but I can't recall receiving any at this time. It's 45, 50 days after the incident, you know.

Q. Could you describe those calls you made to Alyeska, please.

A. The only one I made involved I believe

getting some hoses from some other ships, cargo hoses. I also asked about some reducers we needed, and Alyeska said they were going to handle it, get on it. So that's all I can say about that. The Coast Guard was doing some of those calls because we had a lot of information coming up from the chief mate on what he needed in parts for the hoses and stuff. So some of those calls were handled by the Coast Guard on the ship there, but I don't know who really handled most of them, sir. I just don't recall any longer.

Q. Could you relate to me who in the Coast Guard was handling those calls?

A. I believe it was the XO handled one or two of them, that's all. That's only when I was there. I think he handled two calls and they answered them, you people answered them, and I couldn't see any problem.

Q. Were there other personnel from the EXXON VALDEZ that were handling the calls?

A. Through part of the period. Captain handled some of them. I can't say who else. It was a very, very busy time, as you can imagine, on the bridge. We had all sorts of things going. Like I told you, I had calls every 30 seconds there. So we had many things going on. But every call that I received was answered or handled some way. I had a pad of paper next to me and I wrote down how

it worked out.

MR. HOWITT: Thank you. That's all the questions we have.

THE WITNESS: Thank you, sir.

DR. DICKINSON: Mr. Howitt. Captain Deppe?

CAPTAIN DEPPE: Mr. Chairman, we have no questions.

DR. DICKINSON: Thank you, Captain. Mr. Colucciello?

FURTHER EXAMINATION

BY MR. COLUCCIELLO:

Q. Mr. LeCain, I need a little further clarification on the Fathometer alarm. You said I think that you check the Fathometer before getting under way and the alarm is set; is that correct?

A. I don't -- whoever the mate is up there would set it, usually in consultation with the master.

Q. Now, you thought that 40 fathoms might be a figure that might be used?

A. Sir, I just --

Q. No.

A. -- gave a figure.

Q. Oh.

A. I would have checked with the captain, see what he wanted. Remember I -- you know, I haven't been in

here in a number of years except for a few times so I don't know what the captain would.

Q. Well, whatever the setting is, it seems to me that when you're in port and you're alongside the dock, I don't understand how you can set the Fathometer alarm and not have it go off immediately because you're in such shallow water at that time. So how was the setting made so that it takes effect after you get out of --

A. You can shut the alarm on low.

Q. Right.

A. So you just shut the alarm off.

Q. Okay.

A. And you can turn it back on again. Then you would --

Q. So what you've done, there is a setting and then there is also an on/off switch?

A. Sir, I believe so. Like I said, whenever I've done it I read through the book. It's been awhile since I've done it.

Q. I see. So that you can make the setting as a separate action from initiating the alert, getting the alarm to be ready to go off. So now that you go out of port, assuming this has been done, at some point, then, someone has to go to the Fathometer and turn the alarm off after you get into deep water?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Sir, I can't recall. It's been a long time since I've --

Q. Well --

A. I need to have the manual again.

Q. I see.

A. And the policy issue.

Q. Well, it seems to me that if this is essentially how it works, then somebody has to -- after the setting is made, you leave port, get into deeper water, you would be turning it on; and if this is the process, then you would have to, when you are approaching port at the other end, you would have to go turn it off before it went off because you were getting into shallow water where you intended to go. Do you recall having anyone doing it that way?

A. I can recall the alarm going off, getting into shallow water and turning it off because we got -- what we wanted was the alarm. I mean, you want the alarm to go off, that's the idea. Usually you want the alarm to go off before you need the alarm, you know. I mean, you don't -- you don't put in an alarm at the point of extremes. You put in an alarm so that it gives you a margin to be able to pull out of whatever your problem is, and most -- the alarm is going to go off anyway coming into port because no matter where you go into port, most

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

places you will get into shallow water.

Q. Right. Right. Is the alarm just an audio alarm or is it both an audio and a visual?

A. I can't recall at this time.

Q. You mentioned, I believe, that you did come into Valdez on occasion, one occasion when you did encounter ice. Do you recall if at that time the vessel was slowed or can you remember what speed it was going up? Was it already going a slow speed?

A. I stated we were coming out of port, sir, and we steadied at about half speed, and I think we went down slow ahead for part of it just to be safe on that.

Q. And did you say that you altered out of the southbound lane?

A. Sir, I don't think we did. We just maneuvered through the ice, right and left rudder. Now -- okay.

MR. COLUCCIELLO: All right. No further questions. Thank you.

THE WITNESS: Yes, sir.

DR. DICKINSON: Mr. Armentrout.

EXAMINATION

BY MR. ARMENTROUT:

Q. Mr. LeCain, yesterday when we were questioning Mr. Kagan, he explained that, and I'm not

going to go through the whole long explanation, but anyway, during the evolution of the ten degree right rudder and then the twenty and then the hard, he said at one point that, and I believe it was somewhere between twenty and the hard, he knew the ship was responding because he heard the clicks. Could you explain -- and I think he alluded to the fact clicking is the sound of each degree as it is, as the compass is passing through that. Could you explain that, how that relates or just what that is that he's hearing as, you know, on the automatic system?

A. It's the course recorder and the -- it wouldn't be an actual sound out of the gyro. It's usually the repeaters and radars. They make a noise, and then you have the course recorder which makes noise back there. When you change course, you can hear it. So where he was standing he would be able to hear that noise, the clicking sound. On the older ships where we actually had an analog repeater right in front of the quartermaster, when he changed course you would hear a definite, but the repeater built into the 2000 system is a, I believe a digital repeater. There is no moving parts so there is no clicking sounds, sir.

Q. Okay. Then what I think you're saying is it certainly was not the turn indicator but it was probably

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

the course recorder that was actually --

A. I would think that's what he heard, sir.

Q. He was hearing?

A. Um-hum.

Q. And I guess the course recorder would -- if he could hear that, then the course recorder, depending on the rate of turn, would click, click, click, or it could be if it's very slow? In other words, he would be able to relate that to some function --

A. He should.

Q. -- of the ship turning or changing course?

A. I would think so, sir.

Q. And the other, the only other question I have. Following the mishap, at what period of time -- or between the time that the ship was finally taken into Naked Island, did you functionally, assist in functionally testing the Sperry system, both emergency and normal operation? Was it examined or functionally tested --

A. Yes.

Q. -- following the grounding?

A. Yes. I wasn't up there when they did it, sir. I understand they did it. That's all I can say. It was the next day I believe they checked on it. See, they were afraid to test it too much except at high tide because if the rudder was touching the ground or anyplace,

you start moving the rudder around, you could damage it. You know, at the present time it seemed we had -- when they were on the rocks they weren't using it. I don't know. I wasn't there. But we used the system when we were floated off of the reef, and it worked fine going down to Naked Island, and we had a Cmdr. Blaise from the Coast Guard, I believe, came out down there and looked at the system, and seemed to function fine through the whole thing.

MR. ARMENTROUT: Thank you, sir.

THE WITNESS: Yes, sir.

EXAMINATION

BY DR. DICKINSON:

Q. Mr. LeCain, just -- I think you've done a good job of trying to explain to us the difference between the gyro, the automatic pilot versus the manual operation. Just to make sure that I'm hearing you correctly, I just need to go through a little bit of it one more time.

A. Yes, sir.

Q. Maybe some of us were under the impression the first couple days of testimony that maybe there indeed was, if the vessel is in gyro that there is indeed a manual override if you turn the wheel X number of degrees or X number of turns, and I think you're saying that if it's in gyro and you grab the wheel and turn it, nothing

indeed happens.

A. That's correct, sir. If you turn the wheel with it in gyro, you will get nothing.

Q. Can you look at Exhibit 12 Charlie again, page 214.

A. Are you talking about --

MR. WOOD: The chart?

THE WITNESS: -- the chart?

BY DR. DICKINSON:

Q. Yes, the newest one.

A. Correct.

Q. The last page, Figure 2-8, the CRT display.

A. Okay. This, sir?

Q. That's correct.

A. Okay.

Q. This is the display that one would, whether one is in gyro or manual operation, the heading in degrees at the top and the heading rate, rudder angle, that's what you'd be seeing?

A. Seeing, sir, yes.

Q. Okay. If I -- yeah, the CRT. If I'm operating this vessel, how would I know that I'm in -- just looking at the CRT, how would I know that I'm in gyro?

A. Well, there is a couple ways. You see the N

says -- letter N. It points over and says gyro mode?

Q. Um-hum.

A. Then on M, it says present steering mode, gyro. So there is also instructions on how to use the gyro there, if you would read them below N there. See, instructions. Select inputs marked by boxes.

Q. Okay. That would be -- that's easily -- that's easily seen looking at this CRT?

A. Yes, sir. It's -- what's nice about this system, you have it. I mean, you're looking at a nice system. It's state of the art.

Q. Okay. So if you were in manual, it would say present steering mode manual?

A. Yes, and it would say manual mode there too, sir.

MR. DANAHER: I was just wondering whether when in manual, do those instructions disappear from the scope or do different instructions --

THE WITNESS: I don't recall, sir. I believe so.

MR. DANAHER: Sorry.

DR. DICKINSON: Okay. Thanks, Jim.

Q. Okay. One other question, Mr. LeCain. You talked a little bit about, I guess in relation to Cmdr. Waldron, question, about ice. We've heard about ice from

Mr. Cousins. Can you give us some indication, approximation, estimation of the size of the ice chunks? I don't think I've heard yet a definition or an estimation of size. Can you do that?

A. Sir, I wasn't there that night so I can't tell you how big the ice was.

Q. Okay. How about in the ice --

Well, thank you. That's fine.

Mr. Johnson.

MR. JOHNSON: Mr. Chairman, I just have one follow-up question that Mr. Armentrout asked.

FURTHER EXAMINATION

BY MR. JOHNSON:

Q. Mr. LeCain, when you discussed the synchronization of the gyro repeaters and you hear this clicking sound, does each click represent a fraction of a degree or a degree?

A. Fraction of degrees. It's not just -- I forget what fraction but it's not just a degree. It's much more accurate than that.

MR. JOHNSON: Okay. Thank you.

THE WITNESS: Okay.

DR. DICKINSON: Okay. Since we asked a follow-up, any parties that have follow-up questions?

Mr. LeCain, thank you for your time and

testimony.

I have 9:35. Let's take a 15-minute break. We will return at 9:50.

(Short recess.)

DR. DICKINSON: I'd like to call to the witness stand, Mr. Jerzy Glowacki, chief engineer for the EXXON VALDEZ. Mr. Glowacki.

Mr. Colucciello, will you swear in and qualify the witness, please.

JERZY GLOWACKI,

called as a witness, having been duly sworn upon oath, was examined and testified as follows:

EXAMINATION

BY MR. COLUCCIELLO:

Q. Would you state your full name.

A. Jerzy Glowacki.

Q. And who is your employer?

A. Exxon Shipping Condition.

Q. And in what capacity?

A. I'm the chief engineer.

MR. COLUCCIELLO: Would the gentleman next to you identify himself, please.

MR. MANNION: My name is Tom Mannion. I'm

present on behalf of Mr. Glowacki.

MR. COLUCCIELLO: You're his attorney?

MR. MANNION: Yes.

MR. COLUCCIELLO: Thank you. Mr. Woody will continue the questioning.

EXAMINATION

BY MR. WOODY:

Q. Good morning, Mr. Glowacki. How do you hear me?

A. Very well, sir. Good morning.

Q. Mr. Glowacki, when did you first get your first engineering license?

A. I graduated from State University Maritime College in 1970, and I received a third engineer's license on, upon graduation.

Q. When did you join the Exxon company?

A. The day after graduation.

Q. Have you been continually employed by Exxon Shipping Company since that time?

A. That's correct, except for a short leave of absence for about three months in 1975 and another leave of absence in 1978 about the same duration when I was teaching at Fort Schyler Maritime College.

Q. When did you first become a chief engineer on Exxon vessels?

A. 1977.

Q. Were they steam or diesel vessels?

A. They were steam.

Q. Steam vessels. And when did you acquire your diesel chief engineer's license?

A. I believe 1983 or early part of '84.

Q. How did you acquire the time for that license?

A. I sailed on the Exxon International vessel, the affiliate vessel, and I also attended a diesel course in King's Point.

Q. How long have you been on the EXXON VALDEZ?

A. I've been on the EXXON VALDEZ since delivery. I've been assigned to the VALDEZ since delivery.

Q. Are you the permanent chief engineer on the EXXON VALDEZ, then?

A. Yes, I am.

Q. Would you describe the power plant of the vessel?

A. It's a motor vessel. Main propulsion is, the engine is supplied by Sulzer, which is a Swiss manufacturer. It's an eight cylinder engine, slow speed diesel with directly coupled propeller, eight cylinder. The bore of the engine is 84 centimeters, the stroke is two and a half meters.

Q. What horsepower?

A. MCR, maximum continuous rating, is 31,400, I believe, roughly. Normal continuous rating is about 28,800 horsepower.

Q. And how many ship service generators do you have in the vessel?

A. Two.

Q. Two. And what are they? Diesel?

A. They're diesel driven, correct.

Q. What horsepower or KW would they -- or what rating would they be?

A. They're 1400s, 30 KW.

Q. Is there any boiler in the engine room?

A. Correct, one boiler.

Q. What is the purpose of the boiler?

A. To supply auxiliary steam for the ship's services such as heating, fuel, imports and also provide steam for cargo pumps, which are steam turbine driven.

Q. Does the vessel have an emergency diesel?

A. Correct.

Q. And what is the rating of that?

A. Seven hundred KW.

Q. Have you had any problems with your power plant in recent months?

A. No, sir.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Have you had any turbocharger problems on the main engine?

A. I wouldn't classify it as having problems. We had them modified as per manufacturer's recommendations based on problems that her sister ships were having.

Q. Could you briefly describe what those problems were?

A. On the LONG BEACH?

Q. Yes.

A. They had a turbocharger failure. I don't know which one, whether it was forward or aft. I believe it was in December of '88, and it was a failure, it was a massive failure, a disintegration of rotor blades, and there was another failure I believe in January of the same nature on the other turbocharger.

Q. So because of those failures, they modified the turbochargers on the EXXON VALDEZ?

A. Correct.

Q. If I understand you correctly.

A. Correct. The EXXON VALDEZ had not had any problems that were apparent to us.

Q. Have there been any problems in the engine room that would cause you to think that you're having an engine room problem rather than, say, grounding of the vessel?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. No, sir.

Q. Do you have any information on the propeller such as number of blades, its pitch?

A. It's a five-bladed, right-handed propeller. I knew the pitch and the diameter when I was working in the shipyards when the ship was built but I don't recall right now. It's approximately around 30 feet.

Q. Thank you. We can get that later.

How about the steering system on the ship? Has that been -- would you describe it briefly, and has it had any problems?

A. It's a Kawasaki steering gear, two ram type, four cylinders with two hydraulic motors. So it's a redundant system. It's controlled by Sperry. There really were not any problems. However, there was a design concern on Exxon's part about the steering gear perhaps being slightly undersized for the size of the rudder and the torque required, but those were design considerations.

Q. Was there a modification made to some equipment on the ship to accommodate this?

A. The steering gear?

Q. Yes.

A. Yes, there --

Q. Steering gear, rudder or --

A. In the Guaranty Shipyards, which was May '87,

I believe, we took off about 15 inches of the trailing edge of the rudder to reduce the surface area and bearings were changed on the, pintle bearings were changed.

Q. Do you know whether there were any tests to the vessel such as maneuvering tests after that time?

A. I was not on board when the vessel left the shipyard, the Guaranty Shipyard, after the steering gear or rudder modifications; but yes, there were turning circle test performed. An ABS was on board, and I'm not sure whether the Coast Guard was on board. But yes, there were tests.

Q. About what date was this?

A. I believe the ship left the yard May, June '87. I'm not certain.

Q. Spring of '87?

A. In that time frame, yes, sir.

Q. All right. Did the vessel recently have any problems that caused a delay sailing from San Francisco?

A. Yes, we did.

Q. Would you describe those, please.

A. Following the problems with the turbochargers on the LONG BEACH, the same modifications were made on the VALDEZ. Trip prior to this, this last one, we had after turbocharger modified as per other modifications, and this trip in Valdez, prior to coming to Valdez we had the

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

forward turbocharger modified.

When we departed San Francisco we dropped the pilot off and took departure, and when we started speeding up to sea speed we heard unusual noises from the turbochargers. They sounded different, they were surging and vibrations were increased. We took vibration readings on them right away and compared it to our baseline data that we had on the previous turbochargers prior to the modification, and at that time I informed the captain that I suggest we turn the ship around and come back to San Francisco, which we did.

Q. Can you describe for us the noise that was different that you were hearing?

A. They were much louder. It was the type of noise that you would not want to hear from a high speed machinery.

Q. Thank you. Did it, was it set to determine which part of the turbocharger was causing the noise?

A. Most of the noise we heard was in the turbine end.

Q. The turbine end. What kind of modification was made to that portion of the turbocharger?

A. The modifications that were made, new defuser ring was put in, which had different number of veins than the original one; also the stationary nozzle ring was

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

changed, which had a different blade configuration.

Q. So after you detected -- and this is what caused the noise to be different?

A. I am not certain that that was exactly it, no.

Q. All right. What changes made to reduce the noise to what would be, what you'd expect?

A. What changes --

Q. Yes.

A. -- would have to be made?

Q. Now, the changes you've just described, was this something that were made after you heard the noises or before?

A. No. What I'm describing is the fact that after the modifications, the turbochargers sounded differently --

Q. Yes. Because you turned back to San Francisco?

A. -- than they did when they were still the original design, and something might sound different but might not be, you might consider nothing wrong with it. But yes, this was, as I said, it was noises and vibrations were higher and it was something, the type of sound you would not want to hear from high speed machinery.

Q. All right. Was it examined by some

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

manufacturer's representative?

A. Yes.

Q. What did he find?

A. As we turned back, we right away called our office in San Francisco, in Benicia, and then they notified the vendor's representatives to meet us as soon as we anchor and to take the unit apart again; and their initial assessment was that it's probably the bearings.

Q. Were some bearings changed?

A. Yes, we changed bearings.

Q. And would you describe what you found after that.

A. Prior to changing the bearings, when we had to drain the oil from both sumps on both the turbine and the compressor end, we found metal particles in the oil, and we knew that the sumps were clean prior to that because that unit was overhauled. So everything was put together in a clean condition and the oil was clean. So that gave us an indication that, yes, it's a very good possibility it was the bearings.

Q. And was it the bearings?

A. You really can't tell because these bearings are very complex. They're quite large. They're in housings and the manufacturer that supplies these bearings already in housings with proper shims to actually position

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

them properly as per design calculations. It's not a bearing you take out of a box.

Q. So were the bearings changed, then?

A. Yes, they were changed.

Q. And then what was the circumstances after the change?

A. Okay. We decided to leave port again, and the bearings were changed only on the forward turbocharger. We checked the oil in the after one based on what we found in the forward one, and we did not see any metal particles in the oil in the after one. So the after one was not opened up at the time. And we decided to leave port again, and then we did not get past Alcatraz, I don't believe, when I called the captain again and we turned the ship around again, and that was due to the fact that vibrations -- there is vibration pickup on both the turbochargers, and the vibration alarm went off on the forward turbocharger after the initial bearing change. So we turned the ship back around, went back to the anchorage and again we notified our office and the vendor's representatives.

Q. Would you relate to us what happened to correct the problem?

A. The vendor's representatives met the ship. Again they could not understand -- again when we opened up

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

the sumps, oil sumps, we found metal in the oil, and it was magnetic. And those bearings actually only had about less than three hours running time on them, and we knew that the oil was clean when we replaced the bearings after the first bearing change. This sort of led them to having to do a little more thinking, and finally the decision was to take the rotor out, send it ashore to verify its balance.

Q. What did you find after trying, after balancing the rotor?

A. That the rotor was within tolerances as far as balancing was concerned.

Q. Did you eventually find out what the cause of the metal in the oil was?

A. No, sir. We sent the bearings to be analyzed by the manufacturer. They took their bearings back to be analyzed, and we also kept a bearing, I believe, to analyze in-house ourselves, and we also had the oil samples analyzed with the metal in them to determine where it was coming from.

Q. Were new bearings then put in to restore the machine?

A. The bearing was -- the rotor was balanced, rebalanced. There was, one portion of the rotor was changed. The inducer on the compressor wheel was changed

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

prior to rebalancing it, and then it was rebalanced with a new inducer wheel. Why the vendor's representative decided to change the inducer on the wheel, I really don't know.

Q. I see.

A. There was a lot of communications going on between Switzerland, the manufacturer, and IHI in Japan that actually built the, the licensee and their representatives in New Jersey, that's in-house communications, because it was a serious problem, I believe, that they felt just from design point of view.

Q. About how many days were you delayed in departing San Francisco?

A. It was approximately six days.

Q. About six days. When you did eventually leave, how did the turbocharger perform and how did it sound?

A. Prior to leaving we organized a sort of a mini sea trial. We engaged a consulting firm to instrument both turbochargers with vibration pickups, and we went to different speeds, we established base lines, and we even tried changing speeds of the vessel to see whether they were surging, and then we -- during that -- during or following that mini sea trial, we decided the vibrations were within limits; and we brought all the

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

people back to San Francisco that were on board for that mini sea trial and we proceeded to Valdez.

Q. At this time the noise emitted by the turbochargers seemed normal to you?

A. That's correct.

Q. But were they still different from the previous, before the change?

A. Yes, they were different but not as different as they were the first time we turned the ship around.

Q. Okay. Have you had any subsequent problems with those turbochargers, either one of them?

A. No. Not on the trip to Valdez, no.

Q. Would you describe the organization of the engineering department on the EXXON VALDEZ, how many people you have and how they're utilized, what watch they may be assigned to, that general description?

A. First engineer, second engineer, third engineer, one what we call an MOA, unlicensed, and a pumpman is also in the engine department.

Q. Are watches stood at sea?

A. No. The vessel has UMS, unmanned, unattended certification. At sea it is unattended from roughly 1700 to 0800.

Q. During those hours, do you have any kind of a watch setup or a standby duty officer?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Yes. We take, we rotate duty nightly. One engineer is on duty every other, on alternate nights. Prior to going unattended, he has to make a complete round of all the engine spaces, fill out a check-off sheet which is based on the Coast Guard's parameters for the UMS certification. He also has to make another round prior to retiring for the night, and then roughly 6:30, 7:00 in the morning he makes another round.

Q. Typical day at sea, say in the recent few months, how many alarms do you, do occur at night, if any?

A. It's very hard to say. Sometimes we might go for two, three days, four days without a single alarm. Sometimes we might have one or two alarms every other day or every day, every night.

Q. What is the most frequent alarm to go off, or alarms if there is more than one?

A. At night?

Q. Yes.

A. I really can't say because there are so many alarm points in the system. We have not had any alarms where the duty engineer had to call me recently at night. All were alarms where he could take care of it and then go back to bed. They were not the type of alarms where he had to stay in the engine room for the rest of the night or we had to assume watches.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Have there been occasions when it was necessary for the engineer or engineers to remain in the engine room, say, sleeping in the control room, for example?

A. No, sir.

Q. Have not. Since the EXXON VALDEZ became operational, has this ever been the case where you've had to have somebody in the control room on occasion?

A. Extending regular watches at sea and after --

Q. No. I was thinking in terms of frequent alarms which might cause the engineers to just stay in the control room, maybe sleep there.

A. No. No, sir, never to sleep there.

Q. Nothing of that --

A. No.

Q. -- that nature?

A. No.

Q. Now, when does the vessel stand watches in the engine room, if ever?

A. It has been my policy that prior to coming into port, prior to taking arrival, we assume watches approximately one hour prior to taking arrival, we continue our watches in port on a four hours on, eight hours off basis until approximately an hour after departure from that port.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Which engineers stand which watches?

A. The first stands eight to twelve; third, twelve to four; and second, four to eight.

Q. On the evening that the vessel departed Valdez, was the first assistant in the engine room?

A. Correct.

Q. He was on watch?

A. Correct.

Q. How many watch standers do you have in the engine room when you're maneuvering?

A. When we're maneuvering, I usually stand by. If I'm not there, we would generally have another engineer. Usually try to keep two engineers. That's -- I should say we always have two engineers, basically. That's the policy.

Q. All right. If you're departing Valdez outbound, how long would the watch continue?

A. I would say until an hour after departure.

Q. After departure.

Would you try to recall back now and relate to us the events that transpired on the EXXON VALDEZ the night it departed from Valdez, say commencing with the time that you returned to the ship. And if you'd just start with about what that time was and relate the events --

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. I returned to --

Q. -- as you recall them.

A. -- the ship approximately 8:20 in the evening. I called the first as soon as I came back that I was back on board, and I asked him are we ready to leave. He said yes, and I told him I will be down in a little while. I looked at some mail that had arrived on my desk, and I basically have a habit of looking out the window when letting go or tying up sometimes to see when the last line is let go, and that's generally when I go back down to the engine room.

Q. Did you -- when you returned on board, did you have the, did you recognize the sailing board as being a different time than what you expected?

A. Yes, sir.

Q. Would you explain that, please.

A. When we left the ship, the board was set for 2100. When I was at the agent's office at approximately 1230 or so, we learned that the board was changed to 2200, and that was -- we were surprised to see that we were leaving early.

Q. Earlier than you anticipated?

A. Correct, and also we were surprised to see that everything was basically set in motion. The pilot was on board, the tugs were either alongside or standing

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

by.

Q. And -- all right. If you'd just continue to relate the events, then. You called the first assistant, you had some mail on your desk. And then if you would just pick up from there and continue to describe what happened.

A. When I saw that we were on the spring lines, almost being ready to single up, I went down to the engine room. That was approximately nine or shortly after 9:00.

Q. All right. Who did you find in the engine room when you arrived?

A. The first was there.

Q. Anyone else?

A. No. Not at the time, no.

Q. Do you recall any events when the engine was first used or anything you can think of?

A. Yeah. I believe the first bell was approximately twenty after nine, and then we continued maneuvering out of port at various speeds and engine orders.

Q. Did you and the first assistant make any rounds of the engine room, checking on temperatures, pressures?

A. The first did. I generally stayed in the control room.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Was there anything that was other than normal?

A. No, sir.

Q. What was the first indication that there was anything different occurring on the vessel?

A. At approximately, shortly after midnight, I was in the control room by myself. At that time the third engineer coming on watch was already in the engine room. She and the first were on the lowest level of the engine room performing certain tasks, routine tasks that we do on, prior to departure. I was in the control room by myself and I heard a noise, and I came out of the control room. I went toward the turbochargers because I thought they were surging, and I stood there for a while and I was satisfied they were not surging.

I came back into the control room, and as I walked in, I happened to glance at the main engine RPM and then I glanced at the main engine load indicator, and it struck me that the load indicator position was higher than it should have been for the RPM that we were making, and I also felt the deck to be other than I remembered. And I looked at the inclinometer on the bulkhead behind me, and we had two degrees starboard list, and I knew that we didn't leave port with a list.

Q. What was the RPM and what was the load that

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

you did observe?

A. The RPM was 64 and the load indicator was almost at 7.5, somewhere -- almost to the maximum.

Q. Through a total of what range on the indicator?

A. I'm sorry?

Q. What range does the indicator have?

A. The load indicator?

Q. Yes, right.

A. It's from zero to eight, but the way it was adjusted on the engine at the time was, the maximum was about a 7.5. It was mechanically adjusted to that point.

Q. I see. What load would you normally expect at that RPM?

A. At that RPM, about 5.5.

Q. Had you ever seen it overloaded before?

A. I didn't -- I shouldn't say it was overloaded because the engine also has an overload alarm, and that alarm never came on.

Q. All right. Let me rephrase the question.

A. It was loaded but not to the point that I would feel was overloaded at the time.

Q. I understand. Had you ever noticed that degree of higher than normal loading before?

A. For that RPM, no.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Now, when you looked at the RPM, did you happen to look at the time this happened?

A. You'd have to -- shortly after midnight, perhaps ten after midnight, five after midnight, something. I did not look at the clock.

Q. This is just simply an estimate?

A. It's an estimate.

Q. Well, do you recall looking at the clock at midnight?

A. No, sir.

Q. Or at any particular time?

A. No, sir.

Q. About how long do you think you were outside the control room listening at the turbo generator? I mean, sorry, at the turbocharger.

A. Perhaps a minute.

Q. Perhaps a minute. Did you have any feeling at the time you got back and observed the RPM and load situation that it is not yet ten after?

A. It might have been.

Q. All right. Just trying to see if you had any recollection of time.

A. It might have been. I --

Q. Did the, did the load continue to increase on the engine?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. No, sir.

Q. Did the -- was the engine in load program up at this time?

A. Yes, it was.

Q. Did the RPM continue, then, to increase?

A. No. 64 was the, high as the RPM went prior to the phone call I got from the bridge when they informed me they were going to stop the engine.

Q. Okay. And who was it who called you? Was that the master or the third mate or someone else?

A. The third mate that called.

Q. Third mate that called. What did you tell the third mate?

A. I told him to do it slowly. I did not ask why are we stopping, he did not tell me.

Q. All right. So you just suggested that he turn it, that he do it slowly. Now, is that something he would do on the bridge?

A. That's right. We were on bridge control.

Q. When you're in load up, load program up and you're going to stop the engine, is there any time it takes to take it out of load program up?

A. No. They can do it by moving a telegraph.

Q. I see.

A. Which had -- when in bridge control is the

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

throttle.

Q. So what you're saying is that even though it's in load program up, you're free at any time to change the speed of the engine?

A. Correct.

Q. Can you back the engine also?

A. Correct.

Q. There would be no, there would be no delay in applying a backing bell if you desired to in load program up?

A. It would not be instantaneous, no.

Q. Would there be any more delay than if the vessel were not in load program up?

A. Yes, because the engine would not start astern until the RPM is down to a certain point.

Q. That would be true in any event, whether it was load program up or not, or would it be?

A. Yes, it would be.

Q. Just to make sure what you're saying, the nature of the diesel engine, it has to stop to back?

A. That's correct.

Q. But with the load program up being in effect, would that make any difference in how soon you could back the vessel?

A. It would probably take more time.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. It might take more time?

A. Before you started going astern.

Q. All right. Would it make any difference in the changing of speed ahead, any head speeds? Could you reduce speed, for example, as soon if the vessel were in load program up as if it were not?

A. I'm not sure I follow you.

Q. Okay. You could probably visualize the time it would take to change the diesel speed in bridge control. Would that time change, say, for going from full ahead to, say, half ahead, would the time be any different if the vessel were in load program up?

A. Yes. It would probably take longer.

Q. Might take longer. What would be the cause of taking more time?

A. Simply the engine's, simply the fact that the engine's already going at higher RPM as opposed to if it had been at full maneuvering and then you went to slower bell.

Q. I see. Based on the fact that you're just changing more RPM, greater range of RPM?

A. The faster you go -- the ship has a tremendous momentum and it's basically pulling the propeller. When you back off the power, it tends to freewheel. So the faster you go, the longer it will tend

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

to freewheel until it reaches the desired RPM, the lower desired RPM.

Q. I see. Thank you.

Now, did you discover why the vessel was overloading at any time?

A. When we -- I saw the high load indicator position for that particular RPM. By that time, the first and third were already in the control room, and we checked the exhaust temperatures on the engine, all this and everything. They were slightly higher than normal but it was nothing, they did not alarm yet.

Q. What is your -- what reason do you attribute to the overload or to the higher, I should say the higher than normal load?

A. Well, I have to tell you this in retrospect now.

Q. In retrospect, of course.

A. The fact that we must have been stopped or near stopped.

Q. That would simply cause more loading on the propeller --

A. Right.

Q. -- is what you're saying?

A. It's as if you try to drive a car with its front against the wall and try to get 50 RPM with the

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

wheels spinning in one place.

Q. I understand. Did the -- after you perceived that there was a higher than normal load, did the engines keep running or were there any speed changes that you can recall?

A. Very shortly after that, that's when I received a call that the bridge will stop the engines. So at that point I was not really concerned about the exhaust temperatures and the overload because they were going to -- if we were going to go into overload.

Q. Didn't -- when the bridge tells you they're going to stop the engine, did you indeed witness the engines being stopped?

A. Oh, yes.

Q. The engine being stopped?

A. Yes.

Q. Do you recall about what time that was?

A. Shortly after 12:20.

Q. Around 12:20?

A. Correct.

Q. Or shortly after 12:20?

A. (The witness nods his head.)

Q. Was there a time when the engine was restarted?

A. Yes, there was.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Do you recall about what time that was?

A. I received a call from the captain when, perhaps five minutes after they stopped the engines. That's when he told me that we were aground. And he asked me can I use the engines. I'm using plural for engines but there is one engine. It's just habit. I said yes. I had no reason to deny him the use of the engines, and the engine was restarted I believe at 12:35 or something of that sort.

Q. That was restarted by the bridge?

A. Correct.

Q. And about how long was it kept on line or kept in use?

A. Over an hour. About an hour and five minutes.

Q. During this time, did the load increase on the engines?

A. No. The load was not as high as it was at that time when we stopped it initially.

Q. What was the highest speed that you can recall being applied on the engine?

A. The highest bell was 55 RPM.

Q. Were you watching the RPM on the engine throughout this time?

A. Yes. We were there.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Was the engine ever backed?

A. No, sir, never backed.

MR. WOODY: Just one moment. Mr. Glowacki, that's all the questions that I have at this time.

DR. DICKINSON: Thank you, Mr. Woody. Mr. Sager.

EXAMINATION

BY MR. SAGER:

Q. Mr. Glowacki?

A. Yes, sir.

Q. You said earlier to Mr. Woody that you had been ashore with Captain Hazelwood while you were in Valdez?

A. Yes, I was.

Q. When did you make those arrangements, the arrangements to go ashore?

A. We spoke about going ashore that morning. My primary reason for going ashore was to Federal Express the lube oil samples from the turbochargers that we had taken that morning to send to our office to be analyzed and to talk to our office from the agent's office about our turbochargers.

Q. Did you plan to have anyone else accompany you?

A. It turned out that the radio officer came

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

with us, yes.

Q. Did you plan to do anything else?

A. We were planning on having lunch with one of the pilots.

Q. Anything else?

A. At that time, no, sir.

Q. Do you recall what time you left the ship?

A. Approximately 10:30.

Q. How did you get to Valdez?

A. One of the pilots picked us up. I did not know him, nor do I recall his name.

Q. Would it have been the pilot that brought the EXXON VALDEZ into port?

A. No. I don't believe so, no.

Q. Where did the pilot leave you off?

A. At the agent's office.

Q. And what agent was that?

A. Alamar.

Q. Did you all get out together?

A. Yes, sir.

Q. Do you recall what time that was that you arrived at the office?

A. Shortly after 11, I believe.

Q. What did you do once you were at the agent's office?

A. I made my phone calls. The captain also made some phone calls to the office.

Q. From the agent's office?

A. Correct.

Q. Did the radio electronics officer make any phone calls?

A. I don't believe so.

Q. But he remained with you?

A. Yes, sir.

Q. How long were you at the agent's office?

A. I believe we left the agent's office around 12:30 or so.

Q. And you think you were there about an hour and a half?

A. Yes, sir.

Q. Perhaps a little less?

A. Fair assumption, yes, sir.

Q. And during this time you just made phone calls; is that correct?

A. Correct.

Q. Did you overhear any of the master's conversations --

A. No, sir.

Q. -- while he was on the telephone?

A. No, sir.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Did the master appear different in any way while you were at the office? Did his moods, did his mood change?

A. I didn't perceive any change, no.

Q. What did you do when you left the agent's office?

A. We had made arrangements to go to lunch with Pilot Murphy, Ed Murphy, and we waited for him outside of the agent's office.

Q. And then he did what? He came by and picked you up?

A. Correct, and we went to lunch.

Q. How far -- how long did it take, did that trip take to go to where you had lunch?

A. Approximately five minutes, I'd say.

Q. Do you remember where it was that you had lunch?

A. It was the Pizza Palace.

Q. Do you recall what you had for lunch?

A. I had Greek salad.

Q. Were you all sitting at the same table, the three members of the crew?

A. Yes, sir.

Q. Was anyone else with you besides the pilot?

A. No, sir.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Did you see anyone else there that you knew?
A. Yes. The agent was there for lunch also, with his wife.
Q. Was anyone drinking alcoholic beverages while you were --
A. I was.
Q. I'm sorry?
A. I was, yes, sir.
Q. Was Captain Hazelwood?
A. No, he wasn't.
Q. Was the radio officer?
A. Radio officer was, yes.
Q. What were you drinking?
A. Beer.
Q. How long were you there at the Pizza Palace?
A. Till approximately 2:30, I believe.
Q. Two hours?
A. Approximately, yes.
Q. Did you do anything else while you were there besides eat lunch?
A. After we ate lunch? No, sir.
Q. But remained there for two hours?
A. I am not cognizant of exact times, sir. Everything is approximate.
Q. Approximately. All right. Did the three of

you, or did the three members of the crew, yourself, Captain Hazelwood and the radio officer, did you all leave together?

A. Yes, we did.

Q. Do you -- how did you leave? Did you --

A. Pilot Murphy took us, drove us back to town, the center of town.

Q. Where did he leave you off?

A. I believe it was in front of the supermarket in Valdez.

Q. And did you remain together?

A. No, we did not. We split up.

Q. And this would have been about 2:40, 2:35 or 2:40?

A. That's a fair assumption.

Q. I'm running a general clock here as we go. Did you make arrangements to get together again?

A. Yes, we did.

Q. And what were those arrangements?

A. That we would meet at the Pipeline Club at sometime later.

Q. When did you make those arrangements?

A. When we parted. Before we parted.

Q. What did you do while you were separate from the other two men?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. I was asked by a couple of crew members, the engineers and the oiler, to pick up some newspapers for them. So I proceeded to walk about town to pick up a newspaper.

Q. Do you recall how many stops you made?

A. I don't recall but I believe I looked at about three newspaper boxes. They were all empty. I did not pick up any newspapers.

Q. Any idea about how long that took?

A. No, sir. I was -- I walked about town, and I felt that I actually enjoyed being by myself for awhile and getting off the ship. So it's -- I really wasn't cognizant of time.

Q. What time did you make arrangements to meet at the Pipeline?

A. We did not make any time arrangements.

Q. Did you go anyplace other than walk around town before you went to the Pipeline?

A. No. I believe I picked up a magazine also at the drugstore, yes.

Q. What time did you arrive at the Pipeline?

A. Approximately 4:00, I believe.

Q. About an hour and a half, then, you were walking through the town?

A. Perhaps it was shorter. As I said, I really

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

wasn't cognizant of the exact time.

Q. How far is the Pipeline from the Pizza Palace?

A. Walking, I would say maybe 20 minutes.

Q. Who arrived next?

A. The captain was next.

Q. About what time was that?

A. He arrived perhaps half an hour after I was there.

Q. Did he appear to have been drinking?

A. The captain?

Q. Yes.

A. No, sir.

Q. How much later did Mr. Roberson arrive?

A. He arrived perhaps --

Q. The radio officer.

A. -- perhaps 20 minutes after the captain arrived.

Q. Had you and the captain begun drinking?

A. I had a drink, yes.

Q. Did the captain?

A. Yes, he did.

Q. What were you drinking?

A. I was drinking gin and tonic.

Q. Do you recall what Captain Hazelwood was

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

drinking?

A. I believe he was drinking vodka.

Q. Did Mr. Roberson purchase anything to drink?

A. Yes, he did.

Q. What was he drinking?

A. I believe he drank beer.

Q. What did you do while you were at the Pipeline Club besides drinking?

A. Prior to the captain arriving, I made a phone call home, and that was maybe 15, 20 minutes; and then after the captain arrived, we simply talked.

Q. Did you play any of the, any of the bar games?

A. No, we did not.

Q. No darts?

A. No, sir.

Q. No machines?

A. No, sir.

Q. Did you mix at all with the local residents?

A. I did not, no.

Q. Did the master?

A. I did not see him, no.

Q. So the three of you were just isolated by yourselves; is that correct?

A. We were together by ourselves, yes.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. How were you ordering drinks?

A. I really don't recall exactly how we did it but, you know, we were staggered, we came at different times. I really don't recall how we did it.

Q. Did anyone buy a round of drinks?

A. That I don't recall.

Q. Can you recall how many drinks you had while you were at the Pipeline?

A. I believe I had three drinks.

Q. I'm sorry, I didn't hear.

A. I believe I had three drinks.

Q. Is that about what Captain Hazelwood had?

A. I am not certain.

Q. Mr. Roberson?

A. I'm not certain either.

Q. How long did you remain at the bar?

A. We left the Pipeline Club about, perhaps seven, a little after seven.

Q. And did you leave together, the three of you?

A. Yes, we did.

Q. Where did you go?

A. We went to Pizza Palace. I decided, suggested that I'd like to get a couple pizzas and bring them back to the ship for the engineers. So that's, that's why we went to the Pizza Palace.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. How did you get to the Pizza Palace?

A. We walked.

Q. Have you gone ashore with Captain Hazelwood before?

A. I really don't recall because this is the first time we sailed together, even though we've both been with the company for 19 years, and I really don't remember. And I was only with him this time for about a month prior to the incident. I really don't recall.

Q. You don't recall if you had been out ashore with him in that month?

A. No. No, sir.

Q. Have you ever seen Captain Hazelwood intoxicated?

A. No, I can't say that, no.

Q. Do you recall when you arrived at the Pizza Palace?

A. Approximately 7:30 or so.

Q. And who ordered the pizzas?

A. I did.

Q. Where did you wait for the pizzas to be prepared?

A. While I was ordering the pizzas, the captain and the radio officer went to the bar next door. Then after I ordered the pizza, I joined them in the same

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

place.

Q. Were they drinking alcoholic beverages?

A. They had some, they had ordered something by the time I came back in, yes.

Q. Did you have something?

A. When I came in, yes, I ordered another gin and tonic.

Q. How many drinks did you have while you were there?

A. Personally, only had one, and I don't believe I even finished that one because we were only there the time that it took to make the pizza, and when I went to pick up the pizza, I paid for the pizza, I also called the cab for us. So I don't believe I finished that drink because getting the pizza, getting the cab almost happened simultaneously. When the cab came, I ran back in and told them the cab is here. That's when we left for the dock.

Q. And you left in the cab?

A. Yes, sir.

Q. All three of you?

A. Correct.

Q. Was there anyone else in the cab besides you and the cab driver and the other two members of the crew?

A. Eventually we picked up another member from another ship, crew member from another ship. I don't

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

recall where that was or when it was.

Q. Do you know, was this a call that the cabbie had received and this was, it was his routine to pick up more than one fare?

A. I believe that's the way it is, yes.

Q. Can you give us an estimate of when you started back to the ship?

A. It was probably maybe quarter to eight, something of that nature.

Q. And the three of you remained together until you got to the terminal?

A. Yes, sir.

Q. Would you describe the procedures that you went through when you entered the Alyeska terminal?

A. You go through security. You go through a metal detector.

Q. You have to get out of the cab, then?

A. You get out of the cab, yes. If anyone carries any packages, they're checked, and then you get back in the cab and the cab takes you to whichever dock you're going to.

Q. Do you speak with the security guards?

A. You might. They've never asked -- I don't follow you.

Q. Well, do you sign in and sign out personally?

A. We personally do not, no.

Q. So you at least have to tell them your name?

A. That's correct.

Q. Did you notice if Captain Hazelwood had any trouble speaking with the security people?

A. No, sir.

Q. Was he enunciating his name at least?

A. I felt he was normal, yes.

Q. Did anyone have any problems while you were logging through the gate?

A. No, sir. He talked with -- we spoke to the guards, I believe. You know, I said good evening or something of that nature. You know, small talk.

Q. And how did you get from the gate to the ship?

A. By cab.

Q. Would you describe the gangway for boarding the vessel at the end of the berth?

A. It's a dock gangway. It's not the ship's gangway. You go up a set of stairs and then you get on the gangway.

Q. If I said there were 40 stairs, would that sound reasonable?

A. I have no idea, sir.

Q. Are there a lot of stairs?

A. It's quite high, yes.

Q. Did you have to go up some stairs and then down some stairs?

A. I really wasn't paying attention. I don't recall.

Q. Did Captain Hazelwood have any problem going up the stairs?

A. No. I don't recall any problems, no.

Q. And the three of you went aboard together?

A. Yes, sir.

Q. Did you plan to meet anyone aboard who was not a member of the crew?

A. No, sir.

Q. What did you do after boarding?

A. Part of that I already answered with Mr. Woody. I went to my room, there was some mail for me. I changed some of my clothes, and I called the first engineer, who was on board. I took the pizzas, left them in the galley. I believe I put one in the freezer. I'm not sure about that. And then I was going to take the other one down to the engine room with me when I finally went down to the engine room.

Q. Do you know where the radio officer went?

A. Went to his room, I assume.

Q. And do you know where Captain Hazelwood --

A. I'm sorry. I did see him in the galley, I believe, for awhile.

Q. Do you know where Captain Hazelwood went?

A. He went to his room.

Q. Is that the last you saw of Captain Hazelwood?

A. That's the last I saw of him, yes.

Q. Until after the grounding?

A. No. I saw him prior to the pilot getting off when I went up to the bridge to give him the part of the departure message with dealt with fuel figures and water figures.

Q. About what time was this?

A. Perhaps 11:00, perhaps before that. I really am not sure.

Q. But you did see him on the bridge?

A. Yes, I did.

Q. Would you think back carefully. Did he appear to speak any differently than he did when you boarded the vessel?

A. No, sir.

Q. Did he speak more slowly?

A. I wouldn't say that. Captain Hazelwood is a man of few words. He's not very verbose; he doesn't say very much. No, I really couldn't say that I saw any

difference in his speech.

Q. Did he repeat himself?

A. Not to me he didn't, no.

Q. In your opinion, was Mr. Roberson intoxicated when you returned to the ship?

A. I don't believe so, no.

Q. Were you intoxicated?

A. I don't believe so, no.

Q. Was Captain Hazelwood?

A. I don't believe so, no.

Q. Did you have any concerns about Captain Hazelwood's capacity to direct the outbound navigation of the vessel that night?

A. No, sir, not really, no.

Q. Is the cab searched at the Alyeska security gate?

A. I've seen it searched in the past, yes, or looked into.

Q. Was the cab that you arrived in looked into?

A. I am not sure because we went into the security office to go through the metal detector.

Q. Did the cab driver say it looks like you are ready to leave?

A. I don't recall.

Q. Was there any answer from anyone about

leaving in an hour and a half?

A. Anyone meaning whom?

Q. Of the three of you.

A. As I said before, I was under the impression, we all were, that the board was set for 2200. While we were at the Pipeline Club, the captain and I did discuss, and not frivolously, the fact that perhaps we should leave at daylight because of the ice, and that was part of the discussion and it was left at that. It wasn't really pursued. But we were surprised that we were going to leave shortly. We were surprised, yes.

Q. How did the subject of ice come up?

A. That I don't know. Captain must have brought it up perhaps in discussion with pilots. I have no idea. I'm just -- I'm speculating.

Q. I'd like to refer back to something you were speaking with Mr. Woody about earlier. That's the turbo on the LONG BEACH.

A. Um-hum.

Q. Is the LONG BEACH an engine room that's manned similarly to the EXXON VALDEZ engine room?

A. You mean as far as number of personnel in the engine department?

Q. Yes.

A. Yes.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. And does it have certification for being unmanned at any period, for any period of time?

A. Yes. It's similar to the VALDEZ, yes.

Q. After the turbo failures, was it, was this something -- was it general knowledge among the engineers that manual monitoring of the lube oil on a periodic basis might have prevented the failure?

A. On the LONG BEACH?

Q. On the LONG BEACH.

A. I have no idea, sir. The manufacturer's recommendation for changing the oil on these turbochargers is 700 hours, and 700 hours running time on a ship which runs continuously 24 hours a day is not very long. And our procedure on the VALDEZ was to change oil every 500 hours, but what the procedures were on the LONG BEACH, I have no idea.

Q. Does the turbo on the EXXON VALDEZ have a sight glass? Does each turbo have a sight glass for lube oil?

A. Yes, that's correct.

Q. Is this checked periodically?

A. Yes. Every, every run. You can see the flow of oil into the bearings, yes.

Q. Was the EXXON VALDEZ always manned as she is now in the engine room?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. No. When she first came out we had a higher complement.

Q. What was that higher complement? What was the complement?

A. We had an extra third engineer because we were standing watches at the time until we got Coast Guard certification to allow us to go unmanned, and we did have two more MOA's, oilers.

Q. Were you carrying oilers for this trip?

A. Yes, I was.

Q. What was the reason for that?

A. I'm sorry?

Q. What was the reason for carrying the oilers?

A. Two oilers?

Q. Yes.

A. It came about basically by accident. One oiler was not ready to get off, another one was ready to come back from vacation, and it just so happened that we were going to overlap with two oilers for one trip.

Q. Were you aboard the vessel while the process of reducing the manning in the engine room was taking place?

A. Yes, I was.

Q. Would you tell us how that happened? What were the procedures that you participated in?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. We did not reduce the manning until we went through the Coast Guard inspection where the Coast Guard inspector rode with us to verify, prior to allowing the vessel to go and get the unmanned certification, and once we did get that certification, we reduced the number of oilers. I believe it was at first one, and then after a short period of time, or maybe it was months, a short period of time, maybe months, we went to one oiler, and after one year we went to one third engineer, I believe.

Q. Did you have to submit any documentation to support your request?

A. I personally?

Q. Or someone representing the company that submitted information pertaining to your engine room operations.

A. Oh, yes. I'm certain there were quite a bit of correspondence between us and the Coast Guard from the office about that, but not from me personally, no.

Q. Do you know what kind of correspondence took place, what kind of information was included?

A. I can't tell you exactly. I've seen copies of some of the correspondence, cover letters requesting that we certify for them a certain status, but I don't recall the exact.

Q. Do you know if overtime hours for --

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. I do not recall submitting overtime hours from the VALDEZ for that purpose, no.

Q. Alarm records?

A. We have kept alarm records, yes. They were there for the Coast Guard inspector's use, yes.

MR. SAGER: That's all I have. Thank you.

DR. DICKINSON: Thank you, Mr. Sager. Dr. Birky.

DR. BIRKY: Yes, I have a few questions. Thank you.

EXAMINATION

BY DR. BIRKY:

Q. Chief, how long have you known Captain Hazelwood?

A. We are graduated from the same school. So even though we're not friends, I did know him from the academy.

Q. How long have you been sailing with him in the last few years?

A. Even though we've been with the company, it was about 19, 20 years, this was the first time we sailed together.

Q. And how many trips -- when you say this is the first time you sailed together, is this the first trip you went with him?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Prior to the incident we were together approximately a month. So that, that would have been the second trip.

Q. Seven trips?

A. Second trip.

Q. Okay. What do you understand the Exxon policy to be on the use of alcohol and/or drugs on board the vessel?

A. That use or possession leads to termination.

Q. And did you ever use or see used alcoholic beverages on the vessel?

A. There were times where the company provided us with wine for holiday meals, yes.

Q. Did you at any time take alcoholic beverages on the vessel when you went ashore, like at Valdez?

A. Ashore?

Q. Yes.

A. Please repeat.

Q. Did you ever take alcoholic beverages back on the vessel when you --

A. Back on the vessel, no.

Q. Did you -- were you ever invited into Captain Hazelwood's cabin to drink alcoholic beverages?

A. No, sir.

Q. When you went ashore with Captain Hazelwood

on this last trip in Valdez, you reported, as I understood your testimony, to the office, to the agent's office, and you were informed at that time that the vessel was going to sail what? An hour earlier than you expected when you left the vessel?

A. No, sir, an hour later.

Q. An hour later. Pardon me?

A. An hour later than we expected. An hour later than when we left the vessel.

Q. I see. Okay. When you were drinking with Captain Hazelwood on the day before the grounding, were you aware at any time or at any point that there might have been some impairment rather than intoxication of either Captain Hazelwood or yourself?

A. I am not sure how I would judge the differences, judge the difference between the two.

Q. How would you, how would you characterize an individual who might have too much alcohol?

A. I don't know how to answer that question, sir.

Q. What are the signs and symptoms of alcohol use?

A. One could stagger, one could be unsteady on his feet, one could slur his words,

Q. Did you detect any of those symptoms on the

night you were boarding the vessel or just before you boarded the vessel?

A. No, sir.

Q. Are you aware in your own use of alcohol that there may be some impairment in thought processes or that sort of thing before you would see those visual signs of intoxication and/or impairment?

A. Sir, I personally do not like to get drunk.

Q. Are you aware of any other evidences of impairment that would not be necessarily visual observations of an individual who is intoxicated?

A. I'm not certain, sir, no.

Q. When did you become aware that Captain Hazelwood may have had a chemical dependency problem?

A. I can't say exactly but being, working for a company for 19 years, you hear certain rumors, but these are innuendoes and rumors and I can't exactly answer you.

Q. When did you first hear a rumor to that effect?

A. I don't recall, sir.

Q. Was it prior to the grounding?

A. Yes. It could have been a few years before that. I can't tell you.

Q. But you think it would have been before the grounding?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Oh, yes, certainly.

Q. Had you been aware of any other issues surrounding Captain Hazelwood's chemical dependency problem?

A. No, sir.

DR. BIRKY: No further questions.

DR. DICKINSON: Thank you, Dr. Birky. Mr. Howitt.

MR. HOWITT: Mr. Chairman, we have no questions.

DR. DICKINSON: Thank you. Cmdr. Waldron.

EXAMINATION

BY CMDR. WALDRON:

Q. Good morning, chief.

A. Good morning.

Q. I have some questions concerning load program up. You explained it fairly well. The question I had was is there an indication on the bell log when load program up is engaged?

A. No, sir. Not the specific engagement of it, no. It was not printed out, no.

Q. Is another position on the engine order telegraph?

A. No. Prior to load programming up, no. The throttle position or the telegraph position would be at

full ahead and remain there while you load programming up.

Q. Who does the load programming up? Is it the engine room or is it the bridge?

A. It depends where the engine control is placed.

Q. Engine control is in the bridge so it's --

A. It's done from the bridge.

Q. How is that done again, please?

A. It's by pressing a button.

Q. Is the engine room notified at that time?

A. Yes, they notified us.

Q. Did you -- were you notified and did you log it at that time?

A. Yes, I believe it was logged but I'm not certain.

Q. Do you remember what time that occurred?

A. At approximately ten to midnight, I believe, maybe fifteen to midnight, somewhere in that time.

Q. Okay. To clarify your propulsion system, to go astern from full ahead, the engine must be first completely stopped and then started again in reverse; is that correct?

A. That's correct.

Q. What period of time would that take from full ahead to full astern?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Again that would depend whether the vessel had weigh on it in the ahead direction or whether it was stopped.

Q. Going full ahead for a good amount of time, say 12 knots?

A. It might take two, three minutes before you would get the full astern RPM.

Q. Do you have any idea what it would take, how long it would take for the vessel to completely come dead in the water?

A. Distancewise?

Q. Right.

A. No, not really.

Q. On the steering system, we've heard testimony from the bridge mates about testing the steering up there. Are there any tests that are conducted by the engineers on the steering system?

A. When we test the steering gear prior to leaving port and prior, also during the prearrival tests, it's tested from the bridge and it's switched from the bridge, from one unit to the other. However, an engineer does go in the steering gear room to verify that, yes, what is supposed to happen is happening.

Q. Were there any tests done of the steering gear after the grounding?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Not immediately, no. We did not want to touch the steering gear because when the vessel is, when this particular vessel is at a standstill or at the dock and you test the gear, you do get significant, you feel significant shudder from rudder movement back aft. So we did not want to do that. Also we didn't want to test anything prior to diver's inspection of the stern section of the ship.

However, we did test the gear prior to refloating the vessel, and the steering gear was used during a passage from Bligh Reef to Naked Island. And after I left the vessel, I left the vessel on April 8, I believe, ABS was on board and they did request that we test the steering gear, just pro forma to say it was tested. I was not there but I knew it was going to be tested.

Q. Regarding the discussion of ice on the evening before -- afternoon before the casualty, when did this subject come up?

A. When we were at the Pipeline Club.

Q. Okay. Who brought the subject up?

A. I don't believe it was the captain. I don't remember whether it was the captain or myself. I don't recall.

Q. Do you remember what was said concerning the

possible delay of the vessel because of ice?

A. I don't follow you.

Q. What was said?

A. I think the gist of it was that if it's very icy out there, the captain would prefer to leave by daylight or at daylight.

Q. Was there any discussion about what the ice was like?

A. No. As I said before, I don't know where the captain got the information that it was icy out there but he must have gotten something from somewhere. Again my assumption.

Q. You stated that at the, when you went back to the Pizza Palace and you went to the Harbor, I think it's the Harbor Bar next door, that you ordered drinks. Did the, did the captain order a drink?

A. He had something when I came back after ordering the pizza, yes.

Q. Did he drink it?

A. Yes.

Q. Did you see the captain purchase a bottle of alcohol or any other type of bottle to take back --

A. No, sir, I did not.

Q. -- to the vessel? You stated that you've been with Exxon for 19 years. What steps do you know that

were taken to enforce alcohol prohibition?

A. I'm aware of, although I have not witnessed it nor been a party to it, that there have been periodic room searches on ships, crew members. Captains at different times have informed the crew of the policies, yes.

Q. What do you know of the alcohol rehabilitation program, and have you heard of reassignment of personnel due to alcoholism?

A. I have -- I don't know anything about it. I was never a party of it and don't want to be a part of it. I don't know anything about it, no.

Q. Has the program ever been explained to you?

A. There has been a letter sent to employees saying that it is available, yes.

Q. And again have you ever heard of anybody being reassigned due to alcohol problems?

A. I would have no knowledge of that, sir.

Q. Did you have any company effort to discover DWIs or other violations or convictions of alcohol abuse?

A. I would have no idea, sir.

Q. Did you discuss this cause of casualty with anyone after the incident?

A. No, sir.

CMDR. WALDRON: That's all. Thank you.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

DR. DICKINSON: Dr. LeResche.

EXAMINATION

BY DR. LeRESCHE:

Q. Mr. Glowacki, could you please look at Exhibit 4I. Do you have that, please? It's the Xerox of bell logger tapes. And most particularly page 3. Page 3 is the one that has just three tapes Xeroxed on the right-hand side and blank on the left-hand side.

A. Okay.

Q. Do you have it?

A. (The witness nods his head.)

Q. All right. Reading in the center column of this page. I'm told that one reads these things up from the bottom to read them chronologically.

A. Correct --

Q. Is that correct?

A. -- because it's a tape.

Q. Please read up three or four inches there, find the line that has 9:05 as the time. I'm assuming that's Zulu time, which would be --

A. I'm sorry?

Q. That's Greenwich time? Am I correct?

A. That's GMT, that's correct.

Q. Okay. What was the RPM on this, at this time reading?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. 61 RPM.

Q. 61 RPM. Okay. So the RPM --

DR. DICKINSON: Dr. LeResche, excuse me. Are you looking at four India?

DR. LeRESCHE: Four India, yes, sir, third page.

DR. DICKINSON: Third page?

THE WITNESS: Page 3?

DR. LeRESCHE: It's the third one that I was handed.

DR. DICKINSON: It has a number on the right-hand corner.

DR. LeRESCHE: I can't find the number on this one. Basically it's the one that has just three tapes and has a blank on the left.

DR. DICKINSON: We don't have that exhibit. Wait a minute.

DR. LeRESCHE: The chief has it.

DR. DICKINSON: Yeah. I'd like for us to have it too. Okay. Go ahead.

BY DR. LeRESCHE:

Q. First of all, what signals this logger to actually print an entry? Is it printed every so many minutes or does a change signal it to print?

A. It prints every time the telegraph is moved

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

from one speed to another. It prints the speed change, it prints the time of that speed change. It also -- when I say speed change, I'm talking about an order, movement of the telegraph. Okay? It prints the time of that desired speed change, and if the vessel is under way at that time, it also prints what the actual RPM of the engine is at that time.

Q. Would you look up at the -- or down below the previous one I referenced, 8:24, 24 second?

A. Right.

Q. Now, at that time it was bridge control full ahead 56 RPMs; is that correct?

A. Correct.

Q. The next printing was bridge control full ahead 61 RPMs?

A. Correct.

Q. What would have caused it to print the second one? There is no indication there was a change at the telegraph.

A. Okay. During transient change in speed, this automatically prints out a change of any, between four and five revolutions. If there is a change of four or five revolutions it will automatically print it out. The actual engine order or desired order is signified by a little chevron on the side of the --

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. I see. And at four or five the computer just decides randomly how many RPMs are reported?

A. No, I don't believe it decides randomly. You're going through a transient so it depends when it catches it, I believe. It's an electronic device.

Q. But it's not by time, it's by change in RPM?

A. There is an also time element involved here. If the vessel is proceeding at -- well, what I'm trying to say is that every 24 hours -- I'm sorry. Every four hours it will print out automatically also, the status.

Q. Okay. So it appears from this that the engine RPMs increased from 56 to 61 over approximately -- what's that? Thirty-nine minute period from 8:24 to 9:05?

A. Correct.

Q. Okay. And then they increase another three RPMs in the five minutes, or I'm sorry, in the 13 minutes between 9:05 and 9:18?

A. Correct.

Q. Is this probably a result of the loading program that was up at the time?

A. Yes, it is.

Q. Okay. Now, you told us that you came, that you read the RPMs after hearing the noise that you felt might be the turbocharger.

A. I read the RPM when I came back to the

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

control room after going out to listen to what I thought was the noise coming from the turbochargers.

Q. And looking at this logger tape, would I be correct in assuming you probably read it at about 9:18?

A. Very close to that, yes.

Q. Okay. And basically that was 13 or 14 minutes after other evidence shows the grounding. Does that comport with your remembrance of that time? Was this 13 or 14 minutes after you heard the noise?

A. No. No, sir. No. When I said that I noticed the engine was at 64 revolutions and that the load was unusual for that number of revolutions, it was very shortly after I heard the noise.

Q. Okay. I assume that this, the increase in speed with the loading program up is probably a fairly linear progression. Is that correct? So many RPM per hour?

A. The increase in RPM is not linear. The increase in the signal to the governor is lineal.

Q. Okay. I understand.

So in these 13 minutes that the RPMs increased by three, that's several minutes to go up one RPM. So am I correct in assuming that in fact you could have seen the 64 RPM signal reading significantly before 9:18 on this chart?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. Oh, yes. The -- it's a digital readout and it would float between 63, 64 for perhaps a minute or so, yes, two minutes, yes, until it finally changed because the digital readout is in whole numbers only, no decimals.

Q. Okay.

A. Did that explain it?

Q. Yeah, that's been very helpful. Have you ever been instructed by Exxon management to reduce overtime in the engine room?

A. I have not been, no, sir.

Q. Would you have expected to receive a memo from Mr. McRobbie, the Exxon fleet coordinator, if he had sent one out to all engineers?

A. Mr. McRobbie is not the coordinator for our ship.

Q. Exxon has more than one fleet coordinator?

A. Perhaps we are using different terms.

Q. But Mr. McRobbie is not in the chain of command above you?

A. Not me, no.

Q. Okay. If you had been instructed by Exxon to reduce engine room overtime by unlicensed personnel to zero, would that have caused you any concern?

A. Yes, I would like to talk about it.

Q. What would your concern have been?

A. My approach to this would be, hopefully from a realistic point of view, that it's, there are situations where you have to use overtime. I mean, you can't make a blank statement like that.

Q. Okay. Are you a member of a union?

A. No, I'm not.

Q. At the start of a series of voyages, I don't know what you call it, a tour of duty or whatever, on board the EXXON VALDEZ, where do you board?

A. On this coast it's generally either San Francisco or Long Beach.

Q. Okay. And is that the case with everyone on the crew, to the best of your knowledge?

A. Generally, yes.

Q. Okay. Has anyone ever searched you or your belongings at any of those places --

A. No, sir.

Q. -- where you board the --

A. No, sir.

Q. Okay. You've been on board Exxon vessels for 19 or 20 years; is that correct?

A. Nineteen years.

Q. Have your belongings ever been personally, your personal belongings ever been searched --

A. No, sir.

Q. -- on board a ship? When you were asked to say what Captain Hazelwood had been drinking at Valdez, you said probably vodka. Is that -- was what he was drinking in orange juice or a straight clear liquid, or do you recall?

A. At the time?

Q. Yeah.

A. It was clear.

Q. Okay. When you were at the Pipeline Club, you said that you and the captain discussed whether or not it might be a good idea to wait until daylight to leave because of the ice. Did you discuss other ship's business with him during these three hours?

A. We might have but nothing of significance that would make me remember exactly what we talked about, no.

Q. Did you ever -- did you discuss personalities of the ship's crew and competency of any of the people working for you two?

A. No, sir, I don't recall any conversation like that.

DR. LeRESCHE: Thanks, Mr. Glowacki. That's all.

DR. DICKINSON: Thank you. Captain Deppe.

/ / /

EXAMINATION

BY CAPTAIN DEPPE:

Q. Mr. Glowacki, just to clarify one point about when the engineers went on watch when you made arrival or departure, went off watch when you made departure. You're talking about arrival at Cape Hinchinbrook, not arrival at the dock; is that correct?

A. Oh, yes, certainly.

Q. Okay.

A. Yes.

CAPTAIN DEPPE: That's all I have.

THE WITNESS: And also departure at Hinchinbrook. I do not mean to say departure meaning when we dropped the pilot off.

CAPTAIN DEPPE: That's all I have.

DR. DICKINSON: Thank you. Mr. Collucciello.

FURTHER EXAMINATION

BY MR. COLUCCIELLO:

Q. Chief, one question about the load indicator. Does it have an associated print record or is there some memory or some information that would show its changes to us?

A. No, sir. It's an analog transmitter. It's sort of a transmitter that drives an analog indicator, that's all.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Okay. There is no record?

A. No, sir.

MR. COLUCCIELLO: Thank you. No questions.

Q. One more question. How long does it take for the load program to load program up? How long does it take?

A. Possibly 42, 43 minutes, I believe, from 55 to 79 RPM.

Q. And does it have to start at a particular RPM or can you start it at any RPM?

A. Yes. If you wish to go to sea speed you have to stop at -- start at full maneuvering ahead, which is 55.

Q. Well, if you wanted to, can you put it on, in effect, before sea speed?

A. The feature that's available to us in the system is that if you are, let's say, at half ahead but wish to go at a little faster speed, somewhere between half ahead and full ahead, there is another feature that's called fine setting. You can manually increase the speed to whatever RPM you desire between the full ahead and half ahead, as an example, to bring it anywhere you want, but you cannot fine set it past the next speed, which would be full ahead.

Q. So, in effect, if do you not use the fine

tuning, the load program up will always bring you up to full sea speed; is that correct?

A. Load program up is only used to go from full ahead to sea speed or from vice versa, the other way.

Q. And the starting point is at maneuvering full?

A. Correct.

Q. Which would be 55?

A. Correct.

Q. So you will start out at 55 and end up with what?

A. Seventy-nine.

MR. COLUCCIELLO: Seventy-nine. Thank you.

DR. DICKINSON: Mr. Danaher?

MR. DANAHER: Thank you, Mr. Chairman.

EXAMINATION

BY MR. DANAHER:

Q. You responded to some questions about the engine room crew reduction from Mr. Sager, and I believe you alluded to the fact that there would be correspondence or was correspondence between Exxon and the Coast Guard. Did you also say that you had seen some correspondence on that?

A. I have seen copies of some cover letters that were part of that correspondence.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Do you recall who from Exxon that correspondence was signed by?

A. I believe it might have been, it was probably from Mr. Paul Myers.

MR. DANAHER: Thank you. No further questions.

DR. DICKINSON: I just have one question.

EXAMINATION

BY DR. DICKINSON:

Q. In your 19 years with Exxon, have you -- you may have already answered it, so if you did, I apologize. Have you ever seen anybody with alcohol on the vessel, on board?

A. No, sir. Not that I recently recall, no, sir.

Q. Have you ever been told by anybody -- have you ever been told that somebody, about people that have alcohol, or persons, part of the crew that have alcohol on board?

A. You know, in 19 years you probably could have heard a lot of things, and I don't -- recently I do not recall, no.

DR. DICKINSON: Okay. Thank you. Mr. Glowacki, you're excused.

I'd like to call to the witness stand now Mr.

Frank Iarossi, president, Exxon Shipping Company. Mr. Iarossi.

Mr. Colucciello, will you swear in the witness and qualify him, please.

FRANK IAROSSI,

called as a witness, having been duly sworn upon oath, was examined and testified as follows:

EXAMINATION

BY MR. COLUCCIELLO:

Q. Please state your full name.

A. My name is Frank J. Iarossi. Frank James Iarossi.

Q. Who is your employer?

A. Exxon Shipping Company.

Q. In what capacity are you associated?

A. I'm the president of Exxon Shipping Company.

Q. How long have you been in this position?

A. Since 1982.

Q. Thank you.

DR. DICKINSON: I just want to make an announcement for the record. One of the exhibits that Mr. Iarossi may be questioned on are some of the service records that the safety board has in their position. You,

the four parties, have information on Mr. Hazelwood's service records. We passed that out to you yesterday. I think that is a partial list of information, what we have here. I am not sure that you have all the information on Mr. Cousins, Mr. Kagan or Ms. Jones.

That information has been subpoenaed. We have some of that back in Washington, D.C. It is in the public record. When we get back to Washington, we will review that. What is pertinent, you will be provided. It is in the public docket and will be a part of this investigation.

MR. COLUCCIELLO: Mr. Katcharian will ask you some further questions.

EXAMINATION

BY MR. KATCHARIAN:

Q. Good morning, Mr. Iarossi.

A. Good morning.

Q. Before Exxon, what other work experience have you had?

A. I graduated from the Coast Guard Academy in 1959. I sailed for the next four years, one year as a deck officer and three years as an engineering officer. I went to the University of Michigan for graduate school, and I have a degree in naval architecture, Master's degree in naval architecture and in mechanical engineering.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

I spent four years in a technical position with the Coast Guard. I was section head of the marine engineering section of the merchant marine technical branch. Left the service at the end of 1968 and joined Exxon International in the marine technical position. During that time I also went back to New York University for an M.B.A. degree, and I've been with Exxon in different positions, including four years in Japan heading up a ship construction program, also spent a couple years as a marine advisor to the corporation, Exxon Corporation.

During that time we were very heavily involved in developing the oil spill response plan that still exists today. In fact, I headed up that project. We also at the same, roughly the same time -- and this was the period right after the ARCO MERCHANT/AMOCO CADIZ. So it sponsored a lot of activity. The other operations going on at that time were the development of the navigation and bridge organization manual. And in 1982 I joined Exxon Shipping Company as president.

Q. That navigation and bridge organization manual, is that an international manual?

A. It was a manual that was developed for all of the Exxon operating fleets. At the time, I think we had 13 different national fleets. And it was developed in conjunction with both shoreside management and captains

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

from all of the different fleets.

Q. And how many fleets does --

A. It applies to all of Exxon's tankers.

Q. And how many fleets does Exxon have now?

A. I think it's down probably to maybe five national flags. I'm not sure. My responsibilities are strictly the U.S. flag.

Q. Okay. So how does Exxon Shipping Company fit into the corporate structure of Exxon Corporation?

A. We're responsible for the waterborne transportation of all U.S. domestic product, both ocean movements and inland tug barge type movements, and we do both the owned fleet and the chartering operations.

Q. Before Exxon Shipping Company was formed, how did it fit into the corporation?

A. The marine department at that time was part of Exxon Company USA. In fact, when I first joined the organization I was general manager of the marine department of Exxon USA, and then just a few months after that, Exxon Shipping Company was formed and I became president.

Q. And how many ships are there in the Exxon Shipping Company America?

A. Right now operational, we have 16 ships and we have about 18 tug barge units.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. And how many of the ships you have or tug barge units are in the North Slope crude trade?

A. I would say, I'm guessing now, we probably got ten ships in the Valdez trade.

Q. And are they any particular size vessel?

A. Of course, the largest two are the VALDEZ and the LONG BEACH. We've got two vessels that are 165,000 tons, three vessels that are 75,000 tons, one that's 70,000, one that's 58,000, and then we have another vessel that's dedicated to lightering North Slope crude in San Francisco Bay. That's 28,000 tons. I think I've got them all.

Q. Can you give me a rough estimate of about how many officers you have and unlicensed personnel in the shipping company aboard the ships?

A. The ocean fleet, when I took over the company we had roughly 1,550 employees, of which just over 1,000 were ocean fleet employees, and they're divided roughly in half between licensed officers and unlicensed. Right now I think that number is down around, the total number is down around 850, 850 to 900. I'm not even sure. But again divided about in half between officers and unlicensed.

Q. How does Exxon's, Exxon Shipping Company's manning levels compare with other U.S., industrywide, you

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

know, vessels?

A. I'd say we're about comparable. If you take, if you look at the fully automated vessels like the EXXON VALDEZ, our manning levels are about comparable to the rest of the industry, and I think the VALDEZ is representative of the rest of our fleet. She had a, she has a standard complement of 19. At the time of the incident I think she had 20. She has a certificate for minimum manning of 15.

Q. Are you comfortable with the manning scales aboard your vessels, number of people?

A. Yes.

Q. Do you have any other objectives when it comes to the manning of your vessels, changing sizes or more automation or how does -- what are those objectives, if you have any?

A. Well, we clearly have moved in our newer vessels -- we have five, six vessels built within the past eight years, and we have moved on those vessels to a full automation, as has the rest of the industry, I think, on all the vessels built in the past, say in the '80s, moved to diesel propulsion, moved to full automation.

Q. And has that brought about the reduced manning of the vessels?

A. Yeah. I think the national standard, whether

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

it's union crew or nonunion crew, the national standard has probably been 21, and that applies to container ships, and I'd say, to my knowledge that goes all the way back to 1982.

The first ship I know that was certificated fully automated was a vessel called the EILEEN INGRAM, and that sort -- that was in 1982. And that sort of became the pacesetter or the model for Coast Guard certification of a lot of other vessels and also manning. I think that had a crew of 20 or 21.

Q. So the way I understand it, as your fleet has been updated, the size of the crews have been reduced slightly?

A. Yes. Yes. The nonautomated vessels I think are manned about 24, 23, 24. We have two new vessels that are manned with slightly higher complements. They're chemical specialty vessels, and we carry an extra mate and an extra unlicensed pumpman on those ships because of the nature of their business.

Q. Could you briefly describe how the manning of the Valdez was established?

A. Yeah. That was done with the, in discussions and exchanges between the superintendent of construction in San Diego while the ships were being built and the senior Coast Guard representative. I guess he was the

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

OCMI for San Diego. And I think they were using as a model the EILEEN INGRAM certificate going back to 1982. I don't know the details beyond that.

Q. All right. So generally it sounds like it's done on an individual basis, individual ship basis or class basis?

A. Yeah. It has to do with the degree of automation that's designed into the vessel. I think the first, the owner at some point in time suggests a desired manning and then the Coast Guard goes through an analysis of what to do. Our desire was to come out with a certificate that was modeled after the EILEEN INGRAM. We don't own that ship, by the way. That was another company.

And the Coast Guard goes through a process, particularly where it has to do with gaining an unattended engine room certificate, a UMS certification. The Coast Guard requires that the engine room be manned for a minimum of six months, and during that time you have to have extra complement on board so that you can go to full manning in the engine room. After six months, sometimes -- it's a period of roughly six months. The Coast Guard then reviews the operating performance of the vessel, and if they do grant a UMS certificate to the vessel, then you're allowed to reduce your crew.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Has there been an increase in overtime because of the reduced size crews?

A. No. It's -- our experience is that it's actually decreased because while you are reducing -- and this applies just to the engine room, of course. While you are reducing the overall size of the crew in the engine room, you're also taking all of the engineers off watch so that you have a total crew of engineers now, and our standard is four engineering officers, including the chief, and one -- or I'm sorry, two unlicensed in the engine department. That total crew is now available for day work, for maintenance work.

Q. What about --

A. So they have a much greater number of man-hours available for maintenance than they would under a circumstance in which many of them were standing watches.

Q. What about the deck department? I know that you can reduce the engine room pretty well with automation, but has there been any increase in overtime for deck department people?

A. Not to my knowledge except maybe you get creep from year to year, but nothing significant.

Q. Now, the manning levels, that is, only includes the deck and engine department? It doesn't

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

include steward department?

A. That's right. That's right. We have -- one of the reasons we went from 21 to 20 initially on the VALDEZ and sister ships was because we reduced the stewards department from three to two. We eliminated a utility position that was responsible for cleaning galley and things like that. We combined that with one of the other two positions in the stewards department.

Q. I understand your mates are considered part of management. So that would eliminate some overtime for them.

A. Yes.

Q. Are they compensated in any way?

A. Yes. We had a study, and I think the base year was either 1981 or 1982, I don't recall, but in that base year we studied all of the overtime records for each officer grade, for all of the officers within those grades, and we came out with an average number of overtime hours that they worked. In fact, we increased it slightly above average, and then we added the income that they would have earned through overtime pay, we added that to base pay, and that's continued to be their base, and we did that, I think that was 1982 or '83. I don't recall.

Q. Why did you do that? Was there any --

A. It was part -- actually the first step goes

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

all the way back to 1973 when we made or declared the masters as part of management and then moved a couple years later to put the masters on a merit salary pay basis, and it was part of an overall move to broaden the responsibilities and the skills of all of our officers, to increase their management skills, their leadership skills, and basically to -- all these people are employees and all of them were supervisors. It was basically to put them more on a total supervisory footing.

Q. Is a copy of that study available?

A. I don't have it but -- and I don't know what form it's in but I think we can certainly provide it.

Q. Thank you. I'd appreciate it.

All right. Do you hold, does the Exxon company hold regular meetings with their captains and engineers?

A. Yes. Usually each year we have a series of what we call senior officer conferences, and most of the these series we take in masters, chief engineers, chief mates and first assistants, and we do it in groups of about 35 to 40. So in a series of meetings, we usually have five one-week meetings, conferences. During those five, during those one-week meetings we go through a whole range of subjects. Sort of each year the subjects change.

Q. Is crew size ever discussed during those

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

meetings?

A. The last series of conferences in 1988 we did discuss crew size.

Q. Did any of that consider fatigue or areas of competition costs between, say, your company and another company? Is there any comparisons made?

A. As far as fatigue, part of the discussion was work load, and what we were seeking in this conference was the views of all of the senior officers, and we're now talking about, I guess we're talking about 180 that attended these five sessions, and we were seeking their views as to work load, how work requirements could be changed, where the heavy work loads existed in different trades, how those work loads might be better handled through more automation, through changes in equipment. Basically seeking their input into the process, and I guess it was the better part of one day in each of those one-week meetings.

Q. Do you keep any records of those meetings?

A. I believe that session we did keep a running record. In fact, what we did, as I recall, is we took the results from the first officer group that went through and we then used that as a starting point for the next officer group and kind of build on that. So in effect, by the time we got to the end of it we had kind of a, what I

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

would say, a consensus position of 180 people, what made sense and what their ideas were and what they thought was possible or not possible.

Q. Is there any chance of getting a copy of that one also?

A. I think so if we can still find one.

Q. Since --

A. Let me say this. If we can still find it, you can have a copy.

Q. Okay. This area up in Prince William Sound where the EXXON VALDEZ operated is environmentally sensitive, as we've all found out recently. Is there any concern about changing manning levels to provide more people to do the different jobs leaving and entering the port?

A. Any changes in manning level that we made would be only after we were absolutely convinced we were not jeopardizing safety, and it would be part of a change in either work requirements or automation that replaced work requirements. None of, none of these changes that we've made or contemplated impact deck offices, by the way. We've had a standard of a master and three mates on our crude oil tankers for perhaps 20 years.

Q. Different subject now. Can you provide a general description of the criterion used for Exxon

management to evaluate their mates and chief mates and masters?

A. Yes. We generally look at five categories, and these categories are clearly defined when we go through our ranking and processes. The five include, and they're not in any particular order, but they include technical and professional skills, management skills, people skills, or leadership skills you might call them, judgment and support of company policies.

Q. Now, to get to Captain Hazelwood. When did he become a master aboard Exxon ships?

A. He was a master before I came with the company. I believe it was about 1979, 1980 perhaps. I'm not sure.

Q. And what type of screening process do you use to select your masters?

A. It's usually a -- or I would say it's almost always a consensus judgment of the different fleet managers. I would say probably the process even most recently has included a number of fleet captains themselves because what you're really doing is grading chief mates. So the masters get very heavily involved. They are the direct supervisors. Their input I would say is really the primary input into the process. It's then reviewed by, by the first line supervisors, which are ship

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

group coordinators, and then the fleet, fleet managers.

Q. About how many fleet managers do you have?

A. We have two fleet managers currently, and there are two other people who could get involved in that process, one is the human resources manager, and the other is called the fleet services manager. They would get involved because they would also have direct knowledge of the people involved.

Q. And do these people get together and make recommendations to you? Are you the final authority on that?

A. For masters and chief engineers, yes. For lower ranks I don't get involved, but for masters and chief engineers, they will make a judgment and provide it to me for review. If I have any direct knowledge of the individuals that might change that judgment, I usually bring it up and discuss it. That's usually not the case. I usually spend my effort in making sure that the process was correct, that we did get a lot of input, that we did consider all factors. So I usually concentrate my attention on making sure the process was gone through and that all of the factors were considered.

Q. Do you have a similar program, evaluation program for your unlicensed people?

A. I believe that's primarily driven by

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

seniority. It's not a process anything like the officer process.

Q. Would you ever or any of your ship masters develop, say, an AB to try to get him to a mate position?

A. I believe there are a number of occasions where they might have encouraged unlicensed people to strive for license. We throughout the fleet strive to get all of our people, licensed officers to move to a higher level of license, and I would say there are a lot of officers sailing in the fleet who have higher Coast Guard licenses than they are currently using in their position.

On the VALDEZ, for instance, we had two licensed masters, we had two licensed chief engineers. We also have a number of unlicensed people in the fleet who do have third mate's licenses. On the VALDEZ we had, three of the unlicensed deck people on the VALDEZ had third mate's licenses. In fact, I think in total on the VALDEZ we had 12 licensed officers. And it's not untypical of the rest of the fleet.

Q. Is that comparable to other US fleets? Do you know?

A. I don't know. I couldn't make a judgment.

Q. Those five factors you gave for evaluating people, your mates, is there any other ones used for selecting the masters?

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

A. No. I would say those are the five general categories that we rate people on. I can't think of any others, no.

Q. Are you aware of any studies of fatigue and crew qualifications? Are there any in progress with your company?

A. Yes. There is a Coast Guard-sponsored marine research board or it's part of the -- it's the Marine Board, part of the National Research Council, which is part of the National Academy of Sciences. They are currently conducting a study on the impacts or the relationships between crew size and safety.

Q. Is Exxon involved in that study in any way?

A. Yes. I'm a member of that group. There are about 12, as I recall, members in the study group, and it's comprised of representatives from three or four companies, two or three national unions, and three or four academics in different phases of the subject.

Q. Switch again to another subject. Can you describe the TAPS trade, TAPS agreements and Exxon's involvement with it, how it started?

A. I really don't have any knowledge. I know it goes back to the early '70s. There is I think seven partners or seven shareholders in Alyeska. Exxon is one of those seven. We're a minority shareholder. Actually

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

it's Exxon Pipeline Company that owns the shares. But beyond that I have no knowledge.

Q. Do you know if the oil is distributed that comes from the North Slope by the shares or does it make any difference as long as you're a member of those seven or eight companies?

A. I don't know how the percentages are worked out or what the ownership of the different reservoirs are. I don't know that.

Q. Does Exxon have a shoreside contingency plan for responding to oil spills on the vessels?

A. Yes. We have a very large oil spill response plan. There are--I counted them before I came here--28 volumes in the oil spill response plan, and they are divided into three major categories. One is organization, the second is resources and logistics, and the third one is, the third broad category is cleanup methods. I can go further and describe it if you'd like.

Q. No, that's quite all right. How effective have you found those plans? A lot of times a lot of things written and people don't read them.

A. Well, I fortunately did not have to exercise any of those plans in the seven years that I was in the shipping company until March of 1989, and I had two opportunities, if you'd call it that, in March of '89.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

The first one involved the grounding of the vessel EXXON HOUSTON just off the coast of Oahu. The vessel was at a single point mooring owned by another company and the mooring chain holding the vessel to the mooring parted, and before the vessel was able to recover she grounded. We lost about 200 barrels of fuel oil and the terminal lost about 600 barrels of cargo out of the hose. The hoses parted when the vessel left the mooring.

We initiated our response plan. It worked very, very effectively. I'm told that, I believe his name is Captain Larraby in the Coast Guard has testified that he would hold out the response on the EXXON HOUSTON grounding as a model oil spill response.

It was just two weeks later when we had the same -- well, when we had to exercise the same team for the EXXON VALDEZ.

Q. Okay. I'll get to that in a moment.

A. So those were two opportunities, if you'd call it that, in one month. And we went back 20 years in our history. We got tired after going back 20 years, but we could not find anytime when any Exxon Shipping Company vessel had triggered an oil spill response or had caused an oil spill that would have caused a response.

Q. Does your company have any agreements with the Alyeska terminal in Valdez for responding to spills

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

from your vessels?

A. No. I think we have an understanding with them that they're the initial responder, but I don't think we have any formal agreements as such. We've traded letters. Very recent letter, maybe six months ago, they asked us to clarify under which circumstances would we exercise our oil spill response team to take control, and I think we told them that in spills roughly over 250 barrels or any spills that they felt were out of their control we would certainly exercise our response team.

Q. Okay. Now, for the evening of the 23rd and the early morning hours of the 24th. Can you describe the events which you supervised after you were notified of the grounding?

A. Yes. I got the call 4:25 in the morning Houston time. That would be 1:25 in the morning Valdez time. I got the call from Darrell Warner, who is head of Exxon Pipeline Company. He in turn had gotten a call from George Nelson, head of Alyeska. I immediately called my boss to let him know what was going on. I then called Harvey Borgen, who was our West Coast fleet manager, and told him to get in touch with the vessel and also to start mobilizing our West Coast response team, which is kind of the first level of response.

I then called -- and this was an office

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

holiday so I had to start calling people into the office to exercise and mobilize our own response center in Houston. We did that, and we got people mobilizing the headquarters response team, which is kind of the second level of response.

By that time I had traded calls with George Nelson a couple times, and it was clear that this was a big spill. So we went immediately into the third response level, which is a total Exxonwide response team. It's called the interfunctional response team. And all of this had been done by 7:30 in the morning Houston time or, say, three hours, 4:30 Alaska time. We had already gotten to the third level of mobilization.

And at that point, we were moving just as fast as we could to do two things, one was to mobilize all of the equipment that was readily available. Our first source of equipment was the, I believe Clean Bay stockpile in San Francisco. We asked them to send three skimmers and whatever boom they had available and a whole list of other equipment. We also -- we did that at -- 3:50 in the morning Alaska time is when we mobilized Clean Bay.

We mobilized the oil spill response stockpile in South Hampton, England, of which we are a member. We did that at 4:10 in the morning Alyeska time, and we told them to bring four skimmers and a whole list of other

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

equipment, communications equipment and different process.

At the same time we also mobilized a dispersant spray aircraft, which is on retainer to the group we belong to. That plane was in Florida. We gave it instructions to go to Phoenix and pick up the dispersant spray package. It's called an ADDS package, A-D-D-S. And then to fly from Phoenix to Anchorage. We also mobilized and set up a dispersant supply system moving dispersant from different points in the U.S., Houston and I believe a couple West Coast stockpiles, to begin to move dispersant to Alaska.

At the same time this was going on on an equipment basis, we began to mobilize people, two groups of people, Exxon employees who were part of the interfunctional response team and also experts from the U.S., the UK and Canada who were on retainer to us or known to us as experts in different fields. That is part of our response team.

We brought Jim O'Brien from -- contacted him. He's out of New Orleans. He's the gentleman who eventually took charge of the Cook Inlet spill a few months ago. He was just on his way back from Antarctica where he had been asked to go as an advisor of that spill. We took Brent Pyburn out of the UK, who is a leading expert there. And these are oil spill cleanup experts,

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

skimming experts. And we also took Jim Rivera out of San Francisco, and each of them brought four or five, three or four or five members of their teams with them.

We also notified Riedel, which is a big environmental organization in the Northwest. They sent a team of experts.

We -- once we got all that mobilized, we then, myself and five people that I picked, took a company plane from Houston to Valdez direct, and we arrived at 5:37 Friday afternoon. There were two groups of people there ahead of us. There were three people who had flown in from the West Coast, Harvey Borgen, Bill Deppe and Paul Myers, and there were three people who had come in from Exxon's offices in Alaska. So that evening we had 12 people in Valdez.

We had another 20 people that evening in Anchorage but they missed the last plane out for Valdez, and you may know you can only get in and out of Valdez in daylight hours. So we had that evening 12 people in Valdez, another 20 that were waiting for daybreak in Anchorage, and we continued thereafter to stream people in.

The Clean Bay equipment arrived in Anchorage that Friday evening, and I believe all the equipment from the South Hampton stockpile arrived the following day.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. So what equipment did you actually have on scene for cleanup by the end of that first day?

A. We had the, let me see, the spray -- the first dispersant plane arrived 6:00 Saturday morning. So it was in the area. What do you want? To take midnight Friday as a point in time?

Q. Right.

A. Midnight Friday we had the Alyeska equipment, the equipment they had on hand, we had the Clean Bay equipment in Anchorage being deployed to Valdez, and I don't know whether it came in by plane or by truck. I think the skimmers have to go by truck. And one of the things we did, the first thing we did when we got here was to begin to set up a trucking system from Anchorage to Valdez and then to set up a feeder airline from Anchorage to Valdez because all this equipment was coming worldwide in Anchorage and we had to get it down to Valdez.

Q. I think all the skimmers probably went overland, although I'm not sure of that. That's a seven-to-ten-hour truck ride, I think. A lot of the smaller equipment kept coming in by, by the, I think it was Northern Air was our primary contractor for setting up equipment.

The UK, probably midnight Friday, I imagine the UK equipment was either in the air or was being

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

mobilized to load in London.

Q. Did you have any consultations with the Coast Guard or the state DEC for getting equipment or procedures?

A. I think we were pretty much blowing and going on our own at that point. We were mobilizing all the equipment and setting up logistics because we realized -- once we understood the magnitude of the spill, we realized we had to get ahold of all the equipment in the world we could. We went all the way to the Black Sea of Russia to get a large boom. We bought boom or sea barriers from Russia, from Finland, from Norway, from Denmark, from France, the UK. And we were pretty much on our own as far as mobilizing all of that.

In the later stages the Coast Guard helped us with the military aircraft. In the early stages we were chartering our own military aircraft. We needed the C141s and the C5As to move the heavy stuff, and we were doing that on our own for the first week and then the Coast Guard took over that liaison with the DOD.

The mobilization was massive, and I've heard Admiral Yost in testimony saying that the federal government, he was asked could the federal government have done the same thing that Exxon did, and his answer was no way. He said that none of the federal government

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

agencies, including the Department of Defense or the U.S. Coast Guard, could have carried out the mobilization that Exxon did.

Q. What were the big problems of getting equipment to Valdez?

A. Well, primarily, you know, you're operating out at the far edge of the world, and once you get it to Anchorage you're still not there because you have to bring it overland or you have to bring it by feeder airline. Then you have to move it -- we were deploying just about everything out of the terminal, Alyeska terminal.

Once we got it to the terminal, then we had to move it to the site, and initially that was 25 miles away but after day three we were talking 80 to 100 miles away over water. So I think it was probably one of the most arduous tests of a logistic system, or I say logistic system, you've got to recognize we started from zero and we did not have a logistic system in place. We had to mobilize that as we went.

Q. About how much money had you obligated by that first day? Any idea?

A. I don't know. It was well into the millions. Somebody told me just the aircraft we were mobilizing were costing us three or four hundred thousand dollars a flight.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

So we -- I really had no limits. I had full authority to do anything and everything I had to do to mobilize. There were no limits to my authority obviously. I had to look forward to sometime when I would have to clearly show that it all made sense, because we weren't throwing money around, but that was something to be done much later. I still haven't gotten to that day yet. But there were no bounds. I had a total open authority to do whatever I had to do to get the equipment here.

Q. All right. This may be beyond the scope but do you have any idea right now how much you've obligated for Exxon?

A. I understand as of last week or early last week, I think it was $92 million. As of Monday of last week or something like that. That's just a figure I've heard. That's in cleanup.

Q. Right. What is Exxon's legal limit of financial liability for a spill?

A. Gee, I don't know. It's really a complex subject, from what I understand.

DR. DICKINSON: Excuse me, Mr. Katcharian. Mr. Iarossi, can you move the mike back a little bit here.

THE WITNESS: Okay.

DR. DICKINSON: We've got a lot of popping.

THE WITNESS: Okay.

DR. DICKINSON: Try that.

THE WITNESS: That better?

DR. DICKINSON: Go ahead, Leon.

BY MR. KATCHARIAN:

Q. You had a lot of problems with logistics or getting gear here.

A. I wouldn't say -- if I can, I wouldn't say we had problems. I would say we had a lot of challenges, but I think we did everything we could to handle those challenges, and I think in retrospect that was really a outstanding effort on a lot of people's parts.

Q. This has been a very difficult time for people in the Prince William Sound. Is there anything that has gone good for you in this response operation?

A. We had three challenges when we arrived in Valdez Friday night. We had the 240,000 barrels of oil on the water, or I think the final figure is 258,000 barrels of oil on the water, we had another one million barrels in the damaged ship, and the assessment, I received the first technical assessment of the condition of the vessel when I arrived, and that came from our technical office in New Jersey, and their evaluation was that if the ship slipped off that reef it was likely to capsize. So, of course, that greatly increased our anxiety.

We had a million barrels in the ship. At

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

this point we had 30 or 40 people on the ship. That was our second challenge. And then, of course, we knew even when we got the oil off we had the third challenge, which was how to get the ship off the reef, because it was still going to have 600,000 barrels of oily water on it. So we had those three major challenges.

I understand that -- you know, it's hard to rate myself. I understand that Secretary Skinner of the Department of Transportation was asked to rate our mobilization, and he said he'd give it an A to A plus. So mobilization was a clear plus.

We got the million barrels off the ship without spilling a drop of it. So I would say that that was a clear plus. It took a lot of heroics on a lot of people's parts. You've talked to most of our crew over the past couple days, and I have to tell you they did an absolutely miraculous job under very, very difficult circumstances, but they stuck with it. They along with a few others were I think the real heroes in getting that million barrels off.

As far as the third challenge, getting the ship off the reef, I would say we probably, if we don't rate 100 it's probably 99 as far as doing that. The one clear thing we were not able to do, and I'm not sure there was a power on earth that could do it, but that was

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

recover the 240,000 barrels that had already spilled.

Q. When did Exxon officially takeover the response to the spill?

A. It happened in phases. When we got here Friday night two of my people, Harvey Borgen and Craig Rassinier, began working with Alyeska. At that point, Friday night, we took over the first couple phases of the response. We took over lightering, we took over dispersant approvals, we took over salvage studies, and we took over community involvement and press involvement. Then during the course of the next day we took over all, just about all of the other activities.

Craig and Harvey had a overflight with the Alyeska people first light Saturday morning. By 12:00 we had our operation center manned, we had all the telephones we needed at the time and we began to take on different parts of the oil spill response activity; and by evening we had taken over full decision making and control of the response except for certain activities that Alyeska was very much involved with. They continued their cperation center. This was deploying boats and things like that. At that point they were, they were acting as part of our response activity, and they continued to act in those particular areas where they had total control of it.

Q. All right. I just want to wrap up a few

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

questions. Do you have any perception of the Coast Guard VTS operation?

A. Just what I've heard in the past couple weeks.

Q. Have you ever given any orders or directives to the vessels leaving or entering Valdez to slow down for ice or wait for daylight operation?

A. Not to my knowledge. I don't know of any.

Q. Get back to --

A. That decision making always rests in the hands of the master.

Q. Okay. Get back to Captain Hazelwood. Do you know why he was assigned to the VALDEZ?

A. No. That was part of an activity -- I think there was a general -- let me see. As I recall, it was associated with the movement of a vessel he had been on from the Gulf Coast to the West Coast, and at that time the ship group coordinators made a decision on how to shuffle masters and what masters would best fit which trades.

Q. Are you aware of his relative rank with the other masters in Exxon?

A. I believe he's an average performer if you take it on an overall basis. He has some outstanding qualities and skills, as I understand it, professional and

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

technical skills. I don't have any direct knowledge of his performance.

Q. What about his -- how does he rate compared to his counterparts on the LONG BEACH?

A. I don't know.

MR. KATCHARIAN: That's all I have, Mr. Chairman.

DR. DICKINSON: Thank you. Dr. Birky.

DR. BIRKY: Yes. Could we give the witness Exhibit 5H and 5J, please.

DR. DICKINSON: Certainly.

THE WITNESS: Okay.

EXAMINATION

BY DR. BIRKY:

Q. I understand, Mr. Iarossi, that, as you know, these are the Exxon Shipping drug policies that I think you had some hand in, I believe.

A. Yes.

Q. At least I see a signature of yours in that document. Can you tell us when this policy went into effect and the circumstances that brought this policy?

A. The policy on alcoholism I think goes all the way back to 1977. This is I think a major update that took place in '86 or '87. I'm not sure. There have been different upgradings and variations of the policy.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Is there any particular circumstance that brought this about?

A. I think the original policy back in '77 was alcohol related, and this policy was in response to concerns about drug abuse as well as alcohol. So the policy was expanded and modified in certain areas.

Q. Could you just very briefly summarize what this policy is in terms of addressing the problem of alcohol abuse and drugs?

A. Well, starting from, and this goes way, way back, an absolute prohibition on possession or use of alcohol, and now it's alcohol and illegal drugs, on board any company facility, including our tugs and barges and tankers, and also an absolute prohibition on anyone being unfit for duty at any time because of, or because of the use of, misuse of alcohol or illegal drugs. That's one facet of the policy, and clearly the penalty for violating that policy through the years has gotten tougher and tougher and now it's an outright termination. It has been that way for a number of years.

The second part of this was a alcohol/drug rehabilitation program that was really in two parts. The rehabilitation program was aimed at trying to get people to recognize their problems and undergo, agree to undergo on a voluntary basis rehabilitation.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. Does Exxon have a training program in which this policy is part of that curriculum?

A. I believe we've handled it at different times through the fleet officers conferences that I spoke of. We also have had a number of letters to employees, one in August of '85, another in March of '87 and another in September of '88 going directly to each employee, explaining the different parts of the program, what sort of help was available to him or her and also explaining again what the policy was and what the penalty would be for violations of it.

Q. On page 1 of that document it refers to unannounced searches on vessels. Has Exxon ever done such a search? And if so, by whom, under what circumstances?

A. Our -- we initiated a very aggressive drug and alcohol search program in 1982. In the past six and a half years, we've had 30 of our ocean tankers go through a very rigorous drug and alcohol search. We use contract inspectors and trained dogs in the search. They have total access to the full vessel, also to the employees.

At times we've used customs agents rather than contract people, particularly if the vessel had left Panama in the, in the Valdez trade. Prior to early this year some of our vessels would go down to Panama and then other vessels would pick up oil on the gulf side of Panama

and move it into our U.S. refineries. So we had a number of ships transiting in and out of Panama. So for those vessels we would usually ask the Customs Service if they had agents available to carry out search. If they did not, then we'd go to contract inspectors and trained dogs. If we were, had a search on a vessel which was not in the Panama trade, then we would go directly to contract agencies and their trained dogs.

So in six and a half years, we've had 30 searches, and I guess that's about five of these searches a year on average, and that represents about 25 to 30 percent of our operating vessels in any given year, which is why I say it was an aggressive program, is an aggressive program.

Q. Have you ever dismissed an individual on your vessels, licensed or otherwise, because of the use of alcohol or drugs or finding of alcohol or drugs on board the vessels?

A. Yes. In the past five years we have had 55 disciplinary cases as a result of violations of the drug and alcohol policy. Thirty-four of those 55 cases resulted in terminations, the employee was fired. Five of those 34 cases was challenged by our, or were challenged by our unlicensed union. We went to arbitration, and in those five cases the arbitrators ruled -- or overruled the

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

company. The position that the arbitrators took in those cases was that the company's termination policy was too severe, and we had to rehire those employees. That was five of the 34.

Q. On page 2 of Exhibit 5I, on paragraph 1, item numbered one there. Who is to do the searches of the vessels for alcohol and/or drugs?

A. Five I is the sea carrier initiative?

Q. Yes.

A. In that case where the masters make the searches and these, the sea carrier initiative covers vessels coming from a foreign port to the U.S., and in that case the master is required to make a search prior to the vessel's departure or to initiate a search and then also once during the voyage.

Q. So this would not apply to a vessel like the VALDEZ leaving Alaska and going to a port still in the United States?

A. I don't believe so. The sea carrier initiative is an agreement with the U.S. Customs Service, and I believe it implies, it impacts those vessels on foreign voyage, foreign port to U.S.

Q. So how would a vessel like the EXXON VALDEZ, how would you implement that drug and alcohol policy?

A. We would -- at different intervals through

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

the year the fleet manager would or, either I would initiate it or the fleet manager would initiate a search of a vessel or I would ask him to pick one of his vessels either coming up from Panama or coming out from Valdez. We usually kept that designation very, very confidential and the only people who knew about an intended search would be myself, the fleet manager and the responsible ship group coordinator.

Q. Who was that?

A. Who would then --

Q. Excuse me.

A. Who would then --

Q. I'm sorry. Go ahead.

A. Who would then contract, or contact the agency which would carry out the search. This is a full search using dogs and trained inspectors. The master at any time has the right, or masters have the right to search for cause if they believe there is any reason to do that.

Q. Was this ever done in a vessel in the last two years?

A. Search for cause?

Q. No. A search, unannounced search generated from outside the vessel master authority.

A. Oh, yeah. The 30 searches over the past six

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

and a half years, they were all generated from shoreside.

Q. When did you, Exxon Shipping Corporation, know about Captain Hazelwood's chemical dependency problem?

A. I believe our first knowledge of it was in May of '85 after he had completed the program. It was a unique situation.

Q. Excuse me.

A. Normally --

Q. May I interrupt you for just a minute? When you say completed a program, I'm not sure what you're referring to.

A. I believe he had already been through the intern phase of the rehabilitation in May of '85.

Q. Was that through your EAP program?

A. I don't -- the EAP program which is currently in place, I don't believe was in place in 1985. I think this is a more recent version.

Q. How did you become aware of that after he got out?

A. We learned through, I think it was just by chance, one of -- I believe the administrative manager had been trying to get ahold of Captain Hazelwood, as I remember it, and had learned that he was in a hospital in New York, Long Island, I believe it was, and tracing it

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

down came across this situation.

Q. Had no one else reported it to upper management that there was a problem?

A. That's the first I heard of it, when the administrative manager told me about it.

Q. Is there -- I'll ask the question again. Had that been reported prior to his going into a rehabilitation program to upper management?

A. Not to my knowledge. Normally that program is totally confidential and we wouldn't even hear anything about it.

Q. That program being the one Captain Hazelwood selected?

A. The EAP program is, that we currently have is totally confidential.

Q. I understand that. That was nonexistent, was it not, at the time in '85 when Captain Hazelwood apparently checked himself into a rehab program?

A. There was a policy at that time. I think that policy also guaranteed confidentiality.

Q. That was an Exxon policy?

A. That was the Exxon policy going back to 1977, yes. I think any records that came out of voluntary rehabilitation were confidential.

Q. What happened at Exxon when this information

came to your knowledge in, I believe you said in March of '85?

A. May of '85.

Q. May of '85.

A. It was either late May or early June of 1985. Well, I asked for the circumstances and found that he had gone through a, I believe it was a six-week program, and recommendation after the program was that he go on a 90-day leave of absence, which at the time of this discussion he was on. We went through the policy to determine exact -- this was the first time I had run into it. To understand the policy, to understand the provisions of the policy.

I was advised clearly of what the policy was and that it was a policy which encouraged -- first of all, it recognized alcoholism as a treatable illness. It encouraged people to recognize and acknowledge their problem if they had one and to seek voluntary help, and it guaranteed the individual that his or her job security or future opportunities would not in any way be jeopardized as the result of seeking voluntary help. The words are very specific.

Q. Was the 90-day period granted, leave of absence granted to Captain Hazelwood?

A. Yes. It had already been when I learned of

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

the situation.

Q. What followed that?

A. When he returned -- well, the result of the discussions that we had at the time I learned about it was that we needed to make sure we set up a monitoring system for his return so that we could in fact closely scrutinize his activities, and we did in fact set that up using the fleet manager and the ship group coordinator as the two key people who would interface routinely with Captain Hazelwood.

Q. Who were those two people?

A. Initially it was Dwight Koops, who at the time was his fleet manager, and Bill Sheehy, who was the ship group coordinator. They visited Hazelwood at about, I think they averaged two week intervals, whenever he was on duty.

Q. And was Captain Hazelwood -- when you learned of the, his dependency and treatment program, was he called to Houston for a conference?

A. I don't know that. The administrative manager made contact with him. I did not call him to come to Houston.

Q. Do you, Exxon, have records of this program that was set up to monitor him?

A. I don't know.

Q. If those exist, could they be provided to us?

A. Yes. We'll check.

Q. Now, in this program, how long did this supervision or close supervision go on in terms of monitoring Captain Hazelwood?

A. Right up to his last voyage before the incident.

Q. And that program did not detect his use of alcohol?

A. No.

Q. Why do you think that was?

A. I couldn't respond. I had three opportunities myself to see Captain Hazelwood during the fleet managers conferences, which I think one was December of '86, one was April of '87, and the last one was March of '88. At the March '88 conference, his fleet manager, who had then become Harvey Borgen, the human resources manager, Dan Paul, and myself had a nonpurpose meeting to discuss our observations of Captain Hazelwood.

Q. When was this?

A. This was March of '88.

A. And it was the last opportunity I had to directly partake in discussions of his situation.

Q. During this monitoring of Captain Hazelwood, was knowledge accumulated as to what type of support group

he was getting in terms of controlling the use of alcohol, such as attending A.A. conferences, meetings and so on?

A. To my knowledge, part of his rehabilitation was to attend A.A. meetings when he was at home.

Q. Do you actually know that that happened?

A. I don't know what the frequency was.

Q. Did you at any time have a complaint or a statement made that Captain Hazelwood was indeed using alcohol --

A. Absolutely not.

Q. -- at any time? Have you -- has -- have there been any charges or disciplinary action taken against individuals who served under Captain Hazelwood who may have reported such?

A. None to my knowledge, absolutely, no.

Q. Would you know if there were?

A. I certainly believe it would have been called to my attention.

Q. Did Exxon pay for any of the counseling that Captain Hazelwood may have gotten for a dependency or other problem?

A. I believe we did. Exxon did pay through the disability benefits program for the rehabilitation.

Q. Looking back over that program, that monitoring program that Exxon set up for Captain

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Hazelwood, would you suggest that there was some flaws in there or would you do it differently today?

A. Well, the contact we had with him was while he was on duty. So that meant that we got, the opportunity we had to view him was about six months of each year, and those contacts were made while he was in port. So the opportunities we had, and to my knowledge we took advantage of all those opportunities, we were probably talking about maybe 12 times a year. I would say twice a month for the six months that he was on duty.

Q. I'm sorry. Maybe you can clarify it for me. You're saying that twice a year you made contact?

A. No, twice a month.

Q. Twice a month. Okay.

A. Which was just about his in-port rotation. In other words, we had opportunities to visit the ship twice a month for the six months that he would have been on duty each year.

Q. And that would include twice a month in the past month, two months before the grounding?

A. Yes.

Q. And did anybody go to, for example, Valdez and see Captain Hazelwood and his behavior and so on when he was not on the vessel?

A. No.

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

Q. So you would not know whether he was using alcohol if he was not on the vessel; is that correct?

A. The contacts we did make with him when he was sailing on the West Coast I think were primarily in his discharge ports of San Francisco and L.A. That accounts for the two-week type interval I was talking about.

Q. All right. Do you know if there is any documentation of these reviews and so on as to his capabilities and so on at this time?

A. I don't know. It's probably in his annual performance reviews, but I don't know that either.

Q. Was his vessel and his quarters ever searched for alcohol unknown to him?

A. No.

Q. Is that not part of your policy?

A. Other than these unannounced dog searches, we would only search for cause if we have some reason to believe there was a violation.

Q. Do you know of -- well, maybe I should ask a more general question. Are you acquainted with rehabilitation programs?

A. Not really.

Q. Do you know how long Captain Hazelwood was in a rehabilitation program?

A. I believe it was six weeks he was an

inpatient and then the 90 days following that when he was off duty.

DR. BIRKY: I have no further questions, Mr. Chairman.

DR. DICKINSON: Thank you, Dr. Birky.

I have 12:45. I think it's a good opportunity to break for lunch. We'll be back at two p.m.

(Luncheon recess.)

COMPUTER-AIDED TRANSCRIPTION BY XSCRIBE

REPORTER'S CERTIFICATE

I, DIANE M. PREECE, Registered Professional Reporter, hereby certify:

That I am a Registered Professional Reporter for Alaska Stenotype Reporters and Notary Public for the State of Alaska; that the foregoing proceedings were taken by me in Stenotype Shorthand and thereafter transcribed by me; that the transcript constitutes a full, true and correct record of said proceedings taken on the date and time indicated therein.

Further, that I am a disinterested person to said action.

IN WITNESS WHEREOF, I have hereunto subscribed my hand and affixed my official seal this 31st day of May, 1990.

Diane M. Preece

DIANE M. PREECE
Registered Professional Reporter

My Commission Expires 6.6.90

NATIONAL TRANSPORTATION SAFETY BOARD

In re,

The Matter of the Investigation of the Accident Involving the Grounding of the EXXON VALDEZ, March 24, 1989

/

OFFICIAL TRANSCRIPT OF PROCEEDINGS

Volume III - Afternoon Session

Thursday, May 18, 1989, 2:05 P.M.

Anchorage, Alaska

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

NATIONAL TRANSPORTATION SAFETY BOARD

In re

The Matter of the Investigation of the Accident Involving the Grounding of the EXXON VALDEZ, March 24, 1989

OFFICIAL TRANSCRIPT OF PROCEEDING,

taken on behalf of The National Transportation Safety Board, at the Hotel Captain Cook, Discovery Room, Fifth & K Streets, Anchorage, Alaska, reported by Deborah D. Parker, Shorthand Reporter for Executive Reporters, Official Reporters for the National Transportation Safety Board.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

NTSB518A

A P P E A R A N C E S

Board of Inquiry:	Lou Colucciello Lee Dickinson Terry Armentrout Jim Danaher
Technical Panel:	William Woody Leon Katcharian Richard Johnson Merritt Birky Eric Sager Ronald Battocchi
For State of Alaska:	Robert LeResche
For U.S. Coast Guard:	Cmdr. Darryle M. Waldron
For Alyeska Pipeline Service Company:	William Howitt Lawrence D. Shier
For Exxon Shipping Company:	Captain William Deppe
Reported By:	Deborah D. Parker

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

VOL. 3 5-18-89 (M)

I N D E X

WITNESS	EXAMINATION	Page
FRANK IAROSSI:	Dr. Birky	934
	Cmdr. Waldron	945
	Dr. LeResche	948
	Mr. Colucciello	997
	Mr. Armentrout	1001
	Mr. Danaher	1005
	Dr. Dickinson	1009
FRANK FLYNTZ	Mr. Colucciello	1014, 1064
	Mr. Woody	1015
	Mr. Sager	1028
	Dr. Birky	1054
	Captain Deppe	1062
WILLIAM DEPPE	Mr. Colucciello	1067, 1104
	Mr. Woody	1068
	Dr. Birky	1088
	Cmdr. Waldron	1095
	Dr. LeResche	1100
	Mr. Danaher	1106
	Dr. Dickinson	1111
DENNIS KELSO	Mr. Colucciello	1115
	Mr. Katcharian	1116
	Captain Deppe	1137
	Mr. Howitt	1149
	Dr. LeResche	1168

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

ANCHORAGE, ALASKA, MAY 18, 1989, 2:05 PM.

DR. DICKINSON: Thank you, Mr. Iarossi. You're back on the witness stand.

Dr. Birky, do you have any further questions for Mr. Iarossi?

DR. BIRKY: Yes, sir, I would like to ask a few questions, if I may. Could we give Exhibit 5B to Mr. Iarossi, please?

I don't believe those pages are numbered, so you may have to bear with me, here, on directing questions.

CONTINUED EXAMINATION

BY DR. BIRKY:

Q. If you would look at the 5B exhibit, that has '82 to '83 at the upper right-hand corner, do you have that in front of you?

A. Yes.

Q. In terms of that evaluation, if you could turn to the next to the last page on that, if you would.

A. Of the entire package?

Q. No. Of just that section, '82 to '83. I think there is about seven pages there,

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

are there? It's actually the fifth page of that '82-'83--

A. Appraisal Development and Summary?

DR. DICKINSON: Dr. Birky?

DR. BIRKY: Yes.

DR. DICKINSON: I think there is a--under explanatory notes at the bottom of the page, there is a number. It starts with "E". Is that--can you give that number? Will that help to identify the correct page?

BY DR. BIRKY:

Q. Well, the one I'm looking, yeah, it may. Is E7200005152-3--

A. Yes.

Q. I assume that number is significant, but we won't go into that. What is meant on that Recommended Developmental Activities, Onboard Counsel, MGT II? What is the significance of that?

A. I don't know.

Q. And then there is a recommendation, I believe, that he be given shore assignment for six months. Is that under the developmental work experiences?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. That's what it says, yes.

Q. Was that actually done at that time? Do you know?

A. No.

Q. It was not done?

A. That's right.

Q. And, then, I notice the performance rating has a 3.0, the box with 3.0 marked with an arrow above, do you know the significance of that.

A. No, I do not.

Q. Looking, now, at the next set of documents which is the 6/1/83 to 6/1/84, and if you could turn to the fifth page of that?

A. Same appraisal and development summary?

Q. Yes. And the page number on that with those numbers we gave before, the last five digits is 5158-0?

A. Yes.

Q. Again, there is a statement there that says: "Shore assignment, needs a challenge." Do you know the significance of that and whether it was followed up on terms of a shore assignment?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. I do not.

Q. On the third page of that document which is 5156-4, would you read that comment at the bottom there?

A. I don't know whose comment it is. "Joe does not try to acheive the true potential his gifted intelligence warrants. Needs motivation."

Is that the one you mean?

Q. Yes, yes. Do you know if any action was taken based on that comment and how--

A. I don't know whose comment it was and I don't know what action was taken.

Q. Pardon me?

A. I don't whose comment it was or what action was taken.

Q. Would it make any difference whose comment that was? I assume it was his superior's evaluation of him, correct?

A. I would imagine so, yes. There is no signature on it, though, from what I can see.

Q. As I understood your testimony earlier is that you participated in decisions regarding the evaluation of masters; is that correct?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. I think we are talking about promotion to master.

Q. Okay. Promotion to master. Did you not--do you not follow up the development of those masters once they have been selected by you?

A. No. That's fleet operations manager and the human resources manager. We have about 1,300 employees.

Q. Once an individual becomes a master, do you participate in the decision as to what vessel he is assigned to?

A. No.

Q. So you would have--

A. That's made by the ship group coordinators with the review by the fleet operations manager.

Q. Is a sheet that was referred in here to your earlier testimony on the classification of Mr. Hazelwood familiar to you in terms of his rating among the other masters?

A. I believe he was an average performer.

Q. Have you looked at that page of the Exhibit 5B?

A. I believe I have the one, yes.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. How would you classify the desirability of being a master on the EXXON Valdez according to all the masters you have--vessels you have?

A. From their prospective?

Q. How would you classify it? Is it a nice job? Is it one of the worse jobs or one of the best jobs?

A. I think some of the masters would prefer to be on clean product ships. They find that much more challenging.

Q. Well, in the overall rating of those--the masters of various vessels, how would this one rate as far as you are concerned? In the upper half, lower half in terms of desirability?

A. I don't think the fact that it's the newest ship has any particular appeal for the masters in the fleet. We don't have any seriatim. If you get to be on this ship, you're top of the pile. There is no association with the good job is the biggest ship.

Q. Do you ever participate in discussions with those below you as to the assignment of individuals to various vessels?

A. Rarely. If there is some special

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

circumstance that comes to my attention, I might ask that.

Q. And what would be those circumstances that would bring it to your attention?

A. Oh, I think I watch very carefully the two chemical and speciality ships that we have operating on the Gulf/East Coast. They are probably the biggest challenge to a master because of the complexity of vessel and the fact that they move 20 or 22 different products at a time, so those ships always draw my particular attention.

Q. Would vessels that have the potential for causing a catastrophic disaster if something went wrong come to your attention?

A. Yes. And that would include just about every ship we operate. You know, 240,000 barrels that's a part load on even our smallest tanker operating in Valdez.

Q. Under those conditions you just outlined, would--did, at any time, the EXXON Valdez come to your attention in the assignment of a particular master to that vessel?

A. I think at the time Captain Hazelwood was selected for the Valdez, I asked for

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

reasoning for that. The answer I got is, that he was our most experienced master in terms of operating in and out of Valdez and that satisfied me.

Q. By the "most experienced master," can you explain that a little bit more?

A. As far as the length of time, number of voyages that he operated in and out of Valdez.

Q. And how long had he been doing that?

A. He was on one of the original vessels at the time that the Valdez Terminal operations began. And there were a number of years that he was operating out of Valdez. I don't know whether it was five or six or eight.

Q. So the fact that his overall rating was--according to this document, was in the order of 33%, I guess, that is, he was in the lower half of the ratings of the masters you have, did not concern you in terms of his ability to operate that vessel safely?

A. This is the seriatim of all of our masters. And they are placed in what we call a forced ranking from what is viewed by their

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

supervisors collectively as the best performer down to the least performer. Even the least performer is fully qualified. We are not talking about people who are not qualified from the standpoint of their license, their experience and their performance. In our company we have a force ranking process. We go through the discipline of saying, fine, we have got 38 masters, all of them fully qualified, but now we want to decide, based on the past year's performance who do we consider had the highest performance and on down. So, we go through that forced-ranking process. But because a person is average or at the one-third level or the one-quarter level, that in no way means he is unsatisfactory as far as we are concerned. It's a very, very tough group to compete in. They are all excellent, outstanding people.

Q. Do you have a process of procedure by which you try to enhance the capabilities of those at the lower end of the scale?

A. Yes, we do. And that's the whole performance appraisal process. There is two parts to this. There is the performance appraisal and we just talked about a couple of those sheets.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

And the purpose of the performance appraisal is to very directly and very openly define strengths and weaknesses for each individual. And then it's up to the supervisor to begin counseling, to begin activities which will enhance the strengths and try to improve the weaknesses. The first step of that is awareness, and that's why this sheet--let me say, awareness on the part of the person being reviewed that he at least is being perceived as having weaknesses. Those weaknesses are identified, the individual, the rater and the person being rated are encouraged to talk their perceptions over, because after all, we're dealing with perceptions not reality. So we have to talk over those perceptions, why the individual might think his performance is better than the supervisor thinks it is. So that's the whole first part. That is meant to identify areas where the individual can improve.

The ranking process, seriatim, which comes up with a list of names, 1 through 38 for a population of 38, that is more a process to determine how pay is allocated.

Q. I know that when you gave the selection factors, I think, for the manager

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

position, you listed, I think, four. However, I believe you stated there were five?

A. Five. One was--

Q. And one was technical professional skills, management skills was two; three was judgment and four was supporting the company policy. What was the fifth one?

A. Leadership skills. People skills or leadership skills. It was professional, technical, management, people or leadership judgment and company--support of company policies.

Q. Where would safety fall into those or aware of safety issues fall into those selection factors?

A. I would say it's, in part, professional, technical and, in part, management.

DR. BIRKY: I have no further questions at this time. Thank you.

DR. DICKINSON: Thank you, Dr. Birky. Mr. Howitt.

MR. HOWITT: Mr. Chairman, we have no questions at this time.

DR. DICKINSON: Thank you. Commander Waldron.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

EXAMINATION

BY CMDR. WALDRON:

Q. As someone that was in Valdez for the first two weeks, I can attest to the extraordinary effort that your company went to to get supplies and materials from all over the world.

A. Commander, we had a lot of help from a lot of people including all the Coast Guard organization. You know, in this whole effort, the only thing I can say is that we tried as best we could, associated with that 240,000 barrels. And we are just absolutely devastated as to what's gone on.

Q. I have a few questions. One, concerning the exhibit that we just talked about. I do not have any evaluations from 6/24 to 3/87. Are these evaluation available?

A. I don't know. We try to do it on an annual basis, but sometimes that doesn't occur.

Q. This just appears to be the rehabilitation period that Captain Hazelwood was going through?

A. I don't know who collected these

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

particular ones. There may be evaluations in his jacket for the other years. I don't know.

Q. But some of these also were signed and some are not signed. Is there any explanation for that?

A. No. They should be signed.

Q. Do you know if evaluations were made during the rehab period?

A. The--I don't know that.

Q. There was a--you spoke of a special meeting with Captain Hazelwood at the 1988 conference. Can you relate to me what was said?

A. Well, it was a meeting not with Captain Hazelwood but about Captain Hazelwood and it was called by his then fleet manager and he asked for an opportunity to speak with me and with the human resources manager and for us to compare our observations of Captain Hazelwood during that five-day session. And we all spoke up about what we had seen him do, how he was reacting, how he was interacting, what he was drinking and it was all iced tea and Perrier. And the fleet manager said that was consistent with everything they had seen up to that point. And that stage was three years after evaluation--rehabilitation. And I

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

just mentioned that we needed to keep the observations going on the schedule we had and that I wanted to know any time there was anything that appeared to be out of line. And that's--it was about a 10-minute meeting.

Q. We had a statement this morning from the chief engineer concerning Captain Hazelwood's drinking. We had a previous statement made after the casualty by the radio officer that also attested to drinking on this occasion and related to one other occasion on the vessel which may or may not have been involving alcohol. Is there any--

A. I sure wish they had of passed on that information. We wouldn't be here.

Q. Do you have any requirement or any methods for crew members to pass that type of information bypassing the management on the vessel?

A. I know in one of the meetings I had earlier than this '88 meeting, the fleet manager told me that he on purpose when he would visit Captain Hazelwood would also talk to other members of the crew and try to elicit from them if anything was really out of the ordinary going on

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

in particular to Captain Hazelwood. Other than that, we have no--no hotline number or anything like that.

CMDR WALDRON: Thank you. I have no further questions.

DR. DICKINSON: Dr. LeResche?

EXAMINATION

BY DR. LeRESCHE:

Q. Thank you, Mr. Chairman. Good afternoon, Mr. Iarossi.

A. Good afternoon.

Q. In--early on in your appearance here today you pointed out that when up took command, or became President of Exxon Shipping, there were about 1,000 employees in the ocean fleet--

A. That's right.

Q. --of the business?

A. That's right. Approximately.

Q. And now there are about 850 of those employees?

A. There were--do you want me to explain the difference? That's right. About 850 to 900.

Q. Is the ocean fleet smaller, now,

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

in terms of ships?

A. Yes. It was 19 ships and it's now down to 16 operational ships.

Q. And is the total tonnage reduced proportionately?

A. The tonnage is probably up slightly, we retired a number of old or smaller vessels.

Q. Was this reduction by 150 employees, 150 ocean fleet employees, was that financially successful? Did you save money because of this?

A. We had no jobs for them. And it was carried out strictly by normal attrition. We didn't lay anybody off, but we just didn't rehire as people retired or went on to other careers.

Q. To replace these 150 employees, how much annual compensation would that involve for your company?

A. I guess the average salary for our seagoing people, including benefits roll up is probably about maybe 45,000 for the unlicensed employee and something like 65,000 for the officer, average case.

Q. Several million dollars in total,

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

then?

A. We also don't have the use of the facilities, either. That went along with the people.

Q. I understand that. We--in Alaska, we all are very aware of the reduction in force that came in the major oil companies three or four years ago. Was that one of the reasons for the--your reduction?

A. We did reduce some shoreside people with the corporate restructuring but we did not input seagoing people. Seagoing people were not part of the shoreside restructuring. We reduced primarily the Houston staff operation.

Q. Were any of the people who took advantage of these--the opportunities for early retirement or however Exxon handled it, were any of those senior and expert people in oil spill response that were in your contingency plan at that time?

A. Not within the shipping company, no.

Q. Within the corporation?

A. I don't really know. There is one individual I could--I believe he left mid-'86 and

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

that was Mr. Lindblom. But we still retained him on retainer, and he was mobilized both for the Hawaii spill and the EXXON Valdez.

Q. As an officer of Exxon Shipping, do you feel it's your responsibility to have a close-working knowledge of the people who are employed under the spill response group within the parent corporation?

A. Those people that I would interface with--normally, I'm not a part of the normal spill response activity. I would be mobilized in Houston, not at the scene. Considering the magnitude of the EXXON Valdez spill, I mobilized quickly.

Q. So the corporate policy, then, apparently is to segregate the response group from the group that contains the assets that would cause these kind of accidents?

A. No. I would have been part of the response group, but I would be part of the headquarter's response corporation. And the on-scene commander would be reporting back to Houston through me. That's under the normal plan, as you see it, or as you would see it in the response plan. In this event or in this

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

particular incident recognizing the magnitude of it right off the bat, I was the first one on the plane.

Q. I have a few questions about the scheduling--crew-scheduling practices and officer-scheduling practices of your company. Generally speaking, what is the policy of Exxon Shipping, on what do you base assignments to a particular voyage of a particular vessel? Is it senority, ability, any other criteria that you can--

A. Well, in the case of officers, what we strive for is what we call continuity. And by that, I mean we would assign two officers to each position on a vessel. In kind of a buddy system, they would relieve each other, on and off. And they would stay probably assigned to that ship for three or four years. And we found that the benefits of that kind of continuity are very, very significant and very measurable. For the unlicensed people, we strive for the same kind of continuity, but it's more difficult because of their paid leave to duty time. For the officers, it's essentially one for one, so it's easy to assign two people to each job. For the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

unlicensed, it's not quite that. And, therefore, you have to have some rotation. What we try to do is rotate between like vessels wherever we can.

Q. Do you have any explanation of why the company chose to not apply this general policy in the case of the EXXON Valdez?

A. I believe we did. Could you help he out with your question?

Q. Yes, Mr. Iarossi, we've interviewed many of the crew members, practically all of the officers of this voyage. Most of them had never sailed with each other before, two or three voyages before. It was a group clearly collected from all over the company and put together on this vessel.

A. I may be mistaken. I think Captain Stalzer and Captain Hazelwood have been on that ship for probably two years, at least. I think Captain Stalzer was the first captain, delivery of the ship. So he has been on there for a long time. I know that Chief Engineer Glowacki was the first engineer to take the ship out of Valdez and he's been assigned--out of San Diego. And he has been assigned to the ship, I believe, since then.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Perhaps I misunderstood you. I thought you said you tried to insure continuity of crews; that is, the same people would work together repeatedly?

A. No, not necessarily together because they are all rotating at different times. And in effect they can change the rotation. Normal rotation is 60 days on and roughly 60 days off for the officers. But they have the latitude if they want to have the relief at 45 days because their daughter is graduating or their son is getting married or their wife is having a baby, they have the latitude and they just do it themselves and decide, I'll get off this trip and I'll relieve you, so the schedule actually floats. There is no set times. We don't have a blue and gold crew.

Q. Okay. And as the president of the company, is that your wish what--could you explain why having a blue and gold crew, as you put it, might not be superior to this catch-as-catch-can method of mixing--

A. Well, I don't think it's catch-us-catch-can at all, sir. I think the Navy would tell you the problems with the blue and gold

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

crew. When you totally take everybody off at one time and replace it with a totally new crew, you lose all continuity. Nobody knows what happened three days ago. So by having this kind of periodic rotation, you always have people that have put onboard 50 days or 30 days. You're never in a position where you wake up today and everybody is new. I think this is far superior to the blue and gold crew approach.

Q. You feel it's more important to have people familiar with the vessel than familiar with one other?

A. I think in the process over time they will get familiar with one another.

Q. And I apologize for saying catch-us-catch-can, but I did thought--think I heard you say that these people schedule themselves off and on according to their personal lives?

A. That's right. And they're nominally on about a 60-day rotation, but they could alter that.

Q. I would like to ask you to turn, again, to Exhibit 5H, which is the Exxon Shipping Company Policy Statement on employee alcohol and

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

drug abuse.

A. Yes.

Q. I believe you told us earlier that this policy was implemented or, at least, derived, published in '86 or '87 in its present form; is that correct?

A. Yes. I think page five has March 11, 1987.

Q. Okay. You also said that the policy goes back to '77?

A. Yes. In it's original form that I know of, I believe it has a January 1977 date on it, it only covered alcoholism at that time.

Q. Okay. Is the essence of the policy of '77 regarding alcoholism continued in the present policy?

A. Yes.

Q. So you have had this policy on alcoholism for more than 10 years?

A. Yes.

Q. I would like you to answer this question, again. I think I know what you said, but let me just ask you, again: Since Mr. Hazelwood completed his rehabilitation program, exactly what did Exxon Shipping Company do to

insure that he was, in fact, rehabilitated?

A. There were two individuals directly in charge or responsible for the follow-up. That was the fleet operations manager who reports directly to me and the ship group coordinator, or in the early stages, he might have been called port captain, who was the direct coordinator or supervisor for Captain Hazelwood. They visited with Captain Hazelwood just about every time he was in-port, one of the two of them did. And that was on a frequency of about twice a month, every two-two and a half weeks, whatever the schedule for that particular voyage pattern was.

Q. And did you say earlier that these visits generally were at the conclusion of a voyage?

A. They were sometime during the in port period. I don't know if it was--at what time. You know, they are only in port 24 hours, so. Whether it's the start or the end, it's hard to tell.

Q. These people were monitoring him, I believe, under the policy?

A. They were--they were sitting with

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

him talking about what was going on, talking about his activities and talking about whether he was drinking or not. They were also making themselves available to other people in the crew.

Q. And so, basically, they just sat down and had a discussion with him?

A. And, of course, they would watch with their eyes, and listen with their ears and try to pick up any signs that Captain Hazelwood was not following the rehabilitation plan.

Q. Your policy states clearly on page 1 that Exxon Shipping has the right to, quote, require employees to, in what I take is Mr. Hazelwood's status at this time, require employees to submit to drug testing or to alcohol testing. Can you tell me why the company decided not to implement that policy in this case?

A. I think the key phrase is where cause exists to suspect alcohol or drug misuse. Essentially there had to be a cause for that.

Q. Was Captain Hazelwood ever tested by Exxon on a follow-up basis, after his rehabilitation?

A. Not to my knowledge.

Q. Did Captain Hazelwood ever refuse

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

a request that he be tested?

A. Not to my knowledge.

Q. On page 1 of the policy, as well, the company establishes their right to conduct unannounced searchs of your vessels of which the EXXON Valdez was one. Did you ever conduct an unannounced search on the EXXON Valdez?

A. I don't know if the Valdez was one those 30 searches or not.

Q. In those 30 searches, was the ship ever searched unannounced on which Captain Hazelwood was the master at that time?

A. I don't know.

Q. What is your company's policy? Your written policy, anyway, indicates where a confirmed alcoholic is found after his rehabilitation to again be drinking; that is, to have had one drink?

A. We don't have a written policy. We would clearly look for whether it was on company--whether it violated the two company policies, one having to do with use or possession onboard ship or one having to do with unfitness for duty. It certainly would be a cause for alarm for us, and would trigger a much higher order of

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

scrutiny.

Q. But, essentially, again, without probable cause speaking, generally, you did not use your unannounced search policy?

A. The situation never came up, so it's kind of a hypothetical as to what I would do. We would be very concerned and that might trigger a search.

Q. Well, of these 30 searches, were each of them triggered by some suspicion or event?

A. A few might, but most of them were random selection, very closely-held random selection. I think a few of them were triggered by masters who suspected something or other or information we may have gotten from other crew members, but I can't tell you how many of the 30.

Q. So there really wasn't involved or even implicit in the policy that a master who had undergone rehabilitation for alcoholism, given the widely known recidivism rate of these people? That did not constitute something that sparked your interest in the vessels that he was in command of?

A. Well, it certainly caused us to have a nonpurpose surveillance program of him

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

using his supervisor and his supervisor's supervisor.

Q. Has Exxon Shipping ever been made aware of allegations of Captain Hazelwood's drinking or abuse or failure to follow any other company policies?

A. Subsequent to rehabilitation, no. Is that what you mean? Subsequent to rehabilitation?

Q. At any time.

A. I think at the time of his rehabilitation, there was one statement from someone that we could not substantiate but it was the period prior to the rehabilitation. In fact, prior to the rehabilitation. I don't know exactly when.

Q. Were there any other allegations made at that time other than captain's use of alcohol?

A. I don't know--are you referring to a 1986 lawsuit?

Q. Yes, sir.

A. Yes. That lawsuit, as I recall, didn't say anything about alcohol use. That was--it was associated with a medical discharge of

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

one employee in 1984, I believe. And in 1986--January-February of '86, as I recall, the employee filed a lawsuit allegating or alleging that his nervous disorder was as a result of his sailing with Captain Hazelwood in 1980, and, again, I believe, in 1982.

Q. Where had he sailed with Captain Hazelwood, allegedly?

A. I don't know the vessels. I do know the years, because I remember the lawsuit. It went back to 19--one period in 1980 and one period in 1982.

Q. Was it--did these events, these alleged events, allegedly occur in Prince William Sound?

A. I don't know.

Q. Worse, was one of the allegations that this litigant had been forced by Captain Hazelwood to take the conn of the vessel when he was unqualified to do so?

A. I don't recall that.

Q. If that had been the allegation, what would Exxon Company policy have had you do in response to that?

A. The allegations themselves were

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

looked into very carefully. The individual named seven or eight people who he said were aware of the circumstances. To my knowledge, all seven or eight were interviewed and none of them supported the individual's position, not one individual supported it. So, the matter is still up for litigation. I don't want to talk too much more about it.

Q. Okay. All right. Fine. You've heard testimony or, probably, at least seen the NTSB report that two bottles of something called Moussy beer were found in Captain Hazelwood's stateroom?

A. Yes, I've seen those reports. Moussy beer is a nonalcoholic beverage.

Q. Well, you said earlier, this is why I'm asking you about this, that there is absolute prohibition of alcohol--

A. Yes.

Q. --on the vessels?

A. Moussy beer is classified as nonalcoholic.

Q. So according to your policy a .5% beverage is classified as nonalcoholic?

A. Whatever the classification,

whether it's federal or whatever it is, but Moussy beer comes in under it.

Q. What percent by volume does a beverage have to have in order to be classified as alcoholic under your company policy?

A. I don't know. You know, it's either an alcoholic beverage or it isn't. Maybe I'll ask the ABC or something.

Q. So your policy specifically references what the ABC says is alcoholic?

A. Yes. We would use that standard I assume.

Q. We also heard from some of your crew that in the past, at least, they had been served wine with holiday meals?

A. Yes. We had a longstanding policy and that probably goes back as long as the prohibition on alcohol, but that policy allowed the serving of wine at the Thanksgiving meal and the Christmas meal. There was a measured quantity of wine brought aboard based on the number of people onboard. And I think in recent years it's been those small wine containers that you might get on the airlines for $2 or whatever they charge you.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Yes, sir, but this was a considered waiver of your strict prohibition against alcohol?

A. Yes.

Q. Why?

A. We stopped that after 1987.

Q. I was going to tell you that a couple of your crew members mentioned that you had shut that off.

A. Yes. We had considerable unhappiness because we were destroying an old tradition, but we felt, under the times, it was time to do that.

Q. Your policy also calls for an employee to be immediately removed from his or her duties if observable physical signs of use or abuse, including the smell of alcohol on a person's breath. If you had smelled alcohol on Captain Hazelwood's breath on the bridge of the EXXON Valdez prior to departure as was observed by more than one person, would your policy have required you to relieve him of his duties at that time?

A. I would have to go back and look at that policy. Does it say removal of the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

individual for smell of alcohol? No, I think the policy says unfit for duty.

Q. So are you saying that once you smelled alcohol, you would have to come to another decision as to whether or not the person was unfit for duty?

A. And I certainly would have to scrutinize him very, very carefully to determine whether or not there was any sign, any sign at all that he was unfit for duty, or in any way impaired. I've listened to television, last three or four days and I haven't heard one individual to say he was in any way impaired.

Q. So it's not clear whether the smell of alcohol on the breath is grounds for doing anything or not?

A. I think it's a clear sign that you have to go further and make a determination.

Q. This policy is well-written and as well-written as it is, seems complex to me. And I'm sure it was for some of your officers who were required to implement it. What did you do to train these people to implement this and other Exxon Shipping Company policies?

A. It was the subject--one of the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

subjects in, at least, three of our fleet officer conferences, those that I spoke about this morning, particularly in relation to drug and alcohol awareness and most recently through the sampling process. As you know, we put aboard some very good drug and alcohol sampling kits. I think Mr. Delozier mentioned yesterday, they were first class equipment and we have had training particularly on the custody part of it, how to maintain a verifiable custody.

Q. Now, on these fleet officer conventions or meetings--

A. Conferences.

Q. Conferences.

A. About five day meetings that we had and they--over the period of five days, we get into a wide range of subjects.

Q. They were-- they included fleet officers down to what level?

A. Chief mate and first assistant engineer. They took the top four grades and that's half of our officer population.

Q. And you feel--

A. About 180 or so officers, total.

Q. Do you feel those conferences gave

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

these people an added education, an added means in which they can go back to their vessels and enforce these policies before the fact to prevent this sort of thing? Did you train them techniques of personnel management in order to implement the policies?

A. Yes.

Q. And is every person at or above that rank gone through this training?

A. They all should have been through those conferences. Now, first two, I think, were in about the '82 to '84 period. So if you had some officers move into the chief mate rank since then they may have missed those first two conferences. Last--the last one was 1987, I believe, the '87 conference.

Q. The '87 conference. So anyone who has achieved that rank and been given those responsibilities in the last two years has not been trained and given the tools to do this?

A. Well, we have some very clear instructions. We have had three letters that went out to each individual employee, one in '85, one in '87, one in '88, so anybody who was an employee. I think the last letter was September

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

of '88. They have been made very aware--excuse me. They should be very aware of what the policy is. You know, there is two very simple points to the policy, the first one says, you shall not possess, use alcohol or illegal drugs onboard our vessels in any way; and the second says that you shall not be unfit for duty in any way as a result of alcohol or drug use.

Q. And you can conveyed these policies to your employees through written correspondence?

A. Yes, directly to each employee. In addition to being a bulletin board type thing each and every employee got a letter at his home.

Q. Who signed those letters?

A. I believe I signed two of them. The third was either signed by human resources manager or the fleet officers--or fleet managers. I don't recall.

Q. I'm sorry. You have 1,500 employees. There must have been 4,500 of these letters. Who signed each of those?

A. I signed two of them that I recall, and the third one was signed either by the human resources manager or by the two fleet

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

managers. I mean, you only sign the original. You don't sign 4,500 of them.

Q. I'm sorry. So these were--you informed them of this important policy through form letters mailed to their homes?

A. They were not form letters. The two I wrote I wrote very, very carefully and I would like--I would be glad to read them, unfortunately they are not exhibits. But I will be glad to make them available to the committee. They were very carefully, sincerely-worded letters to try to point out to all the employees the hazards of drug use, the effect that it has on the safety of everybody on the vessel, the effect on the world we live in. They were pretty hard hitting letters trying to define the nature of this problem that society faces and how it impacts a shipping company.

Q. Thank you, sir. Going on to the--your performance appraisal system?

A. Yes.

Q. You've given a real eloquent statement of what this system is meant to accomplish. And, basically, to the way I understand it, please, correct me if I'm wrong, is

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

that this--the performance appraisal was the first step toward a continuing program of helping each employee improve and perhaps achieve a higher ranking; is that correct?

A. Yes. That's what it is targeted for.

Q. Are you satisfied that this purpose is being achieved throughout your company?

A. I watched over the past few days as the crew of the EXXON-Valdez spoke here at this forum and I was proud of them. I think they are a very intelligent group. Handle themselves well both professionally and in a difficult forum like this. I think our results are not totally satisfactory. We would like to have perfect results from it. But I think certainly we have made major strides in upgrading the professional management and leadership capabilities of our people.

Q. For the performance appraisal system to work as you hope it has, anyway, your written policy regarding these appraisals needs to be followed, I assume. Going to Mr. Hazelwood's performance appraisals, I believe you said you, quote, tried to do these as a--on an annual basis

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

but sometimes this doesn't occur. On a formal basis--

A. Yes, I don't know that we have annual reports for everybody in this formal form.

Q. What is the written company policy on how often these reports in this performance appraisal system should be?

A. We try to do it annually, but we couldn't have that written in any policy anywhere.

Q. So, there are--in the material that we have been provided, there are no performance appraisals for the period from April '84 through April '87 for Captain Hazelwood, nor any more recent than April of '87. Is that pretty much a standard separation of these performance appraisals for your officers?

A. I don't know what the frequency was in the case of Captain Hazelwood.

Q. What is your policy regarding following up on suggestions made in the performance appraisal?

A. The follow-up comes from the fleet operations manager and the human resources manager to the extent that any circumstances are brought

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

to his attention.

Q. Would recommendations written in an officer's performance appraisal be brought to that person's attention?

A. It may. I can't state that it is in all cases.

Q. The simple question is: Who reads these things?

A. They go in--well, the fleet manager would read them and they would go into the human resources group.

Q. To the group.

A. I don't know that this--I don't know that the human resources manager reads every one. I don't believe he does.

Q. But if the policy is to follow-up on recommendations, if possible, whose responsibility is it under that policy to do the follow-up, to read them and follow-up?

A. The fleet manager, to the extent that he has the ability to do that.

Q. To the extent that he has the time to read them?

A. No. If it's a recommendation on a certain training program, then, you know, do we

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

have openings, do we have such a program, items like that. That's what I mean by opportunity. If it's a discussion about giving someone a six-month shoreside assignment, then, you know, what are the opportunities for that, who else has been recommended? Quite often there are more than one recommendation for a shoreside assignment like that and then it's a best fit or best schedule-type situation.

Q. Do you, then, understand why the recommendations in Captain Hazelwood's '82-'83 appraisal, performance appraisal, may read that he be reassigned to shore duty and that he be given management training? Those were two recommendations in that. Do you know why those were not followed up on in this instance?

A. I would have to read it. If possible, temporary shore assignment in Headquarters or fleet office. He needs to be exposed to the needs of running the business. Is that the comment?

Q. Do you have any records of whether or not anyone reviewed that recommendation and decided why not to implement it?

A. Well, at the time opportunities

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

came up, I'm sure the fleet managers discussed it and chose amongst the people who had indicated a desire or a need.

Q. Do you know that?

A. No.

Q. Does the company keep any records of what is done in response to these recommendations?

A. No.

Q. In the mangerial categories in these performance appraisals, I guess, I just like to know generally what are the managerial skills in an outstanding ship's master? I guess more particularly, does that include personnel management skills?

A. Administrative skills, yes. Leadership skills, I personally would put in a slightly different category. I think that leadership skills are very unique skills and when I talk about leadership skills, I'm talking about the ability to motivate, the ability to bring people out and have them reach their potential. I would view those as separate from management skills although you could put them in the same category.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Do you feel that this type of skill is any more or less important than the technical skill in the master?

A. Well, I think the professional skills are the foundation. That's a must. I think as we--as we progress from that, then you get into a higher level, which I would say are management skills over those professional skills. And the individual can get to a higher level than that and many do. And that's when they get into true leadership skills where they understand not only how to administer but how to motivate and how to get people to put forward their best. But I see it as a hierarchy. They are not exclusive, but certainly the bottom rung and the must rung is the professional and technical skills. And, then, as individuals of--grow and improve, they move to the higher management skills and the higher relationship skills.

Q. Which type of skill would you think is required to properly implement your alcoholism policy as well as your general ship's orders of the policies contained therein?

A. I think those specific policies could be administered by a master who has

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

relatively low management skills. I mean, they're pretty simple policies and enforcing them is very simple. Getting people to accept them that--accept them willingly and understand the challenge, that probably takes more of a management skill and a leadership skill. Just implementing the policy, that's pretty simple.

Q. Were you an officer of Exxon Shipping when the EXXON Valdez was designed?

A. Yes.

Q. What were the basic design criteria for this vessel? What were you trying to optimize?

A. We were trying to use state-of-the-art technology to achieve the best fuel economy we could, to achieve the best and most appropriate trade-off between manpower and mechanical, or in automation. I'm not sure what other answer you're looking for.

Q. That's fine. Was this vessel designed with the Valdez trade in mind?

A. Yes.

Q. Was there a design criteria regarding suitability for operation in ice?

A. No.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. So it was basically, to summarize you, that the ship was designed for efficiency but there was not a design criteria specific to operating in icy waters?

A. It was designed for Valdez trade, I don't know that any tanker is--I mean, it's not an ice-breaking tanker. That's for sure.

Q. I realize that. Is the steel in the hull of the EXXON Valdez, is that a different form than in previous tankers?

A. It's a high-tensile steel which is fairly recent. But I think that our previous class of vessels, the EXXON Venicia and NORTH SLOPE are also built of high-tensile steel fine.

Q. How does high tensile steel differ in response to hitting an iceberg compare to--

A. It's a higher strength steel and has a higher yield point. I guess that's the important factor to it.

Q. Is it more or less brittle than non-high-tensile steel.

A. I don't think brittleness is the difference. The difference is in its tensile strength.

Q. Fair enough. Let's go, if you

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

will, to the chronology that you submitted to us or that Captain Deppe did under Exhibit 4T, if you would, sir. This is titled, Exxon Shipping Company, Exxon Valdez Casualty Reponse, Chronology of first 24 hours.

A. Yes.

Q. Just in general, what was Exxon Pipeline Company's specific responsibility in responding to this accident?

A. Exxon Pipeline Company received the first call from Alyeska. They then passed that call onto me and I told them we would take charge of the response, Exxon's response. So at that point, Exxon Pipeline Company bowed out of the loop and I picked up directly with George Nelson. So they were just the first communicator. It was our responsibility within Exxon to mobilize and implement the response.

Q. And what was Exxon Corporation's responsibility? That was totally on your shoulders at that time, as I understand you.

A. Yes. I was communicating back to Houston and from--Houston was communicating to corporate.

Q. I understand where you're

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

communicating, but what was the company-wide responsibility?

A. As far as the mobilization and the implementation of the oil spill response plan, I was the implementer. I had all of the authority. I had unlimited authority.

Q. Which oil spill response plan are you referring to?

A. We have three levels of response plan within Exxon. The first one is unique to the shipping company. That's called the Field Office Response Plan. And the west coast field office, that's our Venicia office carried out that mobilization. The second level of response is also unique to the shipping company. That's the Headquarters Response Plan. We initiated that within the first few minutes. The third level is the Total Exxon Interfunctional Response Plan. That's essentially mobilizing a team comprised of individuals from all over Exxon within the US, all of the different operating functions. We have two such teams. They are designed to relieve each other so that we don't keep people on scene for more than a week. Actually, the mobilization got so large that we had both teams here at the same

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

time. And that is the third level of our Exxon response plan, the Interfunctional Response Plan.

Q. So the response plans that you are referring to are mobilization plans?

A. Yes. They involve three different categories in our total response plan. The first is organization, and within our organization there are these three levels of a response plan. They talk about the organization. They talk about individuals. They talk about specific job descriptions for each of the jobs within the organization. And they talk about non-Exxon experts who are part of this response plan, people that we mobilize at the same time we mobilize our own people. That's organization.

The second category in the response plan is the resources and logistics. And we have volumes covering the area from Maine to Panama and, then, from Panama all the way up to Valdez. And each of those volumes is site-specific for a given area. It defines all of the oil spill response resources in that area. It defines the local companies who could respond to a spill. And it gives all the information as to how to mobilize those resources and those companies. So it's just

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

volumes and volumes of different companies, different phone numbers so that you can respond very, very quickly. You're not looking through yellow pages.

The third part of it is cleanup methods. There are six volumes in that part and they go through use of booms, of skimmers, of dispersants. They talk about very surveillance and tracking. There's one volume on fate (ph) and effects.

Q. Okay. Thank you. What was Mr. Warner's responsibility within your company?

A. He is the President of Exxon Pipeline Company.

Q. Of Exxon Pipeline Company. Does he have any position or other duties in any other Exxon company?

A. No, not to my knowledge.

Q. Okay.

A. There may--well, there may be partially-owned pipeline companies that he is a director of, but I don't--I don't know.

Q. At about 1:40 a call was placed from Houston to the EXXON Valdez. And I believe, judging from your--from your chronology here, it

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

was Captain Myers speaking to Captain Hazelwood.

A. That would--had to be from Venicia, California. There was no call from Houston that I'm aware of. Myers is assigned to the West Coast Fleet office. He is a ship group coordinator for the Valdez.

Q. And did--this call lasted for 51 minutes. Can you, please, tell us what Captain Myers discussed with Captain Hazelwood as reported to you?

A. I called Harvey Borgen, who is the fleet manager. I woke him up and told him that I had received word that the Valdez had grounded. And told him to get in touch with the ship and to begin to mobilize his West Coast Response Team. I later learned, he, in turn, called Paul Myers, who is a ship group coordinator for the Valdez, and Myers then called the ship. We were in communication, on and off, through those first two or three hours until we all got airborne. And during that course, he--Harvey called back to me and said that Paul had been in touch with the ship. Gave me a first assessment of the damage. And the first assessment of the oil released at the time of the grounding. Other than that, I

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

don't know what they talked about.

Q. Did Mr. Myers tell why he thought this accident had occurred?

A. No.

Q. Were you curious--

A. He's a--

Q. --why it occurred at that time?

A. Paul is not a captain. Paul Myers is not the captain.

Q. Were you curious at that time as to why it had occurred?

A. That was well down on my list of things that needed to go on. I mean at that point we were moving at a very high adrenalin rate and I knew there were a lot of things that needed to be done and somewhere down in that priority list was an understanding of what went on. But quite frankly, it was--didn't make the high five.

Q. You said that Mr. Myers did discuss with the vessel, actions it would be taking from then on; is that correct? You didn't--it wasn't high on your list to know how it got there, but it was high on your list, as I understand it, to save the vessel?

A. Our overwhelming concern at that

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

point was for the million barrels still on the ship, the stability of the ship which we absolutely had to understand to the full extent we could and for the 20 or so people that were on the ship. You know, we knew there were 34-degree water and an awful lot of fuel oil cargo around that ship so we had tremendous anxiety.

Q. Did Mr. Myers--

DR. DICKINSON: Dr. LeResche?

DR. LeRESCHE: Yes.

DR. DICKINSON: The court reporter needs to take one minute. Sorry.

(Off record.)

DR. DICKINSON: Okay. Go ahead.

BY DR. LeRESCHE:

Q. Okay. Did Mr. Myers discuss trying to remove the vessel from the reef with the vessel?

A. Not to my knowledge, no. I don't think Paul Myers would be--would engage in that. He is not a ship's master. He is not a deck officer. And I don't think it's an area of his expertise.

Q. Thank you. Did Mr. Myers tell Captain Hazelwood to place a phone call to the law

firm of Wilmer, Cutler & Pickering in DC at that time?

A. Not to my knowledge.

Q. Okay. You stated earlier, sir, that in this cleanup, in this response--your quote started from zero. Now, you've exhibited very well in responding to questions from the Board's staff--an ability to mobilize equipment, to spend money very fast. Have you exhibited an ability to clean up this crude oil?

DR. DICKINSON: Dr. LeResche, I don't think anybody said that Exxon has an ability to spend money real fast. I don't remember that on the record.

DR. LeRESCHE: I won't argue with you, Mr. Chairman, but your staffed ask how much money they had committed in these first seven weeks.

DR. DICKINSON: That's fine. Is that real fast? I think you can ask the question.

BY DR. LeRESCHE:

Q. Okay. I'm sorry. You have exhibited an ability to procure equipment at a certain rate--

DR. DICKINSON: Dr. LeResche?

DR. LeRESCHE: Yeah.

DR. DICKINSON: At the prehearing a week ago, we discussed the issues that would be discussed at this hearing. We said we will discuss the issues, the event up to 12 to 24 hours following the accident. Are you going to keep your questions within that 12 to 24 hours?

DR. LeRESCHE: Yes, sir, I will.

DR. DICKINSON: Thank you.

DR. LeRESCHE: If you might instruct the witness to keep his answers within that period as well, I would appreciate it.

THE WITNESS: Accepted.

BY DR. LeRESCHE:

Q. Okay. The state of Alaska does require an oil spill contingency plan to enter Prince William Sound. Are you aware of that?

A. My knowledge--are you talking about ship operators?

Q. Yes, sir.

A. The state of Alaska does not require, to my knowledge, a ship operator to have an oil spill response plan for Prince William Sound if you're going to load at the Alyeska

terminal. All ship operators are covered by the Alyeska Response Plan, to my knowledge. For outside of Prince William Sound, the State of Alaska does require ship operators to have the--

Q. So within Prince William Sound you are relying on Alyeska Pipeline Service Company's Contingency Plan?

A. We twice submitted to the state our oil spill response plan and the statement we got back from the ADEC was that we were covered under the Alyeska Response Plan and we did not need to make a submission.

Q. You got a written response back to that effect?

A. Yes, two letters from either Mr. O'Brien, I believe--it was ADEC.

Q. So you did understand that you were covered by the Alyeska Response Plan?

A. According to the state.

Q. Did you review this Alyeska Pipeline contingency plan?

A. No.

Q. So within Prince William Sound, you were covered by their plan which you had not reviewed? I'll just ask again.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Exxon Shipping Company did not review the Alyeska Response Plan. We have our own response plan for how we mobilize and respond. Once we get in this situation, then the site-specific parts of the Alyeska Response Plan is what we work from. When you say review, did you mean, are we aware of it or did we participate in the development of it, or review it as it was being developed. We did not review it as it was being developed.

Q. Did you review it after it was developed to gain some sense of security in your own mind that this plan that you were operating under was indeed a valid plan that had a good chance of working?

A. Yes. We have one individual who is our environmental conservation coordinator and I believe he was aware of the plan.

Q. Okay. Did Exxon Shipping provide any of your spill-response personnel with training related to a spill specifically within Prince William Sound?

A. No. With the exception of the environmental conservation coordinator, who was the marine superintendent at the terminal for a

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

year and a half, I believe so, so he had very specific knowledge. This is Mr. Rassinier.

Q. He was previously an employee of Alyeska and is now an employee of yours? Is that--

A. He was previously an Exxon Shipping employee who was on loan to Alyeska for about 18 months.

Q. I see.

A. As their marine superintendent, I'm sure he's quite familiar with the plan on that basis.

Q. Was Exxon Shipping aware of any inaccuracies or incorrect statements in the Alyeska Contingency Plan?

A. Not that I'm aware of.

Q. Especially with respect to the ability of Alyeska to respond to a 200,000 barrel spill?

A. I believe what played out unfortunately was exactly as spelled out in the 200,000 barrel scenario of the Alyeska plan.

Q. So you were not aware, before the fact, that there was anything particularly incorrect in that?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

If--Exxon Corporation, at least, is a partial owner of Alyeska Pipeline Service Company, I believe?

A. No, not to my knowledge. Exxon Shipping--Exxon Pipeline Company is a shareholder, a minority shareholder in Alyeska.

Q. Exxon Pipeline?

A. Exxon Pipeline Company is one of seven companies that own all the shares of Alyeska.

Q. Did you as Exxon Shipping ever discuss the management and operations of Alyeska Pipeline--I'm sorry--Alyeska Pipeline Service Company with the shareholders in your sister company?

A. No. You mean, do we discuss--have discussions with Exxon Pipeline?

Q. Yes.

A. No.

Q. You've been through and you've provided us with a chronology of all the phone calls and all of the hard work and traveling that you did the first 24 hours. Did anyone from your company ever attempt to contact any state official within these first 24 hours?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Yes. I met the Governor within, about an hour after arriving. I met him at the Civic Center. I told him that I would enjoy the opportunity to meet with him again. Following day, if I'm allowed to get into it. Maybe I shouldn't--within 24 hours--

Q. I appreciate if you didn't, sir.

A. Okay.

DR. DICKINSON: So would we.

THE WITNESS: Within--within that 24 hour period, my guess is that the time was about--about 7:30 in the evening. Friday evening, I met the Governor.

BY DR. LeRESCHE:

Q. Did you--had you arranged this meeting or attempted to contact him before that time?

A. I was in the air for about 10 hours. That was the first opportunity I had. It was about--must have been within an hour and a half of arriving in Valdez.

Q. Okay. As of sunset Friday, how much skimming gear did Exxon have on the water at the oil spill?

A. The three open-water skimmers that

were here on-site were in operation.

Q. Those were your skimmers?

A. No, they are Alyeska's. But they--once we took over the operation, obviously, they stayed on the job.

Q. When did you take over this operation?

A. The skim--the full operations were probably between 4 and 6 o'clock on Saturday.

Q. On Saturday?

A. Yes. That's--

DR. DICKINSON: Dr. LeResche, I've asked that--I'm sorry. That is still within 24 hours.

DR. LeRESCHE: Saturday isn't, sir. But what I asked is what he had on the water at sunset Friday.

DR. DICKINSON: Let me ask both of you gentlemen--

DR. LeRESCHE: The three Alyeska--

DR. DICKINSON: Excuse me. Mr. Iarossi?

THE WITNESS: Yes, sir.

DR. DICKINSON: Let me ask both of you gentleman to stay within the 24-hour period

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

that we have all agreed to, including the four parties.

BY DR. LeRESCHE:

Q. Okay. As of sunset Friday, Alyeska's three skimmers were at the site. Were you in command of those vessels at that time?

A. No.

Q. As of sunset Friday, how many barrels of dispersant were available for you to use in Valdez?

A. There were 360 drums. Each drum, 55 gallons, in Alaska at the time of the incident.

Q. The question was in Valdez.

A. Well, you don't use it in Valdez. You stage the airplanes out of Anchorage. And you load the planes in Anchorage where we had 160 barrels. You load them at Kenai where we had 160 barrels. And 45 barrels that were here, on site, we could have moved from Anchorage anytime we wanted.

Q. And at that time, what capacity of aircraft did you have that were capable of taking off an hour before sunset loaded with this stuff?

A. We had a C-130 on the way.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. On the way?

A. Yes. As of sunset Friday it was airborne.

Q. Airborne toward Alaska?

A. Yes.

Q. Okay. Thank you. Mr. Iarossi, thank you for responding to these questions. I have one more. It's clear from all you've told us and all you've provided us that Exxon clearly has a very fine set of policies in place, Exxon Shipping Company does. It's also obvious, however, from what did happen to all our dismay that Captain Hazelwood was in command of this vessel; that an unlicensed or mate without the proper endorsement was at the conn and that Captain Hazelwood tested at fairly high level of blood alcohol shortly thereafter.

DR. DICKINSON: Dr. LeResche, do you have a question?

DR. LeRESCHE: Yes, I do.

DR. DICKINSON: Can we hear your question, please?

BY DR. LeRESCHE:

Q. Okay. You have a policy, something happened. Have you thought about, and

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

could you give us any guidance on, whether the problem that led to this accident was a result of field policies or of insufficient implementation to these policies?

A. Well, let me say that I share everyone else's dismay and maybe my feelings are certainly as strong as anybody's about what did occur. I'm not sure exactly at this point that we know enough of the facts and I hope that this--that the NSTB will be able to shed more light on exactly the reasons for the grounding. At this point, all the information that I have still leaves me with some unanswered questions, including what impact on this whole incident you attribute to the alcohol issue. I think there is still a lot of questions open and, hopefully, we will get some guidance to help us understand the reasons for the incident.

Q. But as a manager, is there something wrong with your policies or something wrong with how they have been implemented?

A. I'd really need more facts to respond to you. I don't believe the policies could be any stronger. I think the bridge and organization manual is about as clear a document

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

as I've ever seen anybody produce as to what a company expects of its people. So I don't believe that policy is where we need to look, although we certainly will be looking at policy hard. We've got a lot of lessons to learn as a result of this. We have a lot of rethinking to do on all facets of this. On operations, on response, there is a lot that we all can learn from this, that the industry can learn, and hopefully these hearings will help us get to those kind of items where we can pinpoint our attention.

MR. LeRESCHE: Thank you, very much, sir. Thanks, Mr. Chairman.

DR. DICKINSON: Thank you. Captain Deppe.

CAPTAIN DEPPE: We have no questions.

DR. DICKINSON: Mr. Colucciello.

EXAMINATION

BY MR. COLUCCIELLO:

Q. Mr. Iarossi, you mentioned that after Captain Hazelwood's rehabilitation, the fleet operation manager and the ship group coordinator were assigned to make visits, and I believe you said, about--perhaps, two visits a

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

month when he was in port to observe him and, I believe, also to discuss his problems with him. So, obviously, Captain Hazelwood knew the purpose of their visit; is that correct?

A. Yes. And I think he felt he was the most scrutinized employee in our company. I think he felt a little uncomfortable with it.

Q. What I'm wondering is if I knew someone is coming to visit me and observe me, and for a particular reason, isn't it reasonable that an individual would be on his very best behavior during those periods? I'm wondering how valid such observation periods twice a month would be?

A. Well, you know that was the opportunities we had to visit with him and they were day-long-type visits. And what you have to look for is what are his conditions, what are his responses, how is he behaving?

Q. But if it was, perhaps, a crew member onboard the vessel and you had a similar program for that crew member, would the observation, perhaps, be assigned to one of the ship's officers or the master and then--

A. Probably to the master.

Q. Then, what do you think the total

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

sum of observation would be compared to what the observations were for Captain Hazelwood?

A. I assume it would be more frequent.

Q. So--

A. To the extent there's more frequent contact.

Q. Do you think, that given the fact that there his very limited opportunity for observing a master, that perhaps the rules in the policy that you have might not be appropriate for a master who can be observed only at very limited times?

A. When we were reviewing the policy and considering the converse of that, actually I thought it was a very compelling argument. And that because we have such limited opportunity to supervise our masters. They are at home half the year and they are onboard ship the other half and when they are onboard ship you can probably get to them two days or three days a week or a month. Because of that, the whole concept, the rehabilitation is very, very important because the only way we are going to get to masters without alcohol problems is if we can encourage them to

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

participate in voluntary programs. That the whole rehabilitation concept has reinforced validity when you're talking about a master because you're not going to be aware if he has a problem, just because he is so isolated. But if you can't get--provide a facility for those people to seek help, if they are afraid of that--seeking that help--then we are never going to be able to identify who has a problem. So it cuts both ways. I agree with what you're saying as far as the follow-up being more difficult.

Q. Well, do you thing that there is a--there needs to be a program for--to utilize the opportunity when he is on vacation for observations or some follow-up during--was there anything done during the periods he was on vacation to keep in touch and observe and monitor?

A. No. And obviously we have to study very carefully what more we can do. This incident has, in fact, caused us to change our whole policy within Exxon Corporation on rehabilitation. I'm not sure that the new policy, which has not been totally defined yet, but the objective of it has been defined. And I'm not

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

sure anyone is more happy with that than we were with the original policy. It's been criticized highly within the Wall Street Journal, within the Washington Post, so there are arguments for and against both sides of the rehabilitation policy. And I'm not an expert on it. But, certainly, this incident has caused us to reflect on the whole concept of rehabilitation and how we follow-up. At this point the company's first response is to deny voluntary rehabilitation to those individuals--not deny voluntary rehabilitation but to deny their ability to go back to their original positions. And as I understand it, many people are concerned that will just drive it underground. So at this point, I'm not sure what is the best policy.

MR. COLUCCIELLO: Thank you. No more questions.

EXAMINATION

BY MR. ARMENTROUT:

Q. Yes, sir, Mr. Iarossi. I have just two quick ones. Yesterday, Chief Mate Kunkel testified that while watching the Snab gauges, he noted that the oil level was dropping at a rate of--a very high rate, and that he estimated about

Jun 12 89 10:41 No.001 P.

115 thousand barrels of oil had escaped within 30 minutes. So given that, my question is, and we are not--the safety board, we have a lot of expertise in certain things, but certainly not in containment. And do you think in your opinion that that amount of oil in that amount of time would certainly test the limits of technology as far as being able to contain something like that, even though you say you had some sort of a plan for possibly 200,000 barrels?

A. The--I agree with the point you're making. With that rapid a release of cargo, even if you had all the equipment that we now have in Prince William Sound stored around the corner, I'm not sure you could deploy it in time to have any effect at all, and you always have to face the fact that with current technology, even if by some chance you're able to corral this slick which Friday night, I think, the Governor said covered 18 square miles, even if you could somehow figure out how to corral that 18 square miles at the point in time that those gales blew up over 50 miles an hour, all that boom would have been destroyed. The boom we did have and weren't able to recover before the winds came up, in fact, was

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

destroyed. So I think that as far as the oil on the water, and I made this comment this morning, and I, obviously, had an awful lot of time to think about it, I don't think there was a power on earth that could have removed that oil from the water prior to those winds blowing that came up Sunday night, Monday morning, blowing it onto the beaches and the areas around Eleanor and Knight Island. The only technology that could have worked or had a hope to working was chemical dispersant, but mechanical pickup, Admiral Nelson commented, Dave Kennedy of NOAH commented and have continued to comment that that was just beyond mechanical pickup.

Q. Sir, then, one other final question. Just--and I just would like your comment on this--we have been asked, the safety board has, and we have done some similar accidents. Nothing like this, but would you comment on the use or efficency or effectiveness of a double hull, double-bottom-type ship in, let's say, an accident like this? And I'll put in a qualifier on it, because I know that we and the parties have not technically had a chance to look at the damage to EXXON Valdez yet.

A. The discussion or controversy over the effect this--double bottoms goes back, at least, 15 years. I think there is general consensus that in a low-energy-impact grounding such as the soft bottom or a slow speed, that bouble bottoms would be effective. The converse of that, in a high-energy-impact grounding, high speed or rocky bottom, that double bottoms are not effective. Right after the incident, the grounding, when I got back to Houston, our own technical people had already begun, based on the extent of damage that has come out of the divers' reports, to begin to analyze whether that particular vessel with a double bottom would have spilled less oil, or had less damage. Their conclusion was that there would have been no change at all, and, if anything, the vessel would have you been more critical as far as stability. I also asked the ship builder, NASCO, to analyze their double-bottom design. They did not have a double-bottom design for this particular vessel but they have one for a vessel that is very close. It's about 188,000 tons. They analyzed five cases of the type of grounding that the EXXON Valdez went through. They looked at five

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

different cases, and analyzed the stability of the vessel. In three of those cases, the vessel would have sunk as a result of their computer stability analysis. In one of those cases, it's questionable. The data was not clear as to whether the vessel would have capsized or not. And only one case would, on the basis of their analysis, the vessel had survived. And neither we nor they believe that that case is real, based on the latest assessment of damage.

Q. Yes, sir. Thank you. May I request that the safety board be provided with a copy of that?

A. Yes, sir.

MR. ARMENTROUT: Thank you, sir.

DR. DICKINSON: Mr. Danaher.

EXAMINATION

BY MR. DANAHER:

Q. Thank you, Mr. Chairman. Mr. Iarossi, I just have--you have been up here quite a while. I'll try to keep it short, but I have two areas to cover. The first has to do with career advancement options that might be available to masters of the vessel. Is that, in essence, the end of the line for--not that it's a bad way

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

to go--for most masters? How many of them, or how many positions in your corporate organization are available for further advancement should--

A. We--I believe that 35 to 40% of the members of our shoreside staff have come from our fleet, from our fleet officer ranks. And they are all permanent positions. I believe only to two are ex-masters. The problem being their salary is so high, it represents a significant debit to them in coming ashore. It's not high relative to what they do as a captain. But when you--the opportunities they have ashore are all lower paying jobs. So, in essence, except for a few individuals getting to be a ship's captain probably represents the height of their seagoing career and the height of their career with Exxon.

Q. So a shoreside assignment is not likely to be a promotion, then?

A. No. I think in a couple instances that I know of, it represented a salary decrease.

Q. The other area I wanted to discuss a little had to do with the composition of your fleet. You mentioned, I believe, that you had some older vessels and that you had some retired some of them. I'm told that some of those vessels

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

may have had a manning upwards of 40 crew. Is that the case?

A. No, sir, not within probably the past 15-20 years. Some of the ships may have been delivered with crews of 42. But they are now operating with much lower crews, because through the years we have added considerable automation to the ships particularly as it pertains to engine room automation.

Q. What would you say, then, is the maximum crew on any of your older vessels?

A. I believe it's 24.

Q. And other than eliminating or reducing the engine room watch, what other--when you speak of automation, what other measures would lead to enabling you to reduce crew size?

A. A large part of the reduction had to do with the steward's group in that 42 compliment. Going back to the mid-'50's, I believe we had seven members of the steward's department. We are now down to three, I believe, on the nonautomated ships. We have gone to recoding the vessels. We have gone to long-life codings on all of our vessels to reduce the daily maintenance that the deck force would be involved

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

in. I believe that just about covers it.

Q. Did any of your studies, in an attempt to reduce the manning, include recommendations to hire newly graduated--graduates of a maritime academy?

A. We clearly--when we do hire, we clearly look for the best qualified and the best experienced people we can find. We have been fortunate. We have been fortunate in the past two years. It's unfortunate for the people themselves but there has been many more graduates of the maritime academies than there were officer positions, so many companies are now or have been, the past couple of years, hiring graduate academy graduates with licenses into unlicensed positions. We started that, 1986. Number of those folks have moved up into the officer ranks and we believe make better officers with the experience they do have. We haven't had opportunities for all of them, unfortunately.

Q. However, does a degree and a mate's license necessarily make them a seasoned able-bodied seaman?

A. Well, you have to compare it to what else is available, quite frankly. It was our

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

decision, looking at what was available from other sources, that that was clearly the best source for us to tap into.

MR. ARMENTROUT: Thank you. I have no further questions.

EXAMINATION

BY DR. DICKINSON:

Q. Mr. Iarossi, if a crew member is--has an alcohol problem and they go through a rehabilitation program and then they're reassigned to, maybe, another vessel who is made aware of that on the vessel that they go to?

A. Within the past few years, the program has been totally confidential, so quite frankly, no one knows.

Q. So the master of the new vessel would have no idea that the individual has gone through a rehab program--

A. The master would not know. I would not know. No one in the shipping company would know and, to my knowledge, no one in Exxon would know.

Q. So in other words, no one would be able to check that individual, except that--the individual him or herself?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. That's true. The individual actually checks in with a separate company--health--I believe it's Human Affairs Incorporated. They have offices spread throughout the US. The cost of that program goes to the medical insurance program, so Exxon doesn't even know from the standpoint of picking up medical costs. That goes through, I believe, Travelers Insurance or one of those companies and that's also confidential.

Q. So it's because of confidentiality that no one would know?

A. Yes. That's, I believe one of the these--one of these exhibits spell out the program as it's been for the past few years.

Q. As a good manager would you, if you were a master, like to know that somebody on your crew has been through and gotten help? Would you like to be aware of that?

A. Well, there are trade-offs involved. The confidentiality is the keystone of getting people to volunteer for the program, as I understand. I didn't take part in developing the program. It's Exxon-wide. There was a lot of outside consultation, a lot of outside support and

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

study in going into developing this EHAP program. The cornerstone of it is confidentiality. Now, the trade-off is just what you're speaking about as far as awareness within the company. But in order to gain that awareness most experts say you lose most of the participants. So, in the end, you won't gain because without the confidentiality, people will not voluntarily go through the program. So, in the end you're not better off, you're worse off. But I'm not an expert in this area. Just my understanding of it.

Q. I understand. Are you familiar with a program in the aviation industry known as Cockpit Resource Management?

A. I have learned about the airline programs. This is in relation to rehabilitation?

Q. This is in relation to better communication between a pilot and the co-pilot in the airplane, captain and the first officer, flight engineer, up front, flight attendants, better cooperation, training together, assertiveness training and those types of things. Are you--

A. I'm not familiar with it in any

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

detail, no.

Q. Is there any way--is there anything in the marine industry that is akin to that? And I will coin a phrase, BRM, Bridge Resource Management?

A. Well, I think the opportunity is they're using a simulator to train teams, if that's what you're driving at, as far as getting team interaction centered around, they simulate it. I believe that opportunity is there. Should be there.

Q. Initially when Cockpit Resource Management came into effect 10 or 12 years ago there appear to be a lot of hesistation from some of old timers, charm school, things of that nature. Would you think that would--the same thing would apply if the marine industry attempted to push a program like that?

A. You mean as far as relunctance on the part of the participants? Perhaps. But I think it would be a distinct minority. And if the program made sense, I don't think that should dissuade a company from going through it. A lot of times the initial reactions of participants are not the same as the reaction after they have gone

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

through the program. Anything new will draw some sort of resistance, but it's been my experience that most of the time after people go through a program, if the program is well thought out, their opinion will change.

Q. Do you think Exxon would be willing to attempt to be a catalyst in this area?

A. We are looking very hard at it right now, yes.

DR. DICKINSON: Thank you, Mr. Iarossi. I appreciate your time. You're excused.

THE WITNESS: Thank you.

DR. DICKINSON: I have five minutes to four. Before we break, I just want to introduce--thank you, sir--Mr. James Michelangelo is our regional field chief. I failed to introduce him on Monday. Jim can you just raise your hand?

Thank you. He has been very helpful to us in this hearing. And also Bill Sherrod has been here all week. And thank you, sir. Bill, I appreciate your time and effort.

Let's take a ten-minute break and we will be back with our next witness, which, by the way, will be Mr. Frank Flyntz because he has an

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

airplane problem. So, if they're no objections, we will be back in 10 minutes with Mr. Flyntz. Thank you.

(Short break.)

DR. DICKINSON: I would like to call to the witness stand, Mr. Frank Flyntz, Assistant Chief Merchant Vessel, Personnel Division, Coast Guard Headquarters.

Mr. Flyntz.

FRANK JOSEPH FLYNTZ,

was called as a witness and, having been duly sworn, was examined and testified as follows:

MR. FLYLNTZ: I do.

MR. COLUCCIELLO: Please be seated.

EXAMINATION

BY MR. COLUCCIELLO:

Q. Please state your full name.

A. Frank Joseph Flyntz.

Q. And where are you employed?

A. I'm a civilian employee of the United States Coast Guard, at Coast Guard Headquarters in Washington, D.C.

Q. And what capacity are you employed in?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. My title is the Assistant Chief of Merchant Vessel Personnel.

Q. Do you hold any certificates or licenses?

A. Yes, sir. I presently hold a Coast Guard license as master: oceans, steam and motor vessels, not more than 1,600 gross tons; master, oceans, auxillary sail of vessels, not more than 100 gross tons; second mate, oceans, any gross tons, and radar observer.

MR. COLUCCIELLO: All right, sir. Mr. Woody will ask you some further questions.

EXAMINATION

BY MR. WOODY:

Q. What is--what is the mission of the office that you're assigned to at Coast Guard Headquarters?

A. We basically run the national marine licensing program for the Office of Marine Safety, Security and Environmental Protection. There is basically seven functions to that program. Seaman's documentation which keeps the records of seamen, accumulates their sea time and basically keeps their biographical records. We have a licensing record function where we track

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

people who have licenses. Make decisions in policy matters on licensing in general, and decide matters of alternate--basically alternate qualifications. We have a section that deals with mariners' qualifications which includes all qualifications for licenses and unlicensed ratings. And, overseas, approximately 150 nautical schools around the country including oversight of the--as far as licensing goes, the five state maritime academies, Great Lakes Maritime Academy and the Federal Maritime Academy. We have a section does manning, basically sets the quality and the number of people assigned to each vessel, commerical vessel. We have a section that develops the marine licenses that we use. It's part of our qualification process. We have a section that deals with merchant marine veterans and we have a staff that deals with pilotage, both setting, regulating pilotage and also developing the pilotage rates for the Great Lakes.

Q. Does your office originate any drug/alcohol regulations?

A. Yes, sir. My office has drafted two drug/alcohol regulations in the past several

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

years. They have been done in conjunction with another office as well but we began to draft it, participate in it. One is the operating-while-intoxicated package and the other one is the one that is not totally implemented through drug/alcohol program.

Q. Okay. I would like, now, to direct a few questions to you regarding pilotage in Valdez and in Prince William Sound. First, can you give us any kind of a history or background of pilotage into Port Valdez?

A. Well, pilotage into Valdez is for coast-wise vessels or all vessels, really. It's governed by statutes which we basically require the vessels to be under the direction and control of the pilot from the high seas into the actual terminal.

Q. Are you familiar with any background as to the rationale for state pilots piloting all tank vessels into Port Valdez including domestic tank vessels?

A. Apparently, that is based on some agreement with the coast-wise tanker companies to take a state pilot. But it's really a misnomer because the state pilot in that instance is acting

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

under the authority of his federal pilotage license.

Q. Right. I would like to direct the next few questions to pilotage in Prince William Sound, specifically, from Cape Hinchinbrook all the way up to some point in Valdez Arm. At the present time, there is a notice of proposed rule-making, which is Exhibit 9 Alpha. I believe that should be in your package.

A. Okay.

Q. I wonder if you could provide us with the background or the origins for this particular rule-making and what preceding rule-making efforts were occurring before this one?

A. Well, as a practical matter behind this rule-making, as I said, the statute requires the vessels to be under direction and control of the pilot from the--when it leaves the high seas into the terminal, which would really mean a few miles outside of Hinchinbrook Inlet. The geographic conditions are such in that body of water that it is very dangerous for the pilot vessel to operate out there, as well as it is for the pilot to make the transfer out in that area.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Because of that, the state--the foreign vessels, which, of course, come under state pilotage regulations, do not take their pilot until they're further in by Bligh Reef or even further in. The Captain of the Port, under his authority, under unusual circumstances, issued an order which essentially excuses the coast-wise vessel from the pilotage requirement under some very controlled circumstances. Someplace in that time frame, the statute was changed to allow the Secretary to set the pilotage waters in Prince William Sound. This is one exception that I know of throughout the whole country where the Secretary can change, by rule-making, the pilotage waters. After the statute was changed, we developed this particular notice of proposed rule-making. It hasn't been acted upon, but during the comment period, we received not one negative comment on the rule-making.

Q. I specifically direct your attention to page 4, towards the top of the page. And to the left-hand column where it's entitled "Prince William Sound Pilotage" and down here where it says, subparagraph (a), it starts reading: "Proceeding directly to or from the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

established Valdez/Whittier pilot station..." What is the meaning of this text?

A. Well, the meaning behind this particular part of the text is to further narrow down the exception. It's meant to keep the trade open in Prince William Sound in that particular area where it was felt that it may not require pilotage in that open area below the Rocky Point down to the mouth, specifically for those vessels traveling in and out. And if you read the part before subparagraph A, it talks about "...when entering or departing Prince William Sound..." The idea behind that part of the text is to not include other vessels who may require pilots and who are simply traversing the Prince William Sound back and forth through some other destination. It's not a blanket.

Q. All right. Now, specifically referring to tank vessels in lieu--involved in the carrage of North Slope crude oil, proceeding from Hinchinbrook up to Port Valdez, would this eliminate the need for pilotage of those vessels between Hinchinbrook and Rocky Point?

A. Yes, it would.

Q. Now, you mentioned that you had

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

received no comments, no negative comments against the enactment--I shouldn't say enactment, but the promulgation or representation of this regulation; is that correct?

A. That's correct.

Q. Now, having not received any negative comments from the proposed rule-making, in the event this grounding had not occurred, what would have been the outcome of this proposed rule-making?

A. We've been holding this particular rule for reasons not relating to the tanker trade in Valdez, reasons related to tow boat operations and pilotage on those. Once those--if this accident had not happened, and this is pure speculation because, of course, the accident had happened, we probably would have solved the other problems and gone ahead with of the rule-making.

Q. All right. Without a requirement for pilotage between Cape Hinchinbrook and Rocky Point, would there have been any other Coast Guard regulations to your knowledge requiring two people to be on the bridge of a vessel navigating in Prince William Sound?

A. Well, the Captain Of The Port

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Order requires two people to be on the bridge. And that is still in effect, so the vessel, in order to take advantage of the waiver of pilotage, would have to comply, and there is several requirements. There is a requirement for advance permission. There is a more stringent requirement for reporting position. There's a two people requirement, so forth.

Q. We understand that is the circumstances now, because there is a requirement for federal pilotage. But if federal pilotage were--if the requirement were eliminated, then would the Captain of the Port Order become moot?

A. Well, it's pure speculation since we haven't gotten to publishing the rule. I would not assume that we would relax the regulation. And it would just be merely using this regulation and keeping the additional port requirements on the vessel.

Q. Was the--

A. But that is pure speculation.

Q. Was one motivation for the rule-making that on pilot--vessels that didn't have--excuse me. Was the motivation because of nonpilotage vessels? In other words, those

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

vessels that did not have the federal pilotage? Is that the motivating element that got this particular part of the rule-making in action?

A. Well, the motivation was to facilitate the trade into the Port of Valdez and since the pilots--it's not feasible to move a pilot vessel all the way out to Hinchinbrook Inlet. It's to relax the rule so that the vessels that do not have a federal pilot aboard could still make the transit into some certain conditions.

Q. But it seemed in reading the Captain Of The Port Order, which is 1-80, Exhibit 9 Delta also in your envelope, that the COTP Order did make a provision for those vessels that did not have the required federal pilotage. And since it did seem to answer the problem we were wondering why the need for a change in pilotage. Or if it did not answer the--if it did have serious problems we would like to hear about them?

A. I don't think I understand the question.

Q. All right. Surely. I think you said that it was a Captain to Port Order, is 1-80 and it is 9D, if you would like to look at your

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

package.

A. That's correct.

Q. And--because you recited from it a few minutes ago. Now, this makes provision for vessels to enter Prince William Sound that did not have federal pilotage?

A. That's correct.

Q. It--

A. And you're wondering why we needed rule-making?

Q. That's correct.

A. Well, the Captain of the Port Order is supposed to be used in unusual circumstances and this particular Captain to the Port Order had been in effect for quite awhile, and the proper long-term fix would be to--especially in light of the change in the statute--would be to do a rule-making.

Q. Now, as a result of the accident involving the EXXON Valdez has Coast Guard Headquarters come out with any other directives or any other policy regarding pilotage in Prince William Sound?

A. There was a Commandant Message changing requirements, and I had not seen the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

message, but I understand it restricted the transits to daylight hours only and puts some other conditions on the transit, in light of the Valdez accident.

Q. Would foreign-flag vessels be able to, say, hire an American officer who had the federal pilotage and comply with the requirement for federal pilotage?

A. Foreign-flag vessels come under state pilotage statutes.

Q. But state does not require pilotage--state pilotage from Hinchinbrook to the Bligh Reef area?

A. That is correct. And that is a state matter.

Q. The only matter--the only requirement is the one of a federal requirement by the US Coast Guard. My question is: Would it meet requirement if a foreign-flag vessel had an American with a federal pilot's license?

A. As far as foreign-flag vessels go, coming into and out of ports, we have no authority in regard to pilotage.

Q. That's correct. I can understand you could not require them, but if they did have

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

an American with federal pilotage would that answer your Coast Guard requirements?

A. We don't have a requirement for foreign-flag vessels. I'm not trying to avoid your question, but I don't see how you can meet a nonrequirement.

Q. Okay. I understand what you're saying. Does this thing--this lack of authority to require federal pilotage for foreign vessels, does that in any way nullify the Captain of the Port Order?

A. No, sir. Captain of the Port Order applies to vessels that are required to have federal pilots aboard.

Q. Does it apply to the foreign-flag vessels, then?

A. In some unusual circumstances the captain aboard may make orders affecting foreign-flag vessels, but it's not specifically aimed at foreign flag vessels as to pilotage. As I say, we don't have authority over foreign-flag vessels and pilotage.

Q. But if a foreign-flag vessel entered Prince William Sound at this time, it would be complying with the Captain of the Port

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Order; is that correct?

A. I really don't how know to answer the question. I don't--the Captain of port Order applies to foreign flag vessels.

Q. All right. Thank you. Now, since the grounding of the EXXON Valdez has Coast Guard Headquarters made a re-evaluation of the pilotage requirements for Prince William Sound; and if so, could you tell us what they are?

A. Well, in order to properly run the licensing program re-evaluate the program on a continual basis. And, of course, in light of a disaster of this sort, we intensify our efforts to evaluate--re-evaluate, so we are reviewing all of our pilotage requirements.

Q. Specifically, just for Prince William Sound, do you have any policy changes that you--that represent Coast Guard policy?

A. None that have been published so far.

Q. Are you able to provide us--provide the board with what you believe the policy is, or can you represent to us what the Coast Guard Headquarters' policy is regarding pilotage in Prince William Sound?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. I can only answer that by saying that when I left headquarters, the staffs were drafting possibilities to take corrective action. But so far we have not come up with a policy on changing the requirements on Prince William Sound other than the message I mentioned before, which is a short-term solution.

MR. WOODY: I see. I think that's all the questions that I have on pilotage at this time.

Mr. Sager will have some questions, further questions.

EXAMINATION

BY MR. SAGER:

Q. Mr. Flyntz, would you get a copy of Exhibit 10F?

A. I don't have 10F.

Q. Why don't we go ahead and start and we will come back and pick it up? The reason we are addressing manning issues in this hearing is because the EXXON Valdez was a reduced-crew vessel. And we would like to clarify some of the issues that are involved in manning and in reduced manning, reduced-crew vessels. Specifically, what does the term "manning of a vessel" refer to?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Well, as we use it in the Merchant Vessel Personnel Division, it means the number and the qualifications of the people necessary--the minimum number and qualifications necessary to safely operate the vessel. We set that through the certificate of inspection.

Q. Is there a difference between the term manning and minimum manning?

A. I suppose so. The vessels traditionally have carried more persons than the Coast Guard requires. For instance, the most obvious example is the Coast Guard never requires a steward's department.

Q. What is referred--what does reduced manning refer to?

A. Well, if I may, I think reduced manning, in the way we have been using it during this hearing, might be a misnomer. What we really try to set is design manning or proper manning and because of the way we do that there is a step in the process where we actually reduce the manning.

Q. Would you identify that process for us for reducing manning?

A. Well, when we set the manning for a new vessel it normally starts with some sort of

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

conceptual meeting where we approve the concept that the operator, or the builder or the owner has in mind. That becomes a design target when he builds a vessel. That's--if it happens to be a modern vessel that's relying on automation to carry a minimum number of people, then at the present time what we require is that the vessel initially be manned as if some of that equipment does not work as--or may not work as advertised, so we carry additional people in case they have to pick up the load for where the automation does not work. We require that during a trial period. When that trial period is over and it's successful, then, we take those additional people off the ship, off the crew and that's the step where we refer to as reduced manning. This can also happen in another case, which was brought to my attention when Mr. Iarossi was testifying, in an older vessel that is then fitted with some automated equipment making some of the crew unnecessary, their jobs unnecessary, then we do the same sort of process. We make it go back to sea with the original manning, check that the automated equipment actually works as advertised and, then, take those people off. So it's really

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

design manning or proper manning.

Q. Could we be a little more specific in terms of the actual chain of events that occurs, let's say in a new vessel like the EXXON Valdez?

A. As I said, there is a conceptual meeting which becomes a design target. When the vessel is completed the--there is really three players in the process. There is the officer in charge of regular inspection, OCMI, who is the man in the field who actually visits the ship or has his people in his command visit the ship and inspect it. And, then, we have the district office and then, of course, headquarters. What would happen is they would propose the manning and they would propose the initial manning, and that would be approved by the district office and approved by headquarters. And, then, they would go ahead and do it.

Q. How would they support that proposal?

A. Well, there's several things that develope the manning. There are some statutes that require a certain number of mates and a certain number of people, because three-watch

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

system is required. The design of the ship, itself, especially in the engine room would determine how many engineers you need to run the vessel. Now, initially we would probably require that watches be stood. But the design in most modern vessels is for an unattended engine room, so, then, they would be able to up those watches and reduce the manning somewhat. Essentially, you would look at other vessels of the same type that have been successful, and that might be your benchmark. So that's where you would start.

Q. By the same type, you're referring to vessels that are similarly equipped?

A. Yes. Each--the manning is set for each vessel on a vessel-specific basis so there is no absolute standard if a designer makes a more efficient ship, then the manning may be different. If the equipment does not work as it was intended, then the manning may be increased.

Q. Could you state what some of the kinds of innovations that existed on EXXON Valdez where that permitted a smaller crew complement?

A. Well, starting with the engine room the Valdez is a fully-automated ship as I understand it. I haven't been on the ship and

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

it's a diesel engine, engine room and it's designed to be bridge-controlled and operated without watchstanders throughout most of the voyage. So, in that case, we require normally three or four engineers. In this case we required four--chief, a first, second and third--who, if the automation did not work, could go back and actually stand the watches.

On the deck side of the Valdez, we--it had incorporated some of the most modern things that you could have on the bridge. That is, all the most modern navigation equipment, the best in visibility, a remote calling system so you do not have to have an extra person on the bridge just to go around the ship and wake up the next watch, for instance. Technology has overtaken that particular function. There is coffee facilities on the bridge. There is head facilities on the bridge, so that the ship may be designed for two-man watch. Under normal circumstances that would be the mate and an able-bodied seaman. You need an able-bodied seaman because he has to be standing by to take the helm should it become necessary. So that would mean a master and three mates and then three able-seaman. And, then, we

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

require in that particular vessel, at the present time, we instituted the maintenance department concept where there were three maintenance persons carried, all of which were required to have an able-bodied seaman endorsement. Now, that allows the flexibility of either using the maintenance person as day workers to do maintenance either on deck or in the engine room or, should circumstances arise, the master could set them on watches on the bridge as--

Q. Did you say that all three had to have able-bodied seamen's qualifications?

A. I believe this--I don't have the certificate of inspection in front of me. I believe they have to have able-bodied certificates, or I'm not sure, but I think it says two of them can be substituted by a specially-trained ordinary seaman. That's a device we use to allow entry ratings. In other words, they--a small percentage of the ABs that have to be on a ship can be substituted by entry ratings of specially trained. I'm not sure it's on there.

Q. Who actually makes the decisions for proving the manning for a vessel, a new vessel

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

such as the EXXON Valdez?

A. Well, the ultimate decision probably rests on the OCMI. He is the man on the scene. He's the man that signs the certificate of inspection. That's done with approval from the NBP office and headquarters. And that would be signed by myself or my boss, Captain Grady. Approval letter.

Q. What do you get in the way of documentation that permits you to evaluate the manning at headquarters?

A. Well, we get rather a large packet and the initial concept may include the design of the vessel, drawings and a write up on how they plan to utilize the people that they are proposing for the crew. And then when trial period is actually done, there is a lot of documentation that we would require, for instance, excuse me, the overtime records, the--and the results of our Coast Guard officer who makes the trip on the vessel and actually interviews the crew.

Q. Are maintenance records used?

A. Oh, and maintenance records, of course. That's--the maintenance records are there to approve the effectiveness of the automation.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Now, once you have the ship operating with a crew that has been proposed, is there any follow-up? Does the Coast Guard monitor the workload for the--for the existing crew compliment?

A. Yes, we do. Every two years a new COI has to be issued and, then, there's a mid-year inspection by the OCMI. And, then, of course, if the automation is not working correctly or there are other problems on the ship, he may actually increase the men.

Q. What other things might be indicative of a crew being of insufficient size?

A. None come to mind. It has never happened that there has been some evidence that the crew needs to be bigger. Normally, the example that comes to mind is that the equipment that they relied upon to take the place of some of the people no longer functions. And, then, they have to--of course, you have to substitue people for the automated equipment.

Q. In the case of an inspection where maintenance appeared to be less than adequate, would that, perhaps, be a clue or indicative of an undersized crew?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Not necessarily because with the concept of minimum manning, companies often rely upon riding crews and in-port maintenance or things like that. What it may indicate is that those functions are not being carried out. In other words, it could be a factor of not enough crew on the vessel or not enough in-port maintenance. We would have to look at that on a case-by-case basis.

Q. To what extent is the ship owner or the operator responsible for safe manning levels?

A. He's ultimately responsible for the proper manning of his vessel.

Q. How is he made responsible for that?

A. I'm not sure I quite understand the question. We issue the certificate of inspection which says this is the minimum number of people you need to operate the vessel. If the owner of the vessel knows or should know that there are other factors that we are not aware of then he would have to make up the difference. As I said in the beginning, or maybe I didn't say, traditional vessels have been manned with more

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

people than we put on our certificate of inspection. Many times in the past, there are vessels that carry day workers to do maintenance, for example, and they are not included in our minimum manning. If the owner of the vessel, the operator feels that that maintenance is necessary for the safe operation of the vessel or any other reason that he deems necessary, then he puts extra people on. I hope that answers the question.

Q. Yes. There has been some reference to a minimum standard for manning vessels. Does the Coast Guard have, in fact, a minimum standard?

A. No, I don't believe we do. We have--we set the manning, as I said, on a vessel-specific basis. There are some things that become the minimum because of the statutes that we are bound by. For instance, we really need to have three mates on a vessel like the Valdez because there, this statute requires it. You really need to have, in the same token, three ABs because it's required to have three watches.

Q. What are the qualifications for a master?

A. Well, the qualifications for a

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

master's license--

Q. Yes, for master's license.

A. --which as we heard may or may not be the same thing, and that's a good point, is having a master license doesn't mean that you automatically get to sail master. Most companies have a rigid screening process. In order to get to be a master the person would have to get--first, get to be a third mate. And there is really two ways to get to that point. One would be to start as an unlicensed member, as entry rating and spend 18 months on deck as an ordinary seaman, possibly go to some training schools, get to be an able-bodied seaman. There is a testing process involved there and there is a couple of additional things he would probably have to do, like a life boatman's certificate. Then, with a total of three years of sea time, he would be eligible, and I stress eligible, to sit for third mate's license. Most unlicensed people either don't make that jump or take a much longer time before they are ready to go to the third mate exam. And if they do, they normally go to some schooling, maybe several of the industry schools that exist, because third mate exam is a four day,

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

pretty rigorous exam. Most of the people who are third mates today probably come through one of the maritime academies, either one of the five state academies at Maine, Mass., New York, Texas and California, and is a federal academy. At that point, they would have had four rigorous years of maritime training. And, then, they would take this four-day exam, plus some other things like radar schools and fire fighting and first aid and CPR and all that stuff. At that point these two individuals would be more or less equal.

A year of sea time would be required to go to the next step which means 360 days at sea that we could document. And based on that experience, all of our licensing as you seen from my explanation is based on practical experience. Then, a test to the second-mate level would be another four-day exam. And then the same process to the chief-mate level, another four-day exam until he got to be a master. The exam process, I would say, is pretty rigorous. Most mariners take it pretty seriously. Most attend the schools before they actually take the next break.

Q. Well, in this case we have had examples of both types of mates on this particular

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

vessel?

A. That's correct.

Q. In your view, was Mr. Cousins a qualified mate?

A. Not having his record in front of me, from what I can recollect he is--he had only a second mate's license. He had been a mate for several years. I would say if he has reached that level he should be a qualified mate. But we have--we would have tested him at the second-mate level probably just about everything that you need to know about navigation, certainly everything he would need to know to do the job that he was assigned on this ship. Even at the third mate level he would have been rigorously tested in chart-plotting and maneuvering a ship and making a course and so forth.

Q. What were his deficiencies, then?

A. I think that's a matter of conjecture. It's something that is under investigation.

Q. Well, I'm referring more to his certification, his pilotage.

A. Well, pilotage is another license or in the case of a lot of mariners, it's an

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

endorsement on an existing license. But it's another category. What it does--what it is meant to do is to provide those--knowledge of those specific waters over which a vessel is traveling. And the way you get pilotage is to make a designated number of trips over the waters. And then have a certain amount of sea time in which case of a licensed mate, he already has his sea time and experience. But do those two things as a practical matter and then take a two-part test that we would give and it's considered, I think I can safely say, one of the most intimidating tests that a mariner takes is the pilot's exam. One part is a written exam and local knowledge and ship maneuvering and so on. And the really hard part for most people is the chart plot which requires, if you look at this chart behind me, basically a mariner to take a chart like that that may have an outline of the land and that's all. And he would be required to put in all of those navigation aids and lights in the proper position and the soundings, those little numbers that you see around there that are near the route and draw in the route and then compass rose. It's really quite difficult.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

So when you say, what was his deficiency, I have to say it's a technical deficiency in that part. He was by no means, according to our licensing procedure, a deficient navigator since we had tested him on all the things he should have known or did know I'm sure on how to navigate the vessel.

Q. Thank you. On the exhibit that you were just given, 10F, there is a summary of the evolution of manning from the 1950s through vessels of the future. Could you trace, briefly, the salient points of that evolution, either using this exhibit or not using the exhibit?

A. Well, this exhibit is an excellent guide. In the '50s--I have to make a count here--they have a crew of 24, which would be 24 people on the certificate of inspection. And I think we heard before that normally the ship would carry a few more than that. Included on this list is a master and three mates, a radio officer, six able-bodied seamen and three ordinary seamen. In the engine room there is a chief and three assistant engineers, three firemen, water tenders and three oilers. The first thing that probably happened in the '60's was an improvement in the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

way that steamship's boilers were tended making the job of the firemen/watertenders kind of redundant. Before that time the person actually had to stay by the sight glass and by the boiler and insure that the level of the boilers was correct, and change the burners and all of those things that the unlicensed people in the engine room do. So that was three that was deleted. That takes us down to about 21. In the '70's, two things happened: one is the requirement for the oilers. It was deleted because a fully-automated steam plant was developed where you had pilothouse controls and the boiler--even the burners and the other maintenance that they had to do were automated, centralized controls and so on.

Also at that time we begin to delete the ordinary seaman. And the ordinary--the typical four-man deck watch was--had an ordinary seaman who was kind of the third person. One of the able seamen would be a lookout and one would be actually steering or standing by the auto pilot, which, by the way, has become much better. And the ordinary would be a person that would call the next watch. He would be the person that would relieve the other guys so that they would go down

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

to the mess room and get coffee bring, you know, coffee, for instance, bring up coffee to the mate. And as I explained before, the bridge now had coffee facilities and automatic call systems, better visibility and so on, so that was another person relieved. That brings us down, I think, to 18.

And I think in the '80's--I did something wrong with the numbers here. In the '80's is when we actually deleted the three oilers, I guess, on final diesel vessels. Because you don't need the oilers anymore and that's also when we developed a concept of the maintenance department which makes the remaining three able seamen or maintenance persons more flexible.

Final comment here in the '90's, is the possible deletion of another person. We haven't seen that yet, but it's certainly a possibility.

Q. As a result of the changes in vessels over the years, have you seen--has the Coast Guard observed a change in seamanship?

A. Well, certainly different things are required today. I think the emphasis on splicing lines and so forth has changed. And I know we constantly reflect that in our licensing

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

examination, both our license examination and our unlicensed-rating examinations. We send the people who develop these out to the field to look at things such as constelate tension, the more winches they have on the ships which they probably didn't have 20 years ago, but very few. So, yes, there is a change and we try to constantly keep up with it.

Q. I would like to ask you a question that really is a repeat of one of Mr. Danaher's questions. In the view of the Coast Guard, how does a four-year degree equate with several years of sea experience in the deck department?

A. Well, that could be a difficult question to answer because I would have to give my own opinion which I will, but by no means everybody would agree with it. I would say that we have a terrific system of maritime training in this country with the five state deep-water academies and federal academies.

It's a trade-off and I'm basing this on about 11 years in the training business. It's a trade-off between sending a person out on a ship, on-the-job training, where you have no Qaulity Control, and training may or may not be really

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

good for the three years, or sending him to a school, some of which have been in existence for 100 years, with a highly-trained staff in which every--not every moment, but most of his productive time is accounted for for a four year period and is directed towards one goal.

And I think, as I got through the answer, I just realized you talked about the degree, but I think a licensed program is the part that really makes him well trained to be a mate. The degree is there probably for other reasons that allows a more rounded person, probably one who can learn things a little easier later on. And it also makes it possible for that person to seek other employment in the marine industry of which many graduates do gravitate to. I hope that answers the question. It's somewhat my opinion.

Q. One last question on this subject. Is there some risk--and this may be a very difficult question; it may not be answerable--Is there some risk in developing a group of able-bodied seamen all of whom are motivated to advance to the officers' ranks, but not necessarily motivated to become or develop their expertise as able-bodied seamen? If that

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

risk exists are we, perhaps, hoping to not having available seamen when we need them?

A. Do you mean is it possible we would be to making a mistake by having people over-qualified?

Q. Yes. And motivated to be something other than the position that they're serving.

A. I don't think so. I think the people we have from the academies, if they are serving as able seamen, are probably doing a pretty good job because they are so well-trained. And I haven't heard--in my position we keep track of numbers of seamen fairly regularly, and I haven't seen a complaint that there is too many third mates and not enough able seamen. From where I sit, there is plenty of able seamen that do not have licenses and they are probably very qualified.

Q. Is there any law to require that a master or mate stand as watch in a wheelhouse?

A. I don't know if there is a law that says that. It's certainly traditional that the master or that the mate stand as watch in a wheelhouse. I've never heard of a mate standing

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

as watch anywhere else, other than someplace on the bridge. It's a matter--if I could elaborate, I think it's a little bit a matter of function. It would be very difficulty, too, for the mate to carry out all of his duties and not be either in the wheelhouse or very close to it. The functions that he needs to carry out, probably, number one, to keep a lookout; number two, to navigate; number three, to avoid collision as the top three things he needs to do. And somewhere else, I don't see how he can carry out those duties.

Q. Does the Coast Guard have any interest specifically instructing or training for shipboard officers to enable them to detect impairment from fatigue?

A. No. I think the Coast Guard has--the only way I can answer that--it's such a specific question. Let me answer it in a more general way. The Coast Guard has participated in three studies on the issue of fatigue, the one National Academy of Science's study of smaller crews, the effect of small crew size on fatigue. We have a study that we're participating with the Maritime Administration on fatigue. And the IMO is doing a study on fatigue. And if it turns out

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

that that is a problem and you--the appropriate way to solve the problem would be to instruct the officers to be better at recognizing fatigue, then I would say, yes.

Q. Perhaps I put the cart before the horse. But why has fatigue been an issue of concern? Why are we sponsoring studies of fatigue at this time?

A. I think it's just a matter--it's a logical conclusion. As I say, I think it's required if you're running a licensing program and a manning program that you constantly review certain safety issues and safety is our main mission in the Marine Safety Section of the Coast Guard, so when you start to reduce the crew there are certain things that you wonder are they doing more things or are they required to do more things, and it's just logical to look into the safety/fatigue issue. I don't know if there is more concern to it than that it is a logical thing to look at once you've made certain changes.

Q. To what extent do the--does the minimum manning level reflect the need to operate on a worse-case emergency?

A. Well, one of the things that we

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

take into account, perhaps I neglected to say that when we set them at a manning level, is the ability of the ship to--excuse me--react to the emergencies that we can anticipate. Are there enough people to set up to fight a fire within the limits that we feel a crew should be able to fight a fire? Are there enough people to set watches, additional people in the watches so that if we are in reduced visibility for an extended period of time, can we have an augmented bridge watch? And we do that. We have additional people that can be lookouts, for instance. If the automation in the engine room failed, can we set up engine room watches? Yes, we can do that, because we had the people to do it.

Q. Has the Coast Guard proposed any training for supervision of reduced crews?

A. Could you ask--could you rephrase the question?

Q. Well, has the Coast Guard, or to your knowledge, have you participated in any discussions about possible training that is devoted to supervisors of reduced crew vessels?

A. Meaning the ship's officers who need to deal with less people?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Principally the ship's officers.

A. I don't think we specifically addressed it in that fashion, although, as I said before, our license examinations attempt to constantly address those things, those issues that change with the changing times. In addition to that, there is some industry training that deals with such things as bridge-team training and the interaction of the people on the bridge.

Q. To what extent does the environmental sensitiviy of a route such as Prince William Sound, to what extent does this route influence manning setting?

A. Essentially, we consider all routes environmentally sensitive, so we attempt to man the ship so that it can safely navigate wherever it's going to be and not destroy the environment.

Q. So are we saying that the coast of Alaska is as important as the coast of California? If you're from California I'm sure--

A. From where I sit in Washington, every state's coast line is very important to us.

Q. As a result of this accident, has the Coast Guard implemented any changes for

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

identifying persons who might pose greater risk, licensed persons who might pose greater risks?

A. Well, the first thing we have done is we notified all of our field offices to augment the wording on license applications, and then also inform the individual so there is no doubt that a DWI or DUI conviction is a--other than a minor traffic incident. We have--that's by way of identification. We have looked into trying to get the authority to have the access and natural driving index and that's the beginning of where we are going, those two things.

Q. In this case of Captain Hazelwood, had you had information of his driving record prior to his last re-licensing, would that have effected his re-licensing?

A. Well, we have the authority to check into the character and habits of life for a licensed individual, anytime we are going to issue a license or re-issue a license. So had that--those facts been known to the local OCMI, he would have checked into it further, investigated it further. Perhaps, he would have refused to give him a license.

MR. SAGER: That's all I have.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Thank you.

DR. DICKINSON: Dr. Birky.

EXAMINATION

BY DR. BIRKY:

Q. Yes. I would like to raise a few questions about the drug-testing regulations that you had mentioned earlier in your testimony, if I may. I think you referred to two of those and I believe those were Exhibits 2A and 2B. And 2A being the '87 regulations.

A. I don't have those.

MR. COLUCCIELLO: Would you identify those? They're not 2A and 2B Exhibits.

DR. BIRKY: I'm sorry. Did I say 2--I meant 10. I beg your pardon. 10A, Alpha, and 10 Bravo.

THE WITNESS: Okay.

BY DR. BIRKY:

Q. If you would, in terms of 10A, the December '87 document, what were the--what are the criteria for determining, in that regulation, the need to test and where are the regulations concerning use of alcohol and drugs in that regulation.

A. Well, it sets up two standards:

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

the behavioral standard and blood/alcohol content standard which is .04 for the commercial vessels, .10 for pleasure vessels. And then it goes on to talk about alcohol use and the general provisions are that you cannot consume alcohol within four hours of taking over your duties or you can't consume alcohol while you are on watch, which I think almost goes without saying. I think that covers it.

Q. Okay. And what in terms of post-accident testing on commercial vehicles--or commercial vessels? Are we dependent on getting a blood specimen for determining whether or not alcohol or drugs were involved in that incident?

A. This regulation allows for the post casualty testing but does not require it depending on the on-scene investigator. Now what we--this goes beyond this document. The policy was that the local commanders were encouraged to seek local law enforcement agencies' help in conducting blood alcohol tests.

Q. And is it dependent on seeking local law enforcement to do that?

A. Well, the reg isn't, the regulation isn't, but the policy is. At present,

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

we have an interim policy in force where we encourage the local commands to become familiar with the regulation to develop this relationship with the local law enforcement agencies and that was while we are developing a permanent policy to possibly to develop--obtain the equipment and the training which we presently don't have.

Q. In other words--let me ask a question for my own clarification a minute, if I can. You're referring to a regulation and you're referring separately to a policy and an interim policy?

A. Yes, sir.

Q. Can you be specific, what you mean by an interim policy? Is that another document?

A. Well, it was disseminated by message, I believe.

Q. Let me reiterate. This regulation allows the Coast Guard--first it sets a standard and allows the Coast Guard to do the test for intoxication--

A. And a few other things.

Q. It allows the Coast Guard to do the test for the intoxication?

A. That's correct.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. And how does the Coast Guard do that?

A. Well, at the present time, since this regulation has become final we have not put into effect training and the equipment necessary for our own offices, our own law enforcement people, to do this testing. In the meantime, we are relying on other law enforcement agencies.

Q. Well, let's take this case of the Valdez accident, if I may. Maybe that will illustrate to help qualify. The samples were taken from crew members of the Valdez.

A. That's correct.

Q. And they were taken by Coast Guard individuals, correct?

A. That's correct.

Q. They were sent to a private laboratory for analysis, correct?

A. I believe so.

Q. Now, is that part of the policy you're talking about, or is this an interim way to handle the problem?

A. No, that is allowed for in the regulations. It just so happened that there was a qualified person to do the testing in Valdez. Had

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

that person not been available from the testimony I heard in the last couple of days may not have or where they weren't sure that he was there at the time or whatever, their first response was to go to a local law enforcement agency and have him do the test, which is one of the ways that we could comply with this regulation.

Q. Is the policy that is under development for the Coast Guard to do their own testing, would in the case of an incident, would that be simply a Breathalyzer or would that be in terms of your own internal policy for that?

A. I don't believe that has been developed yet. It could be a Breathalyzer, but we haven't determined that at this time.

Q. Well, let me question you further about the other exhibit you have because I think these, I guess, are very closely intertwined at this point. As I understood the 10 Bravo document, that also provides for post-accident testing that will be in effect as of, what, December or November of '89?

A. That's correct.

Q. Now, where does this one stand relative to the one you just told us about

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

the--this policy--this regulation and the policy you are developing?

A. They are two separate rule-makings. The 10 Bravo rule-making is one that directs the post-casualty testing for drug and alcohol. And the implementing policy has not been promulgated yet.

Q. So, will the policy that implements the 10 Alpha be in effect before the regulation that goes in effect as of November '89?

A. Well, there is policy in effect now for 10 Alpha. Are you asking me when we are going to be finished formulating a national policy on how to implement the regulations?

A. Yes.

A. I don't know.

Q. Well, if we have a accident, marine accident, tomorrow, what will happen in terms of post-accident testing? What is the policy that is in place right now to get samples, specimens as rapidly as possible within the constraints of the accident and so on?

A. Well, naturally, there is a lot of variables in your question. But assuming there isn't any problem to do this, the local commanding

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

officer would call as he is going to the site of the accident and beginning his investigation. He could--and were there a need to do alcohol testing, which let's just say there was in this case, there would be. As I said, 10 Alpha does not absolutely require the post-casualty testing. It allows for it. He would call the local law enforcement agency to get help in doing the testing.

Q. Well, one of the concerns that I have in this particular accident was the rather significant delay of obtaining samples for testing and I am wondering if that policy is being--the implementation policy for the regulation is being looked at to respond to that as rapidly as possible?

A. It's certainly being looked at.

Q. Let me, then, ask a further question about the regulation, the new regulation that goes in effect latter this year, 10 Bravo. As I understand that regulation, and maybe you can correct me if I'm wrong, that requires only the collection of urine; is that correct?

A. That's my understanding.

Q. Now, in post-accident testing

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

will, as far as the Coast Guard is concerned, will that provide information as to whether or not the individual was impaired by the use of alcohol and/or drugs?

A. Yes, sir, I believe it does.

Q. And how does it do that?

A. Well, the testing required by this regulation, and most of the requirements are on the employer, the sample would be obtained and then it should be sent to an approved laboratory, and then the results come back.

Q. The sample being, that's going to be collected is what?

A. A urine sample.

Q. And you can determine whether impairment has occurred from use of alcohol from an urine measurement?

A. I believe you can.

Q. I think we had testimony yesterday that indicated you cannot do it unless--except under very strict, rigid conditions which are generally not met and probably only limited to alcohol, and that is questionable. Is that corrected?

A. I don't know.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Were you here yesterday?

A. I was here for part of yesterday.

Q. The concern is whether or not this regulation can be implemented in a way that will provide information for post-accident testing, post-accident assessment of impairment from drug use. Has that been considered in the devlopment of the regulation?

A. Well, I believe that was the intent of the regulation.

DR. BIRKY: I have no further questions at this point.

DR. DICKINSON: Thank you, Dr. Birky. Captain Deppe.

Captain Deppe, excuse me one minute. Fine. Captain Deppe, you can ask your questions.

EXAMINATION

BY CAPTAIN DEPPE:

Q. I just want to clarify several points. Mr. Flyntz, did you say that you do have access to conviction information about people that are applying for a renewal of license or you do not have access to that information?

A. I don't believe I said either way. What we do, as you probably know for

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

original licenses, is we send out fingerprinting cards to--through our FBI source. And then we get a national conviction record. If there was some reason to do that, I believe we could fingerprint a person at the renewal time, although it's not commonly done.

Q. You do not check the renewal application, the form where people answer--where you asked if there has been any conviction? You do not check that with any source? You just take that at face value?

A. Well, as you probably know the--we work through the system of local offices and the local officer in charge of marine inspection is given a pretty wide latitude. Now, it's up to him to access the situation on-site. If he has reason to believe that the person is not telling the truth on an application, then he can pursue it further.

Q. Thank you. But there is no policy in the Coast Guard to check those things routinely or to spot-check them?

A. No, not to spot check them. It's strictly up to the local OCMI.

Q. Do you know if anyone has ever

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

been denied a license for having a DWI, if they have admitted to it on their renewal form?

A. I don't think there has ever been anyone denied a license for one DWI, but I do believe there have been cases where the--as I said before any affirmative answer to that question would cause the OCMI to investigate further and find out what the circumstances were, the possibility of rehabilitation and so forth. I think there have been cases where there have been several DWIs and the license has been denied, but I'm not sure.

CAPTAIN DEPPE: Okay. Thank you, very much. That's all I've got.

DR. DICKINSON: Mr. Shire.

MR. SHIRE: Mr. Chairman, no questions at this time.

DR. DICKINSON: Dr. LeResche.

DR. LeRESCHE: No questions, Mr. Chairman.

MR. DICKINSON: Cmdr. Waldron.

CMDR. WALDRON: No questions.

DR. DICKINSON: Mr. Colucciello.

EXAMINATION

BY MR. COLUCCIELLO:

Q. Mr. Flyntz, you referred several times to this policy that is guiding for the interim period, at least, for--that applies when 10A, Exhibit 10A is in force now. You indicated that it may have been a message, I believe, from the commandant. Would you supply that to us?

A. Yes, sir.

Q. Do you recall essentially what it says now?

A. It directs the field officers to become familiar with the content of the regulation and it discusses briefly the fact that it will take some time to develop the training and the equipment necessary to do the testing. And in the interim it encourages the local commanders to use, develop and use the resources of the local police forces.

Q. All right, sir. Now, with respect to manning, I heard all of the list of criteria used in determining the design manning, or whatever you call it, minimum manning some cases. But I was interested, I never heard any mention about considering what the workload is on the ship's officers while they are in port. Isn't this a very important factor particularly when

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

they are going to get under way and they may have been up all night and all day working on loading or unloading whatever the case is? Isn't this an important matter?

A. Well, it certainly is something to be taken into consideration. However, there are statutes in effect that should ensure that the individual has adequate rest or at least has the opportunity for adequate rest.

Q. What statute would that be?

A. It's in Part 46. Requires six hours off duty in the previous 12 hours before assuming the watch. And if those statutes are complied with, then the person would have adequate rest. So it's really up to the operator to ensure that they are compiled with.

Q. It says 6 hours in the previous 12 hours? Is that what you said there?

A. That's what the statute says, yes, sir.

Q. So that presumably you could have had in the previous 12 hours, you could have had 6 hours off and worked for 6 hours and then go on for a four-hour watch?

A. That's a possibility, yes, sir.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. So that you would then--the Coast Guard, in essence, would allow a 10-hour duration of work?

A. That's correct.

MR. COLUCCIELLO: I have no further questions.

DR. DICKINSON: We ever no further questions. Thank you, Mr. Flyntz, for your testimony.

I would like to call to the witness stand, now, Captain William J. Deppe, Group Coordinator for Exxon Shipping Company. Captain Deppe.

Mr. Colucciello, will you swear in Captain Deppe and qualify him, please?

WILLIAM J. DEPPE,

was called as a witness and, having been duly sworn, was examined and testified as follows:

THE WITNESS: I do.

MR. COLUCCIELLO: Please be seated.

EXAMINATION

BY MR. COLUCCIELLO:

Q. Please, state your full name.

A. William James Deppe.

Q. Who is your employer?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Exxon Shipping Company.

Q. And how long have you been employed?

A. 18 years.

Q. And in what position are you presently employed?

A. I'm a ship group coordinator.

DR. DICKINSON: Mr. Woody.

EXAMINATION

BY MR. WOODY:

Q. Good afternoon, Captain Deppe. How do you hear me?

A. Very well.

Q. Captain Deppe, where did you receive--when and where did you receive your original license?

A. I believe it was 1982 in New York City.

Q. And had you gone to some school to qualify for the license?

A. My third mate was 19--1971 in New York.

Q. And when were you employed first with Exxon Shipping Company?

A. September of 1972.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. When did you first sail as master?
A. In October of 1981, I believe.
Q. Were you the master of the EXXON Long Beach?
A. Yes, I was.
Q. And is that a sister ship to the EXXON Valdez?
A. Yes, it was (sic).
Q. Approximately how many months did you have as master on EXXON Valdez--EXXON Long Beach?
A. I was involved in the construction project for several months before the ship was delivered and the ship was delivered in the spring, so I was master on there for roughly eight months at sea, plus another three months or so in the shipyard.
Q. Were you--could you--are you familiar enough with the handling of the vessel to characterize it as to how it handled?
A. I think so.
Q. And how did the vessel handle?
A. It was a very-good-handling vessel.
Q. Would the EXXON Valdez be a sister

ship and handle the same?

A. I would think so.

Q. We've heard a lot of reference to the SRP 2,000 and the fact the wave points can be placed in the steering console to steer the ship. How many wave points are used to steer the ship from, say, from Hinchinbrook to Long Beach?

A. You might have four wave points on that trip.

Q. And when the ship arrives at the wave points, would it automatically change course?

A. You can program that into the computer if you would like. But it's rather complicated and sometimes doesn't work exactly right, so generally when you reach a wave point you take the ship and change course through your own means.

Q. So, in other words, would the ship put it back on hand steering and make the course and, then, put it back on gyro?

A. Just program the new course into the gyro and press the accept button on and do it that way.

Q. I guess what I'm curious about at this point is how much opportunity does a mate

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

have to change course on a vessel like EXXON Long Beach or Valdez?

A. Well, I think there would be a lot more opportunity to change course in traffic situations when you might be meeting other vessels and you would have to change course to avoid a collision or to just give more sea room between the two vessels when they meet. So the amount of opportunities could be, during the regular sea tour, maybe, like, a trip down to Long Beach, five times possibly.

Q. So by the time a mate had enough time to become second mate would he be familiar enough to know what to expect when right 10 degrees rudder was placed on the vessel?

A. I don't think he would be an expert by any means. But by being on the bridge during transit through pilotage waters and his experience at sea, watching other people to it and doing it himself, I believe he would have a fairly good feel for what would happen when he put right 10 on the ship.

Q. Does Exxon Shipping have any kind of training, ship-handling training for deck officers?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Yes. I have attended several simulators and also I've been to Grenoble, France to a model school there where we get our handling experience.

Q. The training you've just spoken of, is this for prospective masters or is this for any deck officer?

A. It's--the Grenoble training is for masters or prospective masters. Some of the simulated training was for a special project I was involved in in the Santa Barbara Channel where third mates through masters went to that simulator. And I've done some simulator training on my own.

Q. Would you say that, say, third and second mates typically have had some simulator training or not?

A. Probably not.

Q. I have about four hypothetical questions. If the EXXON Valdez were proceeding at 12 knots and right 10 degrees rudder was applied, what would you expect to occur?

A. 12 knots?

Q. Loaded, no particular wind or sea conditions to contend with, in a deep water?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. I would expect that within 10 to 15 seconds that the ship would start moving to the right.

Q. And about how long would it take to reach, say, 10 degrees from its original course?

A. If I answer this, it's going to be more a guess, because I've never timed this and I've never been involved in trying to time it, and we generally don't think in those terms, when you're on a ship, to see how long something like that will take. It's more, more of a feel than it is an exact science.

Q. Let me rephrase the question: How long after applying right 10 degrees rudder, not seeing the ship change as you would expect, would you increase the rudder?

A. I think within 10 to 15 seconds, I would increase the rudder if it didn't change.

Q. Captain Deppe, on the chart on the easel behind you, there are two points, Point A and B. Point A is a point one mile west of Busby Island light. This is a point that the EXXON Valdez would have proceeded through and been at when it was abeam of Busby Island light. Point B

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

is a point about three-quarters of a mile south of this on the course of 180, which represents the position that--when Officer Delozier said was pointed out to him by the third mate and by the master of the EXXON Valdez. My first question is for Point A which is the point where the vessel would have been abeam on the course of 180. In your opinion would right 10 degress rudder have caused the ship to miss Bligh Reef?

A. I think it would have.

Q. At that point, what rudder would you have used?

A. I probably would have used right 15.

Q. Now, for the second point, Point B, which is, say, three--about three-quarters of a mile down the track, would a course of right 10 degrees rudder have allowed the ship to miss Bligh Reef?

A. I don't believe it would have.

Q. What rudder--in that case what rudder would have been necessary to miss Bligh Reef?

A. I probably would have used right 25 or right 30.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. On the maneuvering diagram, there is a note which speaks to a rudder change. Do you recall the note on the maneuvering diagram of the bridge on the EXXON Valdez?

A. Yes.

Q. What does that note of rudder change refer to?

A. During the last shipyard period the EXXON Valdez had, oh, a little more than a foot of rudder trimmed off the rudder because of some problems with the forces being developed on the steering gear, itself, the steering gear motors. They were reaching maximum allowable stresses so a little bit of the rudder was trimmed off to reduce some of those forces on the steering gear.

Q. What changes does it make in the maneuvering of the vessel?

A. I've been told that it is barely noticeable to the people who have been on the ship. I haven't been on the ship since that was done. Theoretically, talking to the naval architects it was less than 10% reduction in maneuverability.

Q. We have heard from the testimony

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

of Mr. Cousins that the vessel effectively slid rather than turned. Have you witnessed this kind of a vessel to slide rather than to turn?

A. I've been on vessels that have slid, and it's in places like the Mississippi River where you go into a bend in the river and the vessel will slide more in towards the bend than will actually turn down to the next course. And anytime a vessel does turn, especially a loaded tanker, you're going to have a change in direction of the ship that will appear like the ship is turning but actually the ship--the direction is turning but the ship is still moving in the original direction for awhile. And you will see that in almost every ship when you do turn it.

Q. Proceeding at 12 knots, will the vessel turn as well using right 10, as left 10 degrees rudder?

A. I don't think you would be able to measure the difference between the two turns.

Q. Are there any policy directives or policy regarding the use of the vessel traffic lane for Exxon vessels in Prince William Sound?

A. Exxon has got a policy to use

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

traffic lanes wherever they are mandatory and it is a mandatory requirement for us to use them as long as it's safe for us to do so. Whether there is voluntary traffic lanes, it's strongly recommended that we use them. But we do have the option to deviate from them if we've got the reasons to. Prince William Sound, we, generally, stayed within the traffic lanes unless there was some ice conditions that might force us to leave the traffic lanes.

Q. Are Exxon masters required to have a pilotage endorsement, those that are in--for Prince William Sound? I'm speaking now for those that are taking tankers to Valdez?

A. No.

Q. Have you mastered vessel--do you have the pilotage endorsement?

A. No.

Q. Have you taken tankers to Port Valdez?

A. Yes, I have.

Q. Did you have to comply with the extra requirement for nonpilotage vessels?

A. Yes, I did.

Q. Was that in any way a burden to

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

you?

A. No, it wasn't.

Q. What did it entail that the vessel do?

A. At our pre-arrival check-in we had to give a lot more information to the VTS center which just detailed a lot of the navigation equipment and things that we have on board the ship. We had to make some check-ins every 10 minutes between Cape Hinchinbrook and Montague Point. We had two watch officers on the bridge the whole time of the Prince William Sound and we had to pick up the pilot at Bligh Reef instead of at Rocky point.

Q. Did it involve any extra fatigue on your officers?

A. No, because even with pilotage, there would generally be two officers on the bridge during the transit of Prince William Sound.

Q. Would that be the mate and who would the other officer be?

A. The mate and the master.

Q. Are there any directives from Exxon Shipping regarding ice navigation in Valdez Arm? I might add, any advisories?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. No, there are no directives that I know of. There have been--all of our masters have been instructed that at their option they can decide to transit that area in daylight rather than nighttime. The master will make those determinations himself. The conditions change quite often there, on a daily basis as far as the ice concentration goes. And the--we feel that the master has got the discretion to make those decisions himself.

Q. Does the master have the option of remaining in port overnight to wait for daylight if there are ice conditions?

A. Yes.

Q. If you're confronted with ice across the lanes while transiting Valdez Arm is it possible to proceed through the ice at slow speed?

A. Yes.

Q. How slow could a vessel like the EXXON Valdez blummage go (ph)--

A. I've never transited there through ice, but if I did, I would probably--if it was thick ice and I was worried about hitting some I would probably go dead slow ahead.

Q. And what speed would that be?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. It would be probably about 4 knots.

Q. When did you arrive on the EXXON Valdez following the grounding?

A. I arrived about 2200 Friday night of the grounding.

Q. And when did you assume command of the vessel?

A. About 2300.

Q. What did you find when you got to the vessel, referring to its condition?

A. Well, all the center tanks were holed and they were leaking oil or they had leaked oil. All the starboard side tanks were holed and they either had gained product in the case of the balance tank or they had lost oil in case of the cargo tanks. The forepeak tank had been holed and the starboard side had been holed.

Q. What checks or inspection did you make of the vessel?

A. In what sense?

Q. Well, did you, in the case of the turnover command, did you make a tour of the vessel or did you call people together and ask them for briefings? What did the turn--

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. I certainly did. We--I toured the vessel along with the other people who came out with me, Mr. Paul Myers. We also got together with the chief mate and chief engineer, got together with the XO who was onboard, Mr. Falkenstein; DEC representative, was onboard--it was Mr. LaBow at that point. Mr. Delozier was there. We all met together and discussed the situation and tried to decide upon our next step of action with the way the position of the ship was in.

Q. Were any particular decisions made at that time, say, regarding lightering or buoy the vessel or anything else that you can think of.

A. It was pretty--one of the first things we decided was that normal lightering would not be able to take place. The cargo tanks were so damaged that the cargo system would not be able to be used for most of the cargo tanks that were in the ship. So I believe the Pacific Strike Team was already on the way at that point and we would have to wait for them. They had some submersible pumps that you could pump cargo from the top rather than use the cargo system, so some of the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

decisions that were made was to try to get as much oil off the ship as we could as quickly as possible. Because of the tenuous condition we were in, there was--no one really knew whether the ship might break in half at any time.

We were sitting there with our survival suits, life jackets and very little information about what the bottom of the ship looked like and whether she would make it through the night. So we certainly wanted to try to get as much oil off as we could as quickly as possible, but our first consideration really was all the people on board, making sure that we had an emergency response plan for everyone on board in case the ship did break in half or did start to capsize if she slid off the reef there.

Q. Did you discuss with Captain Hazelwood the cause of the accident?

A. No, I did not.

Q. Did you receive any information from Mr. Cousins as to what caused the accident?

A. No, I didn't.

Q. Did anyone else relate any information to you about the accident that would help us to understand what happened?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Mr. Hazelwood left the vessel shortly after I got on. He did discuss the circumstances with Mr. Nicholas, one of our lawyers who came out with me and I wasn't in that conversation. Mr. Cousins incident was sleeping when I got there. We were so busy the next day I never got to speak with him. We were busy trying to get cargo going and he was on the bridge and he left the vessel the next day, so I didn't get a chance to talk to him. I did talk to Mr. Kagan, though.

Q. Did Mr. Kagan relate anything that would help us?

A. Yes. Mr. Kagan told me that he went 10 right. Then he went 20 right. Then he went hard right. Then he went hard left and then they went aground.

Q. Did he recall the heading of the vessel changing any when he right right 10 and right 20?

A. Yes, he did. He remembered the vessel swinging quickly to the right. But the way he related the story to me, now is not quite clear to me.

Q. At that time, do you have a

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

recollection that his information was that the vessel was swinging to the right following the right 10 and right 20, before the hard right?

A. I don't recall.

Q. We would like to have you comment on the--some testimony we've had regarding the lifting of the inert gas system bullets or the relief valves. We have had two witnesses say they heard them and Mr. Kunkel has provided information that would indicate that it was unlikely for them to have lifted. Do you have any idea? Can you shed any light on what happened with regard to the bullets?

A. I think Mr. Kunkel's version of the story makes a lot more sense to me than the version that were related by the ABs. I think that with the size of the holes that were in the hull, at least the way they have been described to me, cargo would be rushing out so quickly that there is no way that the valves could be lifting. I think the suction part of those things were activated and air was rushing into those tanks very quickly rather than anything escaping.

Q. We've heard testimony that there was a smell of inert gas. Is inert gas easy to

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

detect and identify?

A. Well, I think that a lot of people confuse inert gas with hydrocarbon vapors. You would think when you are loading a tanker, you've got vapors being vented to the atmosphere. That's an mixture of inert gas and hydrocarbon vapors. And I imagine a lot of people confuse pure nerve gas with hydrocarbons vapors, so I wouldn't be surprised that they were hydrocarbon vapors that they were smelling, not inert gas.

Q. In other words, they might have been smelling the cargo that was being spilled?

A. That's correct.

Q. When the EXXON Valdez was refloated, we read that the way was to secure the tanks so that the vessel would float on a cushion of air is that correct?

A. That's correct.

Q. What was done to accomplish this?

A. Well, all the openings to the atmosphere from the deck were blanked off with metal blanks. The--so the ship was basically sealed, the cargo block was sealed. The only openings were accessed from compressors to get compressed air into the tank or access to the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

inert gas main so we could put inert gas in the tanks. As the tide went out that final morning when we were going to lift off, the inert gas system was activated and the tanks were pressurized to a certain pressure with the inert gas system. Then each tank was isolated. We shut off the inert gas valves to each tank, so the--the only opening to a tank was from compressors or the hoses from the compressors.

As the tide started coming in the cushion of air in each tank did not allow the water to enter up through the hose in the bottom. The air was compressed somewhat so that the water level would stay lower than it was previously. As the salvage master and the naval architects had come up with some calculations about how much pressure they would need in each tank to get the right trim and the right list on the ship as the tide came, in so we activated some compressors and pressurized certain tanks up to four and a half pounds, or other tanks were left at--pretty much atmospheric pressure to enable the ship to list or trim the proper way. And about midway through the tide the ship just floated off the reef and was underway.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Is it still floating on bubble up air, so to speak?

A. It certainly is.

Q. I have one question regarding the lightering. When you--we have heard that oil bubbled up from the starboard side of the ship--I believe the Coast Guard is--informed us of this. When you attempted to lighter using the ring system, do you have an explanation of why the oil came out the starboard side of the ship?

A. Well, this was the first morning on the ship. And we--the port side cargo tanks were still intact and we assumed that the cargo main line, there is a cargo line that runs through there which you could get access through those tanks and pump the cargo out, we assumed that that was in good shape also. So we attempted to start the cargo pump using that system or that line and to pump cargo out. When we did that, we noticed that cargo was--some cargo was coming out the starboard side. We weren't quite sure then, at that point, whether we had damaged that ring main or not on the port side, so we shut down the system and, rather than risk any additional oil spilled, we decided to pump all the oil using

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

portable pumps.

Later on, after we had divers in these tanks to inspect them and look at the ring main, it's been determined that ring main is not damaged, that it is in good shape. But the theory that--the reason we saw oil when we started there its possible that some inert gas pressure increased on the starboard side tanks or the center line tanks and caused--that increase in pressure caused a little bit of oil to flow out through the damaged--the holes in the bottom of those tanks.

Q. I see. I have one last question: Is there anything along the track of 180, any change in the bottom conture that would cause the vessel swing to slow down?

A. I don't believe so until you hit that eight and a half phantom spot.

Q. And this is right at Bligh Reef?

A. Yes.

MR. WOODY: Thank you, Captain Deppe. That's all the questions I have at this time.

DR. DICKINSON: Dr. Birky.

EXAMINATION

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

BY DR. BIRKY:

Q. I have a few questions. Captain Deppe, in your experience as a master, would you consider it unusual to not be in the pilot house when the pilot captain and the pilot--state pilot is taking the vessel out of port or into port?

A. Yes, it would normally be unusual for that to happen.

Q. Has it ever happened in your experience?

A. Yes, it has.

Q. For any duration?

A. We do have some sea passages which are quite long with pilotage, I should say. Going up the Mississippi River in the winter time in high river, you might take 36 hours to get up the river. If you're up there for 36 hours straight, it would be kind of an unusual thing, so at those times you might lay down in the sea cabin or lay down on a settee someplace and delegate your authority to the man on watch.

Q. As a master would you go down below while someone else as Cousins and Kagan were operating the vessel in the Valdez area?

A. In the area from the dock past

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Bligh Reef, I would stay on the bridge of the ship.

Q. And how do you access the fact that Captain Hazelwood did not do that?

A. I have no basis on which to make an assessment on that.

Q. As a--during the past three days, we have heard testimony from a number of individuals who served under Captain Hazelwood, none of who reported smelling alcohol on his breath. However, a number of other people that boarded the vessel before and after reported smelling that. Do you have any explanation for the differences of general opinion about that, or experience rather than opinion?

A. I really couldn't comment on that, I wasn't involved in smelling Captain Hazelwood's breath that night.

Q. As a ship's coordinator, I think you've probably reviewed our Exhibit 5B, is that correct, 5 Bravo which is the personnel records of Captain Hazelwood?

A. Yes.

Q. Do you consider, in the position you hold, that that would be a complete file, if

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

you had an individual, a master that you were evaluating for that period of time?

A. I think the files vary on different individuals. I can't say whether that is complete or not. I think some people have got more complete files and some have got less complete files. To say--I think this would be, if this is all we got then, I believe that's all we got.

Q. Do you happen to know why the period from '84 to '87 is missing in terms of evaluations?

A. No, I don't.

Q. Is there other paper work associated with Captain Hazelwood that would not or may not have been in personnel files?

A. I really don't know. I don't--I haven't been in the office for that long, and I've never been in headquarters. I'm not quite sure what cubbyholes we might stick different papers in. But I believe, as far as the evaluations go, they would all be in one place and that would be all of them.

Q. Do you frequently do evaluations on masters that are not signed?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. No. Any evaluations on a master would be signed by me.

Q. Would that evaluation also be discussed with the master and then signed by the master you're evaluating?

A. Yes, it would be.

Q. Do you know why these are not?

A. No, I don't.

Q. In terms of the, if you will, supervision that was provided for Captain Hazelwood after the '85 rehabilitation program that we heard about this morning, do you consider it reasonable that a person under a master that you supervise, that an individual serving under that master could go around the master and talk to you about the problems he may have with that particular master?

A. Those things have happened to me before, but I think in society in general those things don't happen very often. I can't imagine too many people who report over their immediate supervisor to someone else. I don't think it's just a shipping problem in that regard. I think that happens everywhere.

Q. I understand. What happened in

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

the case when that was done that you experienced?

A. I do have some close relationships with people out in the fleet. I've sailed out there for a long time so people will feel free to confide in me at times and give me information they might not give someone else. So I did get some information about a supervisor that might normally not have gotten into the office and it was done on a confidential basis, but it was relayed to me that way.

Q. So, unless there is a either a special relationship or unless there is some protection mechanism set up, it's not likely to happen?

A. I think in a--I think that's correct in a general sense.

Q. So in terms of your supervision of masters today, is there any such mechanism set up so that if you have a master who had a problem that people that were serving under him could in some way communicate with you without threat of losing their job or other harrassment?

A. If someone did communicate to me in that way they wouldn't be harassed or lose their job. But there is no system right now that

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

would protect that.

Q. Do you think there should be?

A. I guess you run the danger of having anonymous letters and poison pen letters being written about a supervisor who someone doesn't like, or just to try to get even with someone who might have given you a poor evaluation, that kind of thing. I don't know whether--I think there is some downside to that kind of system also.

Q. Yes, there is obviously downside, but isn't there also a downside of not knowing when there is a problem going on such as was going on with the vessel under Captain Hazelwood's supervision?

A. I believe, as a professional seaman if there was a major problem that involved a safety risk aboard the vessel, a person who is in a lower position should do something about it.

Q. Are you saying that someone should have done something about this, the alcohol dependancy, before it became a problem in safety?

A. Well, I don't think it's totally proven yet that that was a problem in safety, and whether anyone should have done anything or not.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Well, would you say that the surveillance or the supervision that was in place did not pick up the problem before it became apparent to some others?

A. That's correct.

DR. BIRKY: I don't have any further questions.

DR. DICKINSON: Thank you, Dr. Birky. Mr. Shier.

MR. SHIER: No questions.

DR. DICKINSON: Cmdr. Waldron. Commander, one second, please.

EXAMINATION

BY CMDR. WALDRON:

Q. Good afternoon, Captain. We have had several people testify, including ship's personnel, the pilot, Coast Guard personnel citing that there was no obvious evidence of impairment on the part of Captain Hazelwood. As to the captain, there was testimony that he left the bridge for an hour and a half during the transit of Valdez Narrows. He put the vessel on autopilot in pilotage waters. He cut across the TSS outside of the traffic separation scheme. Gave the conn to a third mate not with--without pilotage

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

endorsement. He did not come up when telephoned by the third mate that he was abeam of Busby light. After the accident, he left the engine room going ahead of low program up for additional 14 minutes.

DR. DICKINSON: Commander, are you summarizing the testimony that we've heard the last three days?

CMDR. WALDRON: Yes, sir, I do have a question.

BY CMDR. WALDRON:

Q. And afterwards he was smoking up on the bridge. Would you consider any of these actions impairment, evidence of impairment?

A. I really don't know if they would be impairment or not.

Q. Could you tell me what Exxon does to insure that 6 hours of rest are given to ship's personnel, to the deck watch officer prior to getting underway?

A. We don't have any program to give six hours of rest to any deck officer before we get underway. On the ships that I've been on, we have made sure that--or I've been made sure that once we have taken departure and if no one has had

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

rest, then I'll stay up on the bridge and stand the watch until someone has got enough rest to come and take the watch and meet the log.

Q. On the ship, who's responsibility is it to insure that the watch officer has had 6 hours within the last 12 hours?

A. That would be the master's responsibility.

Q. Thank you. I understand that you met with Captain Hazelwood in a stateroom right after you boarded the vessel. Could you tell me what the purpose of the meeting was, what was said and what was the cause of the casualty discussed?

A. The cause of the casualty might have been discussed but I wasn't present when it was done. I went--when we got to the stateroom, I left pretty soon afterwards, went up to the bridge and talked to the mate on watch, went to talk to the chief engineer. And at that point, Mr. Nicholas, our attorney, was talking to Captain Hazelwood and I never really discussed the accident with Captain Hazelwood, except I did mention to him just before he left the vessel to--that this was something much bigger than he could imagine by sitting where he was right then,

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

and to be prepared for quite a lot of attention when he got to shore.

Q. After listening to Mr. Cousins, Mr. Kagan and Ms. Jones, is it your impression that Mr. Cousins knew exactly where he was on the chart when he relieved the deck prior to the grounding?

A. When he relieved the deck?

Q. When he was given the conn from the captain?

A. I believe he knew exactly where he was when he relieved the captain.

Q. Up until the time of the grounding?

A. I believe he thought he knew where he was the whole time.

Q. And what do you base this on?

A. On his testimony.

Q. Do you agree that he had available to him a chart and operating radar, sufficient visibility, lookout and illuminated ace navigation to help him determine his position accurately?

A. Yes.

Q. Do you believe, therefore, that Mr. Cousins needed any information from the VTS

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

traffic system to determine his position?

A. No, he didn't.

Q. Couple of questions about drug testing. This vessel apparently had a drug sampling kit aboard. The requirements do not--the regulations do not require it until December. Why did it have it on at this time?

A. Exxon's drug and alcohol policy, which we've got some documents on, was implemented just recently. And part of our policy is to--if certain conditions are met to require testing of an employee to determine whether they have been using drugs onboard the vessel.

Q. Does Exxon have a Breathalyzer onboard, or are there any plans to put Breathalyzer's onboard?

A. They are not onboard yet, but the--we are planning on having them onboard this year sometime, I believe.

Q. The new regulations that are going to be becoming into effect requires that post-casualty testing include samples of urine and blood, or urine and breath. Is there--does part of your drug testing or drug policy address the need to take blood samples?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. No. Our policy right now is just to take urine samples. I don't know whether that is going to change in the future, but right now it's just urine samples.

CMDR. WALDRON: Thank you, Captain.

DR. DICKINSON: Dr. LeResche.

EXAMINATION

BY DR. LeRESCHE:

Q. Thank you. Captain Deppe, just two or three here: Has Exxon issued any written policy directives to masters in the North Slope trade regarding response to navigation oil spills?

A. Could you refine that a little bit? Response from onboard the vessel? Is that what you mean?

Q. Yes, yes.

A. In what sense? In a reporting sense or in a active sense of fighting the spill.

Q. In the latter sense.

A. No. We got regulations as far as reporting what has happened, and we have got guidance about trying to minimize what has occurred but there is no capability onboard except in a very minor sense to be able to clean up the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

spill.

Q. Does Exxon Shipping require any training of masters and other licensed officers in the areas of vessel-management, for example?

A. We spend--we've spent an awful lot of time over the last three or four years in improving our vessel management skills and working with people, to improve communications, to breakdown some of the barriers between licensed and unlicensed, deck and engine departments, to improve the teamwork among the individuals on the ship, to try to improve efficiency through better ideas getting the unlicensed to come with ways of doing their job better more efficiently. Having--trying to improve the safety of our vessels the same way. We went through--everyone in the fleet was invited to a five-day program. We called it Exxel, where we went through training for that five days from--with many outside consultants to come up with the program and different techniques of accomplishing this improved communications and improved leadership.

Q. Did any of the officers onboard the Valdez in the voyage in question have this training?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. I would imagine they all did.

Q. Are any of the masters or officers in your fleet required to have training and leadership for interpersonal skills? If so, what specific courses are they required to take?

A. Well, like I just said, the course that we just took, and I believe it ended two years ago, was called LEP, and it was a leadership enhancement program is what it was. So the program was to develop better leadership. And every person in the fleet was invited to go--to attend that program.

Q. When you say invited, in this sense does that mean required?

A. Well, the officers were more or less required; the unlicensed people were invited.

Q. So everybody who was an officer or a master two years ago you feel certain went to that course?

A. 99.5%. There might have been one or two that slipped through.

Q. Okay. You spoke about being ready to install Breathalyzers onboard the vessels. When would those be used?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Well, this is something that has been in the works ever since the new Coast Guard regulations were proposed that are going to be--come into effect at the end of this year. And part of them was to have a Breathalyzer onboard each ship. So, we have been researching it for a while and I imagine sometime this year we will have the research completed and we will have the Breathalyzers installed.

Q. If they are installed, what would you do with them?

A. They will be used in conjunction with meeting the requirements of the new regulations.

Q. Do you have any idea what those requirements are?

A. I read them last year and I forget exactly what we have to do. But I imagine if someone appears intoxicated this gives us a means of determining whether they are intoxicated or not.

Q. So you will put them onboard and use them to meet the minimum requirements of these regulations?

A. Well, I imagine--I imagine we will

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

meet--do more than meet the minimum requirements with them. We will probably be proactive in using them to avoid any problems with our people.

Q. Who will be responsible for conducting these tests, you figure?

A. I imagine the master will be.

DR. LeRESCHE: The master. Thanks, Mr. Deppe.

DR. DICKINSON: Captain Duncan, will you identify yourself and then--

CAPTAIN DUNCAN: William G. Duncan. No questions.

DR. DICKINSON: Thank you, Captain. Mr. Colucciello.

EXAMINATION

BY MR. COLUCCIELLO:

Q. Captain Deppe, there's been a lot of talk about how bad the fumes were after the spill and whether or not there was a high danger of fire explosion. Do the Exxon tankers carry explosion meters onboard?

A. Yes, we do.

Q. Do you know whether or not anyone suggested using them to measure the atmosphere around the ship that evening or when you came

aboard?

A. When I was there, Mr. Colucciello, there was no fume problem at that point.

Q. And to your knowledge, did anyone use the explosion meter prior to your arrival?

A. Not my knowledge, no.

Q. On the class of vessel, the Exxon Valdez, do you know approximately where the pivot point is for it's turning?

A. Probably around tank two center.

Q. Which is about, in percentage of the length of the ship from the bow, about how much?

A. Probably about one third of the way back.

Q. Presumably Captain Hazelwood went below to work on ship's papers and he was there, I understand, through the transit through Port Valdez and the Narrows which is a fairly substantial amount of time. When you took over, did you find behind that he left papers that he had been working on that would indicate that this is what he had been doing?

A. No, I didn't find anything that would indicate that he was working on papers at

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

the time that he was down below there. But I don't know what your office looks like, but any master's office on a ship is pretty much full of papers and things hanging all over the place. It's kind of hard to determine when one paper was worked on versus another paper.

Q. With respect to what a ship, perhaps, could do in the event of a spill, do you believe it's feasible for a tanker to carry, say, booms that they could quickly put over the side and boom the ship in a case like this, and using the crew and the ship's boats?

A. I don't think that is very feasible, Mr. Colucciello. Anything can be done but the manpower is not available for that kind of thing and the equipment certainly isn't. I don't think that would be very feasible at all.

MR. COLUCCIELLO: No more questions. Thank you.

DR. DICKINSON: Mr. Danaher.

EXAMINATION

BY MR. DANAHER:

Q. Thank you, Mr. Chairman.

Captain Deppe, I would like to return briefly to the personnel records that have been

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

placed on Captain Hazelwood--that have been placed into the record. Earlier, Dr. Birky reviewed some of the appraisals and we learned also that, from Mr. Iarossi, that there is an attempt to have an annual appraisal. In looking at those that have been submitted, it would appear that from perhaps '84 up until '86 or '87 there are none. No appraisals. And it occurred to me that seems to coincide with the period under which Captain Hazelwood was undergoing rehabilitation and perhaps post-rehabilitation monitoring. And I believe Mr. Iarossi mentioned that there were two management people who were specifically assigned responsibility for continuing surveillance of him. Is there any chance that this annual appraisal system was set aside and that during this period there were different monitoring and paper reporting on him? And if so, there might be other records elsewhere?

A. I don't believe so. I believe if you went through all of our masters' files you might find the same gap in all of them. This might have been taking place ashore. I'm not quite sure we might have changed fleet managers during that period, also changed some of the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

personnel ashore and Captain Hazelwood moved from one coast to another during, I believe, in that period, so it's possible that other outside factors influenced why they aren't there rather than any other records anywhere else.

Q. Have you any knowledge of any other documentation that is made periodically on people who are undergoing or have undergone the rehabilitation program?

A. I don't know of anyone who has undergone the rehabilitation except Captain Hazelwood.

Q. Okay. Briefly, I would like to touch on assignment of masters to vessels. In some transportation modes there is a bidding system to encompass vehicle operators preferences and this is based on senority quite often and it's an attempt to accomodate peoples' preferences for type of vehicle, trips and, in fact, compensation is a consideration as well. Is there anything comparable in the shipping industry and specifically at Exxon?

A. I can't speak for the shipping industry. At Exxon you can make your personal preference known to people and if it fits into the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

system and we can meet the request we will try to meet it, but there is no extra compensation for any special vessel. You--compensation is based on performance and you could be on the smallest vessel and be the highest paid person; be on the biggest vessel and be the lowest paid person. It doesn't matter. There is no union-type seniority thing. There is no bidding for jobs. If someone wanted to be on the EXXON Valdez, they could make a request, hey, I would like to go on one of those ships, and if we could meet it and they fit the--fit into--be the type of person we need on that ship, then we might make the transfer. But it generally doesn't work that way too often.

Q. Thank you. To what extent is senority a factor in considering such assignments or accommodating an individual's preference?

A. All things being equal, I guess senority might come into play but we don't change masters' positions that often. What happens is we have a person assigned to a ship, or two people assigned to a ship and they might be there for three or four years and we would not move one of those people off to accommodate someone else. If an opening--if a ship--if a person left or

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

requested a transfer and an opening resulted on a ship, we might look at who is available to fill that position or who wanted to go to that position and then pick from those people. But we wouldn't--we would never change a person just for senority reasons or anything like that.

Q. With respect to senority, it would appear--and also compensation--it would appear that there is a bonus system in that one's ranking in this overall ranking scheme determines the magnitude of the bonus that one gets. Is that the way it works?

A. Last year there was a bonus system. Exxon's compensation system is based upon what the industry is paying its people. The industry has not shown very many pay increases over the last several years, so Exxon has not increased the salaries of its seagoing people during the last several years. But in order to compensate people for the extra work that is upon a ship--aboard a ship or the extra, management-type things that are done, a bonus-type program has been approved and that ranking that you saw was to distribute money in that bonus system.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. I see. One final question: Again, Mr. Colucciello was talking about the master going below outbound to do paperwork. And I believe earlier we heard testimony to suggest that he was preparing departure messages. Can you imagine any paperwork of sufficiently urgent nature at departure time that should give consideration to pre-empting his presence on the bridge?

A. No.

MR. DANAHER: Thank you.

EXAMINATION

BY DR. DICKINSON:

Q. Captain Deppe, just a few follow-up questions to Exhibit 5 Bravo. If you look--do you have those with you? If you look at the first appraisal review period, '82 to '83, when Mr. Hazelwood was a master of the EXXON Baton Rouge, okay? These appraisal reviews are typed, at least the remarks are, comments are. So that would appear to me that there is probably--well, let me ask the question a different way: When somebody is appraised, are these forms filled out by hand and then they are given to somebody else for typing, or does somebody sit there and type

the appraisal at the same time they are reviewing the master?

A. I'm not quite sure how this one was done. I would imagine it was done by hand and then probably given to one of the secretaries to type, but I'm just guessing now.

Q. Okay. If that's the case, would there be a hard copy of handwritten documents somewhere that may be signed?

A. I have no idea.

Q. Who would know that? Who should know that?

A. I imagine the fleet manager during 1982 would have to be asked that question.

Q. Let's look at the next exhibit, from June of '83 to June of '84. That's handwritten. Again, it's not signed. And we don't know what position the master had, or at least what vessel the master was on during that period. Is there any other way to check to find out on what vessel this was taken or what position he had during that period?

A. Yes. Our personnel office could give a whole history of what ships he has been assigned to over his whole career here.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Would it be possible that the personnel office would have other information in a review fashion like this?

A. I believe they would have assignment information. This information would not be in the personnel office.

Q. How would you in your position--let's just--the appraisal review that we are looking at here from '83 to '84, how would you know that this is a valid appraisal with no signature, if you were the one that's reviewing a master's history?

A. Well, since it's not signed, I wouldn't know that.

Q. How would you, looking at the first appraisal from '82 to '83 that's typed but not signed, how would you know that is accurate?

A. Same answer for that. I wouldn't know.

Q. So, therefore, if you were reviewing this particular person over that two-year period, trying to do a review, you may not have--are you saying you may not have any accurate information or valid information on this individual?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. I would assume that these are valid, but I could not prove that they are valid.

Q. Why would you make that assumption?

A. I can't imagine that they would get into our system any other way then through the regular routine in the office.

Q. Are these checked? Has anybody looked at these besides the person doing the appraisal review?

A. I'm not quite sure. I was on the other sides of the fence here during this period. I was one of the masters being appraised. Not doing the appraisals.

Q. So you're not the person to answer this question?

A. No, I don't think so.

Q. Who would be the--what would--who would be the person? If a master were rated below average, who would be the person that would make some recommendation about that master?

A. Right now, it would be the ship group coordinator. During this period, it would have been the fleet manager or the port captain.

DR. DICKINSON: Okay. Thank you,

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Captain Deppe. You're excused. I have 18:30 hours. Keep smiling. We have one more witness. We will take a 15-minute break. We'll be back at a quarter to seven with our last witness for the day.

(Short break.)

DR. DICKINSON: I would like to call Mr. Dennis Kelso, State of Alaska, to the stand, please.

Mr. Colucciello, will you swear in and qualify the witness?

DENNIS KELSO,

was called as a witness and, having been duly sworn, was examined and testified as follows:

THE WITNESS: I do.

MR. COLUCCIELLO: Please be seated.

EXAMINATION

BY MR. COLUCCIELLO:

Q. State your full name.

A. My name is Dennis Kelso.

Q. Who is your employer?

A. I'm the Commissioner of the Alaska Department of Environmental Conservation.

Q. State of Alaska; is that--

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. That's correct.

MR. COLUCCIELLO: Mr. Katcharian will ask you some further questions.

EXAMINATION

BY MR. KATCHARIAN:

Q. Good evening, Mr. Kelso. How long have you been in your present position?

A. I've been commissioner since January 5th, 1987.

Q. And what is your previous experience or education?

A. Prior to becoming Commissioner of DEC, I was the Deputy Commissioner of the Alaska Department of Fish and Game, and prior to that, I was director of a division within the Department of Fish and Game, responsible for managing a research program state-wide on the uses of fish and wildlife resources, including fish and wildlife resources in the area that's been affected by the spill.

Q. And what is the mission of the Department of Environmental Conservation?

A. The Department of Environmental Conservation has responsibility, under state statute, for protecting the quality of the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

environment and it does that through pollution control programs, through environmental health programs and through assistance to communities in areas such as solid waste, water quality and sewage disposal.

Q. Does the DEC--are they responsible for the state's monitor, review and approval of oil terminal contingency plans?

A. Yes. Under statute, the Department of Environmental Conservation is the only state agency that has that responsibility. We are responsible for all of the state's oil pollution control work and I have a staff that includes individuals that have, basically, world class experience. We have a core team of oil spill response people that includes some staff who frequently get requests from all around the country to come and assist with spills. Two of those folks have a long list of responses including assignments such as the ARGO Merchant, the Lee Wang Zen (ph) and other major spills.

Q. Since you have been in charge of DEC, how has the size of your staff varied in the area of monitoring in the oil terminals and reviewing contingency plans in that area?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. The program began as a terminal-and-tanker program and was changed over time. That was in 1977. In 1982 the program was changed to include all aspects of oil pollution control. And in 1988, we modified it so that includes not only oil spill but also other hazardous substance releases. Our current program staff includes two and a half positions in the headquarters office and nine field positions. And those positions are responsible not only for oil spill prevention, but oil spill contingency plan review, oil spill response and also hazardous substance work, as well. In the current budget, what for us is fiscal year 1990, there is an additional $332,000 which represents about four and a half positions to do this work related to the oil spill, preparedness and response.

Q. In your opinion would those additional people be sufficient to do your job?

A. In the area of oil spill, we have, I think, a good strong core and with the additional people we should be able to do the emergency response portion of that work very well. We are also working with the Governor's office to supplement the work we do in the area of

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

oil spill contingency plan review and over the next few weeks we should know whether some of the additional funding may be available from an appropriation the legislature made this session.

Q. Does the DEC have an inspection staff to visit oil terminals such as the Alyeska terminal?

A. Inspections are done as part of our responsibility within a particular district office or a region office. And in this instance, for example, the Valdez Marine Terminal that work will be done by the three technical staff who are present in Valdez, the Prince William Sound District Office. Those people would do inspections in conjunction with their other work, for example, related to Alyeska. But our real way of determining capacity for cleanup is based upon spill drills and actual observations of spill response. In this instance, for example, we had not only spill drills every year since 1984, but also had actual observations. In 1987, there were 85 small spills that we were able to observe response by Alyeska. 1988, there were 65 of those spills and, perhaps most importantly, in 1989 there were three spills, two in January and one in

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

March. And the first of those in January involved 1,700 barrels. It was an excellent opportunity to observe the equipment, the deployment and the response that Alyeska had committed to under the contingency plan. So that is really the best indicator of how well any particular operator is situated to carry out the requirements of the contingency plan.

Q. You're eliminating a lot of questions. If, in the past five years, for a time frame, has Alyeska complied with the regulations as required by DEC?

A. Alyeska Pipeline had three areas of primary interaction with us. And I would have to say that Alyeska Pipeline has been resistant to cooperating with us in a number of ways related to pollution control. One part of that is oil pollution control. We have, in addition to the oil spill work, two important areas that involve discharges of oil-related material. One of them is discharges of oil-tainted water from the balanced water treatment plant. And this is a major issue because 18 million gallons of oil-tainted water are discharged by the plant every day. In the related area, more than 300

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

tons of volatile organic compounds are discharged just from the vessels associated with the Valdez Marine Terminal. And, again, that's hydrocarbon oil product, really volatile organic compounds, so we spend a good deal of time in both of those areas. Alyeska has not been cooperative in shouldering their responsibility in that respect. With respect to oil pollution control it has been a continuous struggle to make sure that the oil spill contingency plan is up to snuff. There has been a long history of challenges of our authority to require a stronger plan. A lot of time delay in order to get Alyeska to take the next steps necessary to do a good job. One example would be their reluctance to include the 200,000-barrel scenario which we insisted upon, and it was eventually included. We also have, in dealing with Alyeska on this contingency plan, insisted on some very specific strengthening for the plan, not only the 200 barrel scenario, but adding exclusionary areas, those areas that are particularly sensitive and where the contingency plan calls for Alyeska to prevent oil from getting into those areas in the first place.

We also strengthen the training

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

requirements and we strengthen the way in which the response was actually carried out based on what we had observed in spill drills. So it has been reluctant. We have stuck to our guns in what we demanded of the company and what we came out with was a much stronger plan. The statute requires revisions every three years. This revision took about 18 months to complete.

Q. Okay. Now, the volatile compounds you talked about, those are vapors from the loading operation?

A. Vapors from the loading operation. Vapors from the the vapor recovery system, as well as other discharges associated with the marine terminal, but the figure that I gave you is really just from the vessels, a large amount of volatile organics.

Q. If Alyeska makes any changes to their operation, for example, in '81, the 20 number of emergency team is expanded. Did they have to clear this with DEC? How does that work?

A. When the team was modified and there were a couple of changes that were made in that time that you mentioned. We objected to changes and were given assurances by Alyeska that

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

the substitute teams that they were developing would be adequate and then I believe that those substitute arrangements were reflected in the updated plan when it was revised shortly after that.

Q. I understand that Alyeska terminal has a response barge; is that correct?

A. That's my understanding, yes.

Q. Okay. It says, part of their plan, the contingency plan. Did the state require that to be loaded with equipment at all times?

A. The contingency plan contains a very specific table of equipment and deployment times that are committed to by the company in the plan. We, of course, had recently observed the equipment that they had available because we had had three of the spills, two in January and one in March that as I mentioned earlier. So it was our expectation that the equipment was fully operational and that they would deploy it as they had committed to.

Q. In those spills how did Alyeska perform in the cleanup? Did they lose much oil?

A. The responses were generally adequate. The largest of those we gave careful

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

scrutiny to, because it was a 1,700-barrel spill. It was under conditions that were favorable to a response, so we watched closely to see how that was handled and it was handled adequately. It was boomed. Skimmers operated properly. At one point there was about three and a half feet of product within the boom. And although some oil escaped the boom, it was generally an adequate response and we critiqued it very carefully.

Q. Could you describe the DEC's first 24 hours of involvement in this--in response to the grounding of the EXXON Valdez?

A. Yes. The head of our Prince William Sound District Office in Valdez, Dan Lawn, was contacted shortly after 1 o'clock on the morning of the grounding. He immediately initiated the communication chain that we have identified for emergency response. That meant that he mobilized immediately not only his staff but staff from other offices through his regional supervisor, and he alerted headquarters as well. By a short time after that, within about two hours, we had staff either preparing to move or actually moving toward Valdez from all over the state, including the people that I mentioned

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

before who have a great deal of experience around the world in oil spill response. The same individual Dan Lawn, was on the pilot vessel with the Coast Guard personnel who first went to the EXXON Valdez, and he was onboard the vessel. I think the time was approximately 3:30 a.m. We--as our staff began arriving, they took up their normal duty stations. We kept one staff member, of course, answering phone and maintaining communications. We put other staff on the way out to the EXXON Valdez. Joe LaBow is one of the staff who arrived. Interestingly enough he arrived from the Wasilla office. Drove a vehicle, basically, across two mountain ranges to get to Valdez and he still arrived on the vessel before the Alyeska equipment arrived. We, then, continued to bring staff into Valdez. I, of course, was notified in the normal course of carrying out that chain and at 8:30 in the morning I convened a meeting of our oil and hazardous substance spill response chief, director of the division, my deputy, other staff who were involved, and the Governor joined us by teleconference from Anchorage--from Fairbanks, excuse me.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Then, about an hour later, I took off from Juneau on a commercial jet. Got to Cordova. Went to the Coast Guard rescue station there. Flew with the Coast Guard in their H-3 out of Cordova, H-3 helicopter out of Cordova. Overflew the spill by early afternoon. And then arrived in Valdez where I waited very briefly for the Governor to arrive from Fairbanks. We, then, immediately went to float plane, flew to the vicinity of the tanker. Went by smaller Coast Guard vessel over to the tanker and were onboard the vessel by late afternoon, sometime between 4 and 5, close to 5 o'clock. We, then, spent a couple of hours there. We observed the trial dispersant drop from the helicopter as we were on the deck of the vessel. We had a chance to spend time on the bridge. We talked to Coast Guard personnel on the vessel. And, of course, while we were out there, staff from the Department of Environmental Conservation, the Department of Fish and Game, the Division of Emergency Services were all arriving in Valdez. We, then, returned to Valdez where I assumed overall command of the operation in Valdez. Our on-scene coordinator was designated and that was Bill Lamoreaux. We maintained Lynn

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Kent with the Regional Response Team. She stayed in Juneau temporary to work directly with Captain Haynes (ph) on the RRT. And then we basically took over a portion of the court building and put together an emergency response center, with biologists, our spill response people, a logistic shop and, basically, by that evening we were fully operational and ready to take what is normally our role: oversight, assessment of damage and monitoring.

As it turned out we ended up having to take a more direct role in cleanup but during that first 24 hours it was our expectation that we were going to be stay in our normal role.

About 18 hours into the spill, it became clear that Alyeska was not responding under the conditions of the contingency plan and that neither Alyeska nor Exxon appeared to be able to carry out the requirements of the plan, and the Alyeska Contingency Plan is the only document that has been approved for this kind of a response.

So 18 hours into the spill we requested that RRT re-evaluate the capabilities of the responsible parties to carry out their duties under the plan and under the law. By early

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

morning on Saturday, we had--I would--and this would be about 24 hours now--I would estimate about 25 people from those different state agencies and they were on duty. This was not folks arriving, going and going to hotels: this was folks arriving and going to the emergency center where we were waiting for daybreak.

Q. What is your--what do you consider your normal role in a spill response?

A. Our normal role is to oversee the adequacy of the containment and recovery by responsible party. In this instance, Alyeska Pipeline Service Company has the approved Oil Spill Contingency Plan and it was our expectation, and I think this is what the law requires, that Alyeska make that response. So our expectation had been that we would be working with the Coast Guard with Alyeska. The Coast Guard clearly is the overall lead as the federal on-scene coordinator and we respect that. There is no--we had no need to intrude on that responsibility but we have a specific set of parallel authorities under state law and that's what we normally would do.

Q. Okay. You said Alyeska wasn't

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

meeting the conditions of the plan, or Exxon. I'm not sure now. What are those expectations that you're talking about?

A. The plan is very specific about the measures that will be taken at the time the spill occurs. One of the most specific parts of that is delineation of what equipment will be deployed under the 200,000-barrel scenario which, of course, we were looking at. They, also, in the general portion of the contingency plan, commit to mobilizing certain teams and to maintaining control of the spill response as agent for the owner companies, one of whom, of course, is Exxon.

Q. In your opinion, what could have been done during those first 24 hours that wasn't done?

A. The contingency plan indicates that there will be deployed a number of skimmers particularly identified amount of boom and that they would be able to--Alyeska would be able to deploy that and have it operational within 5 hours even to a point further south than where this tanker grounding occurred. There is also basically a long list of items which Alyeska

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

agreed to do, for example, to mobilize teams which we saw no evidence of occurring. So, when I was on the tanker with the Governor, for example, this was well into the first day and far beyond what they had committed to in the plan, we did not see the equipment that they had promised. There was no booming of the leading edge or of the tanker, the leading edge of the spill or the tanker. The only boom deployment that we observed were some lengths of boom that did not appear to be well directed. They may have been part of the two smaller skimmers that were operating. We knew that the larger skimmer should have been deployed but we did not observe it operating at all during the time we were onboard the vessel. It was quite clear to us that what had been promised in the contingency plan was simply not being delivered.

Q. What was the extent of DEC's participation in the RRT meetings?

A. In the first 24 hours, there was an RRT meeting at 12 o'clock on Friday. We participated with our normal staffing. Lynn Kent is our designee to the RRT and we sit as a member to the RRT. At that point, the RRT was looking at the overall situation. They discussed the

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

weather. They discussed the movement of the spill, the kind of equipment that was supposed to be moving into the area. It was just a general overview at that point. I think they also discussed the use of dispersants because dispersants had been pre-approved in Zone 1 by the RRT earlier in March. So that was the kind of discussion, and our participation is as a normal full-scale member of the Regional Response Team.

Q. Is that an advisory position?

A. We sit as a full member of the RRT. We are the state member to that and the Regional Response Team advises the Coast Guard on-scene coordinator.

Q. Did Lynn Kent, did she concur with what was going on at the RRT meeting?

A. In what respect?

Q. She sat in on all of these discussions and did she make any recommendations for equipment or do anything that wasn't being done or wasn't in the process of being done?

A. At that initial meeting, of course, the expectation was that there would be the full response that had been promised in the contingency plan. Later in the day, we talked

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

with Lynn Kent because we were not seeing that happen. So Lynn contacted Captain Haynes after we had put together a letter requesting the RRT to re-evaluate whether Alyeska and Exxon would really do what had been promised by the contingency plan, and she contacted Captain Haynes directly in order to ask that the RRT take a hard look at just what response was actually being fielded. Then, at that time, we attempted to send, by fax, a copy of the letter which could not be successfully transmitted just because of problem with the receiving end of the fax, so we made sure that the content of that letter was conveyed to Captain Haynes and then it was communicated, by fax, the first thing in the morning between 8 and 8:30 on Saturday morning.

Q. I'm a little confused. What did that letter say?

A. The letter indicated that Alyeska had not responded with what was listed in the contingency plan. This really was a--this really was a failure of performance under the plan. And we knew that we could not wait for this situation to go further because our experience with the spill from the Glacier Bay, tanker Glacier Bay in

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

1987 in which we worked very closely with the Coast Guard, that experience had shown that we absolutely had to watch exactly what was developing in the way of containment and response, and that we could not wait for the situation to progress beyond the point of which the Coast Guard could take a more directed roll. Otherwise, what happened with the Glacier Bay was for the first two days there was passing of the ball around the circle of potentially liable parties and no cleanup happening. We were determined that that not happen in this instance. We knew who clearly the responsibility. It was Alyeska. Exxon had come into the picture, of course, but we wanted to make sure that the on-scene coordinator held their feet to the fire and that if they weren't going to perform, that the decision was made early to intervene rather than to wait until things were out of hand.

Q. Were you aware of some of the activities that Exxon was doing to get equipment to the scene?

A. To the best of my knowledge, the information that we had from Exxon was only through the RRT and through the press conferences

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

that were held on Saturday by Mr. Iarossi. And, in fact, that is how I learned that Exxon was asserting that it had taken over the spill. The indication at the press conference was that as of noon on Saturday, they had initiated that take over of responsibility and that was completed by 6 p.m.

Q. Where is the Zone 1 in Prince William Sound?

A. May I use the map?

Q. Yes, sir, please.

A. Zone 1 generally extends on either side of the tanker lane in this fashion and then down to Hinchinbrook Entrance. Basically the bulk of this open water area. And then, close up to the Bligh Reef area, there is a boundary and during most of the year, during the period from October through March, this entire area is also Zone 1. As of March 1st, it becomes Zone 2. The movement of the oil from Bligh Reef, of course, was basically in a heavy pancake here and then it moved generally this way for about the first 65 hours. And then just before the end of the third day, the wind came up in this direction and blew the spill out in this kind of conjecture. So

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

during a good portion of that first three days, that spill, and clearly the leading edge of the spill, was in the Zone 1 area which--

Q. Zone 1 area is basically through the--covers the traffic separation scheme or traffic lanes?

A. That's right. And in a large area on either side and basically a diamond pattern.

Q. That Glacier Bay, was that an American vessel or a foreign vessel?

A. I'm not sure what the registry was. It was owned by Trinidad Shipping.

Q. How big a spill was that?

A. It's about 300,000 gallons.

Q. Did Alyeska have the equipment at the terminal or just not getting it out to of the scene? Was that the big problem?

A. The indication we had is--or that the equipment was available but not deployed as the plan required.

Q. Was the scenario for the 200,000-barrel spill in the plan, was that--was that unrealistic in the first place, that much oil being spilled at one point and only be handled by dispersants?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. I'm sorry. I don't--

Q. My understanding is that, basically, they were going to use dispersants to take care of the spill.

A. Well, the 200,000 barrel scenario described a variety of equipment that would be used. In that scenario was discussed the use of dispersants and, in part, because the use of dispersants appear to have some utility for this kind of a spill, we made sure that we worked with the RRT to get the pre-approval so that there would be no need to return to us to get approval in that Zone 1 area. But it was very clear, I think, from the 200,000-barrel scenario in the plan that mechanical recovery was to be relied on. And Coast Guard, of course, had made it clear in this instance that mechanical recovery was a preferred method because the conditions were perfect for that. They were not ideal, however, for dispersants. The weather corresponded almost perfectly to the assumptions in the 200,000-barrel scenario. Virtually no seas. Wind conditions very low. Not much current in that particular area. It was ideal for implementing the 200,000 barrel-scenario response.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. With the equipment they had, if they would have gotten it out to the scene and used their mechanical pickup devices, would those devises and the equipment they could store it in when they picked it up, would that have been sufficient for them?

A. According to the--according to what the plan represented, there would have been the capacity if those assumptions held, and they did, to recover 240,000 barrels with the equipment that the contingency plan had designated.

Q. How long would that take with the equipment they had?

A. That would have been completed prior to the first 72 hours, according to the specifications they have provided.

MR. KATCHARIAN: That's all the questions I have.

DR. DICKINSON: Captain Deppe.

EXAMINATION

BY CAPTAIN DEPPE:

Q. Mr. Kelso, did your department ever give notice to Exxon that a determination had been made that the cleanup conducted by Exxon were inadequate?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Absolutely. I met with Mr. Iarossi. We met with the Exxon staff and with the Coast Guard and, of course, we met also with the RRT and conveyed our views in that way. I, personally, let Mr. Iarossi know that we considered the response to be inadequate. In fact, during the first days of the spill, it was so inadequate that local people were coming to us and saying why is nothing happening? And we would, then, talk to Exxon and say, what is the problem? We would get from Exxon a list of equipment or a list of people that were being mobilized and we had no doubt that there was an effort being made to mobilize but what we weren't seeing was response in the field that was actually picking up oil, and that was what the great concern was. That's what we needed to see results in.

DR. DICKINSON: Mr. Kelso, Captain Deppe, if you could keep your questions and your responses to within the 24 hours.

BY CAPTAIN DEPPE:

Q. Mr. Kelso, can you tell me when you had that meeting with Mr. Iarossi?

A. Well, the meeting--

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Was it within 24 hours?

A. No. Mr. Iarossi arrived after the Governor and I had gone to the tanker on Friday evening. There was a press conference--

DR. DICKINSON: Mr. Kelso, the answer was, no, it's not within the 24 hours. Thank you.

BY CAPTAIN DEPPE:

Q. Mr. Kelso, did your department ever hire anyone to begin cleanup activities within the first 24 hours?

A. Within the first 24 hours, it was our expectation that we would be doing our normal monitoring, quality control, damage assessment work and that the responsible parties, Alyeska and Exxon, would be carrying out the cleanup.

Q. Does that mean no?

A. We had mobilized a response team which included bringing onboard an oil-spill contractor but that was to--at that point we expected it to be to advise us, so, yes, we began to bring a team together but it was not with the expectation that we were going to have to do the cleanup. That realization came later.

Q. Do you feel that funding cuts to

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

your department might have hurt your response to this spill?

A. This was a spill that needed an immediate response. It was not a spill that could--it was not a response that would have been different had there been any additional inspections. We were well aware of the equipment that was available. We were well aware of the plan that Alyeska had committed to, and we see this as a failure of performance. It would not have been changed by having more staff in Valdez. It might have provided additional opportunities to work with other problems that Alyeska has in air and water pollution, but it would not have made a difference in the way they responded here.

Q. So what's the answer? No? Is the answer no?

A. You asked me a question that requires more than a yes or a no. You asked me whether the--whether the lack of funding hurt our ability to responds. And I'm saying that if you're asking me whether additional inspection would have made a difference here, I'm saying, no, it would not have made a difference.

Q. The answer is no. Thank you.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Well, was that the question? I'm not prepared to accept a characterization if that's not what you're asking me.

Q. Well, that's exactly what I asked. In spill drills that your department witnessed and observed, were you satisfied with Alyeska's performance prior to this drill?

A. Alyeska's performance was spotty. In 1984 they performed inadequately. We called them on it. They said, well, if has had been a real spill, of course, we would have done things better. That was a red flag to us. The spill drills are an important part to preparedness, so we required additional spill drills in '85 and '86. And when this--ultimately when this plan was revised, we required as a condition of approval, that the--that a successful completion of a spill drill be accomplished and that was accomplished in November of 1986.

Q. What was the size of that spill drill that you witnessed in '86?

A. I would have to look at my notes on that. It was a smaller spill. And I don't remember exactly where it was located, but it was intended as a test of full response. We have two

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

kinds, basically. One is desk top and the other is full mobilization, and this was intended to be mobilization.

Q. Mr. Kelso what's a compliance order?

A. In what context?

Q. In regard to an oil spill contingency plan.

A. Well, normally, a compliance order--I'm not sure what you're asking. But normally a compliance order is an order that we enter into, that we make for a company who is in violation of a regulation or a permit requirement to bring them back into compliance, and those can be a variety of kinds. But the basic approach is to establish an order that would be enforceable in court if the company fails to conform to its requirements.

Q. Okay. In connection with Alyeska's plan, did you issue any compliance orders?

A. I have since issued an emergency order.

Q. Were these done prior to the spill?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. No. What we have done with Alyeska is to issue some very specific requirements for strengthening the plan. And if you look back--that process really extends back to 1977.

Q. But there were no compliance orders prior to the spill, as far as you know?

A. Well--

Q. As far as Alyeska's contingency plan is concerned.

Q. Had there been a violation of the plan, that would have been an appropriate circumstance to issue a compliance order. Here the problem was the plan was intact, but the performance was wholly inadequate.

Q. Mr. Kelso, in your opinion, do you think--

DR. DICKINSON: Captain Deppe, one minute, please.

(Off record.)

DR. DICKINSON: Okay, Captain Deppe.

BY CAPTAIN DEPPE:

Q. Knowing the rate of spillage and the amount of oil that was spilled, do you think

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

that there was any power on earth that could have mechanically contained the spill and cleaned it up?

A. I think that had the powers that were present, Alyeska and Exxon, done what they had promised in this plan, it would be a very different situation today. The commitment that Alyeska made was to have the capacity to pick up 240,000 barrels with a certain set of assumptions. Of course they did not do that. It was grossly under that level and it is only in hindsight, of course, we can see that neither Exxon nor Alyeska was prepared to do what they had committed to do. But I think that there--that had the resources been properly mobilized this would have been a very different situation. If I had had the monetary resources that Exxon had, the expertise that my staff had, the creativity and energy that local people brought to this task and the support that the Coast Guard provided, this would have been a very different situation had we been running it.

Q. Did your people insure that the equipment that was available would be able to pick up the oil, 240,000 barrels of oil, in the time

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

alloted in the plan?

A. The way that oil spill contingency plans are done in Alaska, and virtually everywhere else in the country, is that it is industry that comes forth with the plan that makes the commitment to do the job and then implements the plan. It may well be that we should do as you suggest which is to make the change so that the state or the Coast Guard is in a position to require certain things in the contingency plan and then to do the implementation steps rather than waiting for industry to prove that it can't do the job and then have to step in.

Q. You said earlier that the Coast Guard made the determination that spill should be mechanically contained and cleaned up. In what way did they do that and who did that with the Coast Guard?

A. I think what I said was that the Coast Guard had indicated, in discussions with the RRT, that mechanical cleanup was the preferred method. The Coast Guard did not rule out the use of the chemical dispersants. In fact, from the beginning that was discussed and I believe that the on-scene coordinator approved the request for

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

trial application that Alyeska made on the first day. Of course, Alyeska did not have the equipment appropriate to deliver the dispersants on the scale that has since been suggested by Exxon that they would have liked, but the on-scene coordinator did not rule out the use of those dispersants at all.

The conditions were such, though, that favored mechanical cleanup. It was ideal for booming and skimming. There would have been a real opportunity to pick up a good share of that leading edge of the spill using containment boom. And so I think that the on-scene coordinator was getting at that. He was not suggesting that you couldn't use other means. There was not sufficient energy in the sea state to really provide the agitation necessary for effective dispersant use.

Q. You said there was a good chance to pick up a good percentage of the leading edge of the spill with mechanical means. What do you mean by a good percentage of the leading edge of the spill? How much oil are you talking about?

A. What I'm suggesting is, in the contingency plan, the commitment was made to

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

contain a spill and cleanup a spill that was of a magnitude that this spill was. And so when the--when the state or the Coast Guard looked at the implementation of the plan, what we expected is that they would deliver what they promised in the plan, which was a full response. It should have had--it should have been well contained. It should have been hit very hard while it was still in its thick pancake and that simply didn't happen. So they should have been able to do very well had they should have been able to live up to what the plan contemplated, what it said.

Q. So you think that 100% of the oil could have been cleaned up if all aspects of plan were followed?

A. I'm saying that is industry's responsibility to deliver on. It's Alyeska that made the assurance that they would be able to handle that level of spill. That's what they listed in their equipment list and they had provided earlier assurances of being able to pick up-- for example, in a letter a few years before this plan was approved, they had assured that they would be able to pick up 100,000 barrels in 48 hours. It is the state's or the Coast Guard's

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

responsibility to second guess industry when it is industry's legal obligation to deliver on what their contingency plan says they can accomplish.

DR. DICKINSON: Mr. Kelso, are you saying, then, that they should have picked up 100% of the spill? I think that was the question that was asked.

THE WITNESS: I'm saying that at this point no one knows what amount of that oil could have been picked up. But it was--it was Alyeska's plan. It was not our plan telling them what equipment they needed to get that job done. They are the ones that committed to doing it, and under their plan and the assumptions of that plan they should have been able to pick up a good chunk of that spill and by that I mean their numbers, their name plate numbers said 240,000 barrels. Whether they came short of that in the actual circumstances no one can say, even in hindsight, but it should still have been a very substantial recovery.

BY CAPTAIN DEPPE:

Q. Mr. Kelso, if your department had pre-approval to use dispersants, why did the Coast Guard state that Exxon only had authority to test

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

and would not--would need state and federal approval before allowing general use of dispersants within the first 24 hours?

DR. DICKINSON: Captain Deppe, is that a question that the state can answer, or is that a question that the Coast Guard should answer?

CAPTAIN DEPPE: Well, if he could answer it, I would like him to answer it.

DR. DICKINSON: Can you answer the question yes or no? Do you know--

THE WITNESS: I don't have information on that.

DR. DICKINSON: Thank you, Mr. Kelso.

CAPTAIN DEPPE: That's all.

DR. DICKINSON: Mr. Howitt. I almost called you Mr. Shier. Excuse me.

EXAMINATION

BY MR. HOWITT:

Q. Thank you, Mr. Chairman. If I may, I would like to ask Mr. Kelso about some questions about Exhibit 10H, which is the State of Alaska Approval Process for the oil spill contingency plan. Mr. Kelso, do you have 10 Hotel

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

in front of you?

A. I do.

Q. Have you reviewed that exhibit?

A. Yes, I have.

Q. Would you characterize that chronology of events to be a fair and complete description of the contingency plan process from 1977 through 1989?

A. The material that I've seen here, although obviously is just an outline, this does not contain the detail that the backup documents contain. I think it's an accurate representation as I know it.

Q. Well, then, is it true that the state approved the Alyeska Contingency Plan for Prince William Sound in 1987?

A. It was conceptually approved with conditions in--by letter in 1986. And one of the conditions was successful completion of spill drill. There were some other conditions as well. And then there was a subsequent approval in March with a couple of other conditions to be completed by Alyeska.

Q. And do you know when the final approval was given to Alyeska?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. I think that the March letter served as that approval and Alyeska, then, carried out the other steps that were required.

Q. Were you Commissioner of the DEC at that time?

A. I was not commissioner of DEC when the conceptual approval was given and when the spill drill was completed. I was commissioner when the final approval was provided.

Q. Did you approve or did you review and approve the contingency plan prior to its final approval?

A. Did I personally review it? I believe that I personally reviewed the letter that was sent because this was a matter that had been so difficult to achieve getting the--getting what we viewed as an adequate plan developed with Alyeska. But I did not do the plan review. That would not normally be my function.

Q. Can you tell me why the approval of the 1987 plan was omitted from the chronology?

A. Well, the chronology, I don't know whether it was omitted as a matter of intention but the dates of the letters that we are talking about, I think, are April 23, 1986 and during

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

March, I've forgotten the date, now, of 1987.

Q. Are you aware that the State of Alaska as well as the federal government approved Alyeska's contingency plan beginning in 1987--excuse me--beginning in 1977?

A. I'm aware that contingency plans were required by state law and that those plans were approved in accordance with statute.

Q. Are you specifically aware that the Alaska Department of Natural Resources as well as the BLM have approved the Alyeska Contingency Plan every year from 1977 through 1988?

A. Are you talking about their responsibility under the state right-of-way lease?

Q. Yes.

A. I'm aware of the right-of-way lease. There are three sources of authority for the state to require the contingency plans: one is state statute having to do with oil spill prevention and response; one is the state right-of-way lease and the other is permit conditions.

Q. Mr. Kelso, your chronology references a May 1, 1984 report which was actually

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

an internal ADEC memorandum discussing Alyeska's preparedness for an oil spill. Is it common practice for the ADEC to rely on internal memorandums to criticize or provide critiques and not transmit those to Alyeska?

A. All of our files are open to the public and when we interact with a regulated entity such as Alyeska, we normally deal directly with the regulated party. In this instance, of course, and I don't have specific information about the May 1984 item, but I do know communications with Alyeska are very difficult, because the--I'm not talking about the lower level staff that we work with all the time, but at the upper levels, there is a real relunctance to meet the spirit of these environmental requirements, period.

Q. So, is it because of upper management that you decided not to transmit your critiques to Alyeska?

A. I do not accept your suggestion that we do not transmit the critiques. I think we have been straightforward with Alyeska about what things they need to improve. And I assume that you would not be surprised that we have internal

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

communications that serve a function within the agency in evaluating what steps we ought to take and what steps we don't need to take.

Q. Are you saying that you did--that the DEC did transmit their critiques directly to Alyeska?

A. I'm saying that our normal procedure would be to have some kind of discussion with Alyeska if we were asking them to make changes. If we were in an exchange of letters with them, we would put it in writing that way, but I'm not sure what you're getting at. This is hardly information that Alyeska did not have access to.

Q. Okay. The last oil spill exercise that you mentioned in your chronology, I believe is October 17, 1984. Are you suggesting that that was the last drill that was performed or observed by the DEC?

A. Oh, no. There were oil spill drills in 1985, 1986, '87 and '88, I believe. Certainly up through '87 and, then, in '88 and '89 we, of course, had direct observation of spill response. We find direct observation to be more useful than spill drills. Spill drills are useful

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

but they are a substitute for the real thing and when you have the real thing happen that gives us a much better picture of how the company is going to react and mobilize equipment.

Q. Mr. Kelso, in May of 1988, ADEC participated with ARCO and Alyeska in a major desktop drill and later on in equipment mobilization. One of the purposes of that drill was to involve ADEC in the phase transition process for a spiller to take over a spill from Alyeska. Was the ADEC satisfied with that response and did that make you aware of what our plans would be?

A. I'm aware of the exercise and the fact that we observed it. I don't have specific information on how that conveyed information about the way Alyeska saw its relationship to the owner companies. I do know that the Alyeska Contingency Plan specifically says that Alyeska will serve as the agent of the owner companies in spill responses for Prince William Sound.

Q. One of the exercises in that drill was to exercise the decision about applying dispersants. Are you aware that the DEC did not approve dispersants at that time and that was one

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

of the objectives of the exercise was to work that problem?

A. Dispersant use was pre-approved for Zone 1 in Prince William Sound at a meeting on March 7th and 8th of this year, roughly three weeks before the spill occurred.

Q. Your chronology says that ADEC reached an agreement on the use of dispersants in 1986. Was this agreement published?

A. The 1986 discussion of dispersants, I think involved the Regional Response Team and laid the groundwork for the approval, the pre-approval, of dispersant use within Prince William Sound. I think everyone realized that if there were a spill for which dispersant use was appropriate, it was important to have in place the pre-approval so we wouldn't lose time at the instant when a spill occurred and we might need to be able to use it. At the same time, everyone recognized that dispersant use should not be uncontrolled because it poses a different kind of risk to biological organisms so what we did, along with the RRT, was approve dispersant use in those areas where it could be safely used and to make sure that that was already

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

done so that the Coast Guard on-scene coordinator had the discretion to authorize it whenever he saw fit. That was the work that was done in '86. Then, I think Alyeska knew that that would be extended to Prince William Sound. There were discussions of it prior to the meeting on March 7th and 8th. And, then, it was formalized on March 7th and 8th.

Q. Mr. Kelso, you testified before, since this spill that ADEC is a hard-nosed agency. Would you agree that that's--

A. I think we are both firm and fair. And I think Alaskans expect that.

Q. In your chronology, you cite that you dedicated considerable staff time and a lengthly deliberate process of review in order to establish with Alyeska the 1987 contingency plan. In reference to that, would you consider that process a model program?

A. I think that the process produced a sound plan and we made a commitment to do that because we wanted to make sure that we built on what we had learned from Alyeska's operation and from the tanker trade in Prince William Sound.

Q. Mr. Kelso, who is Paul O'Brian?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. Paul O'Brien was previously the manager of our oil spill program.

Q. Was Mr. O'Brien responsible as the ADEC official for reviewing and recommending approval of the 1987 plan?

A. Mr. O'Brian would have had the lead in that and he would have worked with our field staff in doing the review. But it would have come back to him for, basically, a final recommendation.

Q. Paul O'Brien was recently quoted in the Anchorage Daily News as saying that nowhere in the world are there enough resources in one place to deal with a spill of up to 200,000 barrels. Do you agree with that?

A. One of the things we learned from this was that the world's inventory of equipment was not readily available to respond. The contingency plan contemplates backup from a variety of sources, bringing in equipment from different locations, mobilizing everything from dispersants to boom from different organizations around the country, around the world. And I think that Mr. O'Brian points out one of the basic policy needs that comes out of this whole episode

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

and that is that it is important not only that there be state-of-the-art equipment available to respond but also that there be a world wide inventory on computer so that that equipment and material can be mobilized in a timely way. In this instance, it seems to me that having provided its assurance that Alyeska was ready to respond to a spill of this magnitude under these conditions, that Alyeska should be held to that promise.

Q. You've stated that ADEC had pre-approved dispersant application in Zone 1. In your opinion was the OSC wrong to have required testing before that dispersant was applied in Zone 1 or should that have been done without testing?

A. The OSC had no need to come back to us for approval. And I think I would not characterize what Commander McCall required as testing. I viewed it as trial application. He simply wanted to see if this would work given that the conditions were not favorable for dispersant application.

Q. Given your pre-approval in Zone 1, do you think testing was warranted in this case?

A. I think he simply wanted to see if it would work rather than have resources expended

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

in that kind of response and it was going to be ineffective.

Q. I would like to ask a few questions with respect to another exhibit. That would be 10 Charlie. This particular area I would like to address is the 4,000-barrel scenario which is on the Alyeska numbered page 3-50. It's about, oh, 5 or 10 pages from the back.

Do you have that, Mr. Kelso?

A. I do have it in front of me.

Q. Are you familiar with the scenario in the approved contingency plan for 400,000 (sic) barrels?

A. I have read the scenario.

Q. I'm sorry. I missed that.

A. I read the scenario.

Q. Would you consider the 400,000--the 4,000 barrel scenario, as defined by the state, a minor, a moderate or a large spill?

A. I think that's a large spill.

Q. Have you noted, in this scenario, that although dispersant decision is presumed to have been made and the application was feasible, that approximately one third of the total spill hit the beaches and resulted in a two-month

cleanup?

A. I'm not sure I understand why this is relevant to what we are discussing here.

Q. Well, the reason I feel it's relevant, it's part of the plan.

A. This is one of the scenarios. This is not the scenario that was relevant to this particular thing. I'm happy to answer your questions but it seems to me rather far afield.

Q. Well, my question was: Are you aware that even though dispersants was applied in this particular scenario, that one-third of it hit the beaches and required in our estimation of approximately two-month cleanup?

A. I know what's in the written scenario. I think the--maybe I'm missing your point.

DR. DICKINSON: Mr. Kelso, I think maybe Mr. Howitt may have missed the point, too. Because aren't you talking beyond our agreed-to limit of 24 hours in your decision of dispersants?

MR. HOWITT: Well, I was referencing the contingency plan, itself. I wasn't talking particularly about response by

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Alyeska beyond 24 hours. Is it proper to talk about the contingency plan scenarios themselves?

DR. DICKINSON: Yes, it is.

THE WITNESS: Then, can I return to your question? You're suggesting--I guess I don't understand what you're suggesting. Are you suggesting that even with the use of dispersants you have a cleanup problem?

BY MR. HOWITT:

Q. Yes, that's what I'm suggesting.

A. Even with the use of dispersants the use of--effective use of mechanical needs is necessary. You might also note, that in the 200,000-barrel scenario, the trajectory there indicated contact with areas such as Naked Island, Eleanor Island, Main Bay, and that as a result of the trajectory that Alyeska had supplied, we asked for changes to the exclusion areas. Those exclusion areas would be things like Main Bay which are particularly sensitive. And, of course, not only was that included in this contingency plan specifically but it was also not done when the spill occurred.

Q. My point, Mr. Kelso, involved--

DR. DICKINSON: That was your

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

question.

MR. HOWITT: What was that?

DR. DICKINSON: Your question and not your point.

BY MR. HOWITT:

Q. All right. My question, Mr. Kelso, was that the assumption in the 400--or the 4,000 barrel scenario involved approximately one-third of the oil going on the beach. Would you not agree that the 4,000-barrel scenario is considerably different from the catastrophic event in a 200,000-barrel scenario?

A. The 4,000-barrel scenario is not only different in volume, the conditions that are assumed here are also substantially different, so the two are not comparable in that respect. What I have said about the use of tools such as dispersants and mechanical is you use whatever tools are appropriate for the conditions. The conditions here favored mechanical recovery. We pre-approved the use of dispersant and had this plan been carried out as it had been indicated there should have been a substantial recovery of oil and containment of oil, and that did not happen.

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

Q. Mr. Kelso, I would like to talk about the 200,000-barrel scenario. And I believe that's on page 3-54 and 3-55. When you approved the 1987 contingency plan, did you read the environmental consideration section of the 200,000-barrel scenario?

A. Our staff worked on all of the aspects of the plan, to the best of my knowledge.

Q. You have stated that you expected Alyeska to make a substantial physical recovery, especially within the first 24 hours. On page 3-55 the recovery rates for the Alyeska skimmers were listed. Do you see those?

A. Yes.

Q. Could you read what the recovery rates are, for me, for the Marco Class V, Class VII and the Vikoma Seapack skimmer?

A. The--under the table the lifted recovery rates and barrels per hour are 428 for the Marco Class V; 428 for the Marco Class VII and the two Vikoma Seapacks are not listed with a recovery rate. However, bear in mind that each of these pieces of equipment comes with a rating of its own. And if you look at basically the name plate ratings for those, you come out with some

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

very specific levels of recovery that are being included by Alyeska in the equipment that they are saying that they will have in place.

Q. I'm referencing the contingency plan, itself, here, Mr. Kelso. And I believe you will also note that sea skimmer which--pardon me. It's not listed as a Vikomas Sea skimmer. It's listed as a sea skimmer. It's listed at 536 barrels per hour. Do you see that? Given these rates what would you expect in the first 24 hours if optimal conditions were available?

A. Given the fact that the conditions, the assumptions in the plan were met virtually to a tee: winds less than 15 knots, sea state less than 5 feet, currents less than 1.6 knots, waves less than 2 feet, visibility equal to, or greater than, 2 miles. We would have expected optimum recovery. What the exact hourly recovery would be in terms of barrels, I don't know except for what each of these pieces of equipment is rated at.

I do know that we don't even get to that point in the inquiry because this equipment wasn't deployed. We waited for this equipment on site. We were assured that it was en route and it never

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

showed up. When I was on the tanker at 5 o'clock in the afternoon, there were two smaller pieces of equipment working. There was a barge present but none of the other eqipment had been put in place that we could see, and the teams that had been promised as part of the general plan, as far as we know, were never deployed.

Q. Do you know this from personal knowledge that this equipment wasn't deployed or are you basing this from your view on the ship?

A. I viewed the operation from the air. On the way in, I viewed it from the vessel. I have viewed it the following day and I interviewed staff about what equipment was on scene. I don't know what Alyeska may have done internally, but I do know what I saw in the field.

Q. Mr. Kelso, could you view the leading edge of the spill from the vessel?

A. From the vessel, I would not have been able to discern the leading edge. From the air, I certainly could.

Q. So are you positive that these three pieces of equipment were not working at the leading edge of the spill?

A. It appeared to me from my

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

observation that they were working in the spill--in the slick, but not at the leading edge. In fact, they did not appear to be operating in any particular systematic fashion. When I observed them they didn't appear to be heading in the same direction. There were short lengths of boom deployed from the mouth of the skimmers but there didn't appear to be anything really guiding the skimmers. I saw no indication that they--

DR. DICKINSON: Mr. Kelso, I would ask you to respond to the question and not--the safety board is not here to analyze any of the contingency plans. I would request that you answer the question and, in your best opinion, give your answer. Thank you.

MR. HOWITT: I'm sorry. I didn't hear if he answered the question or not.

THE WITNESS: What was your question?

BY MR. HOWITT:

Q. My question was: Were you able to observe the leading edge of the spill and know whether those pieces of equipment were, in fact, working on the spill or not?

A. I observed the leading the edge of

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

the spill from the air. I, from my observation, believed that the equipment was not working the leading edge, but was located in the slick.

Q. So are you saying that that equipment was working?

A. The equipment was not at the leading edge.

DR. DICKINSON: Mr. Howitt, I think he said that the equipment was working, yes.

BY MR. HOWITT:

Q. Mr. Kelso, did you visit the Alyeska terminal or converse with any Alyeska people in charge of the spill on the first 24 hours?

A. I had a short conversation with George Nelson in the Civic Center and I believe that was in the first 24 hours but I'm not certain that that was within 24 hours.

MR. HOWITT: Okay. Thank you. I have no other questions.

DR. DICKINSON: Thank you, Mr. Howitt. Cmdr. Waldron.

CMDR. WALDRON: No questions.

DR. DICKINSON: Dr. LeResche.

EXAMINATION

BY DR. LeRESCHE:

Q. Mr. Kelso, simply stated, do you see the problem in the response here as due to deficiencies in the contingency plan?

A. No. I think the problem was execution of the plan.

Q. Do you think it was due to deficiencies in the state approval process of this contingency plan?

A. No. The state worked very hard to build new safeguards into this plan. They were ultimately incorporated. Then, we had every reason to expect it to be carried out, especially since we observed spills in January and March.

Q. We have all learned a lot, especially you, in the past eight weeks. In light of what you have learned since this accident, would adjustments in the contingency plan be sufficient correction for the mistakes made?

A. There is nothing that changing the contingency plan could do to insure that there was actual performance. And that's what the problem is.

Q. Are you satisfied with the state's 24-hour response?

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

A. The state's 24-hour response, I think, was aggressive and professional.

Q. Mr. Iarossi testified earlier that it was Exxon's Contingency Plan which Exxon Shipping Company implemented. Is that consistent with state regulations?

A. There is only one state approved contingency plan for oil spill response and that is Alyeska's.

DR. LeRESCHE: Thank you, Commissioner. No more questions, Mr. Chairman.

DR. DICKINSON: Thank you, Dr. LeResche. Thank you, Mr. Kelso. Appreciate your testimony and you're excused from the witness stand.

It's been a nice 12-hour day and I thank you. We will--I heard 7:30. No, we just went beyond 7:30. I'm sorry, Commander. We will recess until tomorrow morning at 0800, again.

Keep in mind, we have three witnesses tomorrow and we have to be out of this room by noon, so we will start again at 8 a.m., 0800, here.

Thank you.

(Proceedings concluded at 7:50 p.m.)

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA

REPORTER'S CERTIFICATE

I, DEBORAH D. PARKER, Stenotype Reporter, hereby certify:

That I am a Stenotype Reporter for Alaska Stenotype Reporters and Notary Public for the State of Alaska; that the foregoing proceedings were taken by me in Stenotype Shorthand and thereafter transcribed by me; that the transcript constitutes a full, true and correct record of said proceedings taken on the date and at the time indicated therein.

Further, that I am a disinterested person to said action.

IN WITNESS WHEREOF, I have hereunto subscribed my hand and affixed my official seal this 30th day of May, 1989.

Deborah D. Parker
DEBORAH D. PARKER
Stenotype Reporter

My Commission Expires: 2.9.91

COMPUTER-AIDED TRANSCRIPTION BY BARONDATA