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VOLUME 26

STATE OF ALASKA

IN THE SUPERIOR COURT AT ANCHORAGE

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In the Matter of:	:	
STATE OF ALASKA	:	Case No. 3ANS89-7217
versus	:	Case No. 3ANS89-7218
JOSEPH J. HAZELWOOD	:	
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Anchorage, Alaska
March 9, 1990

The above-entitled matter came on for trial by jury before the Honorable Karl S. Johnstone, commencing at 8:38 a.m. on March 9, 1990. This transcript was prepared from tapes recorded by the Court.

APPEARANCES:

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C O N T E N T SWITNESSESDEFENDANT'SDIRECT CROSS REDIRECT RECROSS

Joseph Winer	3	32	60	69
Andrea P. Martineau	74	76	80	85
Shiras M. Walker	87	148	-	-

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E X H I B I T SDEFENDANT'SIDENTIFICATION IN EVIDENCE

BX	13	-
BY	75	76

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P R O C E E D I N G S

(Tape C-3665)

THE CLERK: -- the Honorable Karl S. Johnstone
presiding is now in session.

JUDGE JOHNSTONE: Thank you, you may be seated.
Sir, you're still under oath.

Whereupon,

JOSEPH WINER

having been called as a witness by Counsel for Defendant,
and having previously been duly sworn by the Clerk, was
examined and testified as follows:

MR. CHALOS: Good morning. Good morning, Judge.

JUDGE JOHNSTONE: Good morning.

DIRECT EXAMINATION

BY MR. CHALOS: (Resuming)

Q Good morning, Mr. Winer.

A Good morning.

Q When we left off yesterday, we were talking about
the damage that you saw in San Diego.

A Yes.

Q Did you see any damage -- strike that and let me
start again. Can you describe what damage you saw in and
around the Number one, Number two and Number three holds?

A Certainly. There were longitudinal or fore and
aft score marks. There were tearing of the plates and

1 distortion of the internal members. In the area around the
2 starboard side of Number two and Number three, the
3 structure was bodily crushed upwards and to a large extent,
4 the outer hull plating had been removed previous to the
5 ship going in drydock.

6 Q In what direction was the damaged you viewed?

7 A From forward to aft.

8 Q In a straight line?

9 A Yes.

10 Q There was some turn near Number five hold, was
11 there not?

12 A Yes, as shown in one of the exhibits, the scraping
13 marks and indeed even the cutting of the hull progressed
14 aft and then sloped off toward the starboard at an angle of
15 about five degrees. This was due to the relative direction
16 of the ship with respect to the rocks.

17 Q Did you see any transverse damage?

18 A None whatsoever.

19 Q Were you here when Professor Vorus testified?

20 A Yes, I was.

21 Q Do you remember his testimony with respect to the
22 subtle scratch marks in the transverse direction?

23 A Yes.

24 Q Did you see any such marks?

25 A No, those appear to me, when I saw the ship, they

1 appeared to be stains and those stains appear in the
2 photograph, to me, as stains. They were not physical
3 contacts.

4 Q I put before you Exhibit 146 that Professor Vorus
5 identified and indicated contained transverse scratch marks
6 or subtle scratch marks. Do you see any such marks in that
7 photograph?

8 A No, I don't.

9 Q When you -- did you view that area?

10 A Yes, I certainly did.

11 Q Did you see any marks when you viewed the area?

12 A No, I didn't.

13 Q Did you see any signs of rotational damage on this
14 vessel?

15 A Not in the plating that remained on the ship, no,
16 I didn't.

17 Q Do you have any opinion as to how the damage was
18 caused that you viewed?

19 A Certainly I do.

20 Q What is that opinion?

21 A The damage was caused, in my opinion, by the ship
22 first having traveled over a hard area which scored the
23 ship and tunneled the ship from bow, directly under the
24 bow, straight down the midship, and then tapering off
25 toward the Number 5 starboard tank and the slop tank.

1 Subsequent to that, the vessel struck a second time shortly
2 after the first striking and fetched up and stopped on a
3 reef in the area of the six fathom mark. That's where she
4 came to rest.

5 Q Is it your opinion that whatever damage that was
6 caused by the grounding occurred in the first and second
7 hit?

8 A Yes.

9 Q You mentioned there was additional damage, I
10 believe you said crushing damage. Do you have an opinion
11 as to how that was caused?

12 A Yes, that was caused by the variations in tide
13 during the several days that the vessel lay on the reef.
14 One indication of how severe that was was in the diver's
15 report, where he shows a localized cross section of the
16 vessel sketched on the 24th of March, again on the 25th of
17 March, showing a crushing upward at the turn of the bilge
18 or the lower corner of the vessel. And then he shows
19 another section dated March 31st that shows an even more
20 severe progression of that crushing, showing a crushing
21 about -- well, the dimension shown on here is about two
22 feet.

23 Q Mr. Winer, would you mind drawing as you just
24 described on the board?

25 A Sure.

1 Q You need to take your microphone with you.

2 (The witness draws on the board.)

3 BY MR. CHALOS: (Resuming)

4 Q What area of the ship are you describing?

5 A This area is in the way of I believe Frame 23 or
6 25 on the starboard side. It shows, on March 24th -- it
7 would be like that and that would be looking forward on the
8 starboard side and the reference is a Point A here. Then
9 the next sketch shown on the diver's report is like this
10 and this is March 25th. It shows Point A here. And the
11 third sketch on the diver's report is March 31st. Point A
12 isn't shown, but there is a dimension that shows this to be
13 about two feet, which in fact shows that the bottom here
14 was crushed upward and it bubbled out to the side and even
15 more intensely at this point. I believe this is two feet
16 out, at about something like two feet, off the flat side of
17 the ship.

18 Q And what does that all indicate to you?

19 A It indicates an upward crushing caused by the
20 consistent movement up and down as a result of the tides.

21 Q All right, you may resume your seat. Mr. Winer,
22 there's been testimony here that subsequent to the
23 grounding, the vessel's engine and rudder were used. Do
24 you have an opinion as to whether any further damage was
25 caused by the use of the engine and rudder after the

1 grounding?

2 A Yes, I do.

3 Q What is that opinion?

4 A My opinion, no substantial or significant damage
5 was caused by the use of the rudder and the engine.

6 Q What do you mean by significant damage?

7 A Any more than perhaps some localized pressure or
8 movement around the pivot point, but that area was already
9 severely damaged.

10 Q Do you have an opinion as to whether any further
11 pollution was caused by this additional damage that you
12 described?

13 A Yes, I do.

14 Q What is that opinion?

15 A No additional pollution was caused because no
16 additional tanks were ruptured.

17 Q Now you were present, again, when Professor Vorus
18 testified. Did you hear his testimony with respect to the
19 bowing of the longitudinal frames?

20 A Yes.

21 Q Do you agree or disagree with that opinion?

22 A The opinion that it was caused by transverse
23 movement?

24 Q Yes.

25 A I disagree with that.

1 Q Why?

2 A Well, for two reasons. One, we know that there
3 was an upward force exerted by the grounding, itself. The
4 longitudinals on the bottom of the ship are designed to
5 provide cross section to the ship and provide longitudinal
6 strength. They're designed also to provide a diaphragm
7 resistance to the upward pressure of the water. They're
8 not designed for a grounding situation. The grounding
9 situation in forcing the hull up would necessarily cause
10 those longitudinals to spread apart, due to the arched
11 shape of the contact, of the damage caused by the contact.

12 Q When you say contact, are you referring to the
13 rocky bottom?

14 A Yes, I am. Secondly, if there were any such
15 transverse movement, it would not only -- it would
16 certainly show up in the adjacent plating that remained
17 intact and there was no such evidence seen during my
18 inspection.

19 Q Now you were also present when Mr. Milwee
20 testified, were you not?

21 A Yes, I was.

22 Q Do you agree or disagree with his opinion of the
23 tons aground in this situation?

24 A I generally agree with the tons aground, yes,
25 based particularly on the large variation due to the

1 extreme variation in tide, yes.

2 Q You heard Mr. Milwee's testimony with respect to
3 the thrust of the engine at full power.

4 A Yes.

5 Q Do you agree or disagree with his opinion that
6 about 200 tons of thrust was what this engine could do at
7 that particular time?

8 A I consider that to be somewhat on the high side.

9 Q Did you do any calculations yourself to determine
10 the thrust of this engine?

11 A Yes, I did.

12 Q At 55 rpms, what did you calculate the thrust of
13 the engine to be?

14 A I calculated the thrust, under the best operating
15 condition -- and that's the situation where the propeller
16 is turning 55 rpm and the vessel is advancing through the
17 water, and that's the function for which the propeller was
18 designed -- I calculated the thrust to be approximately 147
19 long tons.

20 Q If the vessel was aground, would you expect that
21 thrust to be less?

22 A Certainly.

23 Q Do you agree or disagree with the opinion
24 expressed by Mr. Milwee that this vessel -- it was
25 impossible to move this vessel using the rudder or the

1 engine?

2 A I certainly do agree with that opinion.

3 Q Do you have any opinion as to whether this vessel
4 was impaled or not?

5 A Yes, I do.

6 Q What is that opinion?

7 A The vessel was apparently heavily impaled.

8 Q Do you share the opinion that it would have been
9 impossible to move this vessel?

10 A I certainly do.

11 Q Now you're familiar with the type of engine that
12 was on this vessel?

13 A Yes, that's the RTA Selzer.

14 Q And you're familiar with that engine?

15 A Fairly, yes.

16 Q There was -- strike that. Can you describe how
17 you would go -- how a captain would go from 55 rpms to full
18 sea speed in a hurry, if he wanted to?

19 A Yes, there's an override on the program up
20 control, the program up control being designed to bring on
21 powers above 33 percent horsepower in a gradual fashion so
22 that you have a stabilized heat balance on the engine.
23 There used to be what was called an emergency override down
24 in the engine room. There still is one, but it has a
25 different name. With that, with what they call the fine

1 adjustment or the fine control, the engine can be brought
2 from 55 rpm to full sea rpm of about 78 or 80 rpm in a time
3 between 60 and 120 seconds.

4 Q 60.

5 A 60 to 120 seconds.

6 Q Is that, in effect, an override of the LPU
7 system? In other words, you don't use the load program up
8 in that instance?

9 A That's correct, that overrides, the LPU.

10 Q So if the captain wanted to go from 55 rpms to
11 full sea speed, all he'd have to do is press a button?

12 A Yes.

13 Q Now do you have an opinion as to whether or not
14 this engine would have overheated, had she been put on full
15 speed in the condition that she was grounded in?

16 A The only way the engine could have overheated
17 would be if there was some impairment to the cooling
18 system. The actual output of the engine would be no cause
19 for overheating. If, by some means, debris came in as a
20 result of the grounding and it plugged up the oil coolers,
21 you could get a high oil temperature, but I wouldn't term
22 that as being the engine overheating.

23 Q Now I'd like to speak a little bit about the
24 exhibits you prepared on the basis of Mr. Shizume's
25 reports.

1 A Yes.

2 Q All right, let's start with Exhibits BF through
3 BL. Can you tell the jury what you did in preparation of
4 this exhibit?

5 A Sure. First, I took the hydrographic chart which
6 gave me the background for this exhibit and --

7 Q When you say hydrographic chart, you mean the
8 chart of -- the nautical chart of the area?

9 A Yes, the one that showed the geography and the
10 depths of the water, as well as the elevations on the
11 shore, elevations on shore as shown here, on Bligh Island.
12 And the depth of the water in the various areas is shown in
13 fathoms which are six feet all throughout the water
14 portion. Then I reviewed the printouts that Mr. Shizume
15 provided to me.

16 Q Are those computer printouts?

17 A Yes, those are the CAORF printouts which showed
18 all of the input employed in driving the position and speed
19 and heading of the vessel at various intervals.

20 Q Let me just show you what we've marked for
21 identification as Exhibit BX.

22 (Defendant's Exhibit BX is
23 marked for identification.)

24 BY MR. CHALOS: (Resuming)

25 Q Are these the computer printouts that you referred

1 to?

2 A Yes, they certainly are.

3 Q And what do these computer printouts tell you,
4 what did they tell you?

5 A Well, they tell me, based on the numerous inputs
6 and the coefficients for solving what they call the vessel
7 motion equation, they utilize the heading taken off the
8 course recorder, together with the engine rpm taking off
9 the bell logger and put together with all the coefficients
10 and constants of the vessel, the weight, the draft, the
11 rudder area, the shape of the hull, the block coefficient
12 and several others. You can derive from that the actual
13 speed of the vessel, the heading of the vessel and the
14 necessary -- the essential derivatives from that, the
15 change in speed, the change in heading, adding in all the
16 inputs from the waves and the sea and currents.

17 Q Having reviewed the information provided to you by
18 Mr. Shizume, based on your knowledge of these types of
19 matters, do you have an opinion as to how accurate Mr.
20 Shizume's computer runs were?

21 A Yes, I do.

22 Q What is that opinion?

23 A I'd say they're extremely accurate with an
24 estimated precision to be, oh, say within one-tenth of a
25 ship length.

1 Q One-tenth of a ship length is how many feet?

2 A About 90 feet, 98 feet.

3 Q Okay. So tell us what you did, once you received
4 the information from Mr. Shizume.

5 A Sure. I took the runs that Mr. Shizume prepared,
6 the first one being the actual course of the vessel, based
7 on the course recorder and the engine rpm from the bell
8 logger, and I plotted the position on a minute-by-minute
9 basis, starting at one and a half minutes after midnight
10 and carrying through on a ship plan view, on a
11 minute-by-minute basis, up to the ship's entrance on and
12 beyond the ten fathom mark.

13 Q What do you mean by the ten fathom mark?

14 A The ten fathom mark is an underwater contour line
15 which I outlined in red and that connects all the points
16 delineating that shelf where, on one side of the shelf,
17 it's deeper than ten fathoms and on the other side of the
18 shelf within this shape it's shallower than ten fathoms.

19 Q Now ten fathoms is 60 feet.

20 A Yes.

21 Q And within the ten fathom line, there are depths
22 that are greater than ten fathoms, are there not?

23 A Yes, there are, yes.

24 Q Okay, go ahead.

25 A For a chart of this scope, taking in such area,

1 the detail shown is one that would envelope or envelope the
2 approximate ten fathom mark, even there are some deeper
3 areas within here. To include all the areas deeper than
4 ten fathoms here would complex the chart too much.

5 Q Do the ship lengths that you've drawn on there
6 represent the actual length of the ship in scale?

7 A Yes, they do.

8 Q Okay, go ahead.

9 A After plotting the actual track of the vessel
10 during the voyage, I superimposed upon that those
11 calculations provided by Peter Shizume identified by the
12 labels here, for example, 7A, and that's identified --

13 Q Will those labels tell you what the angle of the
14 rudder was at a particular time?

15 A Yes, the particular runs and track determinations
16 were made with specified rudder angles at specified times.
17 This run shown in green, for example, is a four-degree
18 right rudder given at six and a half minutes after the
19 vessel was .9 miles directly west of Busby Island at an
20 approach speed of 11.67 knots.

21 Q So the turn started at a minute and a half after
22 midnight?

23 A Yes, and the vessel at that time was right here
24 where my finger is pointing, showing the label 0001-1/2.

25 Q Okay, what was the next run that you made?

1 A The next run I made is identified as Run Number 7C
2 and that took into account a five-degree right rudder, six
3 and a half minutes after and .9 nautical miles west of
4 Busby Island Light at an approach course of 180.5 degrees
5 and a speed of 11.74 knots.

6 Q Again, the turn started there at a minute and a
7 half after midnight?

8 A Yes, that's correct.

9 Q Okay, when was the next one?

10 A The next one is 7D and that shows a ten-degree
11 right rudder at six and a half minutes after and .9
12 nautical miles west of Busby Island Light with an approach
13 speed of 11.4 knots and that's shown with this green curve
14 here identified with the label 7D.

15 Q Why is the speed different using ten degrees as
16 opposed to using five degrees?

17 A Because the effect of this -- there is an effect
18 on the speed imposed by the rudder angle.

19 Q Could you explain what you mean by that?

20 A Yes, when you impose a high degree rudder angle on
21 the ship, it tends to slow the ship down and that's, for
22 example, the reason why you can see, as we progress through
23 these various illustrations, the ship scale sizes appear to
24 get closer together. And the reason for that is that the
25 one-minute interval, the ship just doesn't go as far

1 because it's moving slower.

2 Q In the scenario that you're describing, once the
3 rudder is put over, are you saying that that tends to slow
4 the ship down?

5 A Yes, it does.

6 Q Okay, what was the next run that you made?

7 A The next run was at the same time, a 20-degree
8 right rudder at six and a half minutes after and .9
9 nautical miles west of Busby Island, an approach course of
10 180.5, at a speed of 11.74 knots. And that speed, of
11 course, is the speed entering or at the time of 0001-1/2.
12 That track is shown by the upper green curve here,
13 identified by the label 7E.

14 Q All right, and the last run?

15 A The last one is a compilation of three rudder
16 orders. It's identified as Chart Number 7F and it calls
17 for a ten-degree right rudder for a period of five minutes,
18 followed by a 20-degree right rudder for a period of two
19 minutes and then a 35-degree right rudder to the end of the
20 run.

21 Q What kind of effect did you get using those
22 orders?

23 A Well, the effect, as you would expect, up to the
24 point of 0006-1/2, it's exactly the same as the ten-degree
25 rudder shown on Curve 7D because, for those first five

1 minutes, you do have a ten-degree rudder. From that point
2 on, you go to a 20-degree rudder and it shows here in these
3 ten ship sketches a significantly more severe change in the
4 vessel's heading and a slight tightening of the vessel's
5 course because the higher degree rudder, the 20 and the 35,
6 were only imposed toward the end of this curve.

7 Q All right. You have, in three of those runs, the
8 vessel headed back north. Could you explain why you did
9 that? What's the purpose of showing that?

10 A The purpose of that is just to run out what the
11 simulator shows where the vessel would be at a given time.

12 Q Of course, a mate on the bridge wouldn't have his
13 vessel go in a circle.

14 MR. COLE: Objection, leading.

15 BY MR. CHALOS: (Resuming)

16 Q Let me strike that and start again. For the
17 purpose of illustration, you ran the I think you said the
18 simulation out to a particular time.

19 A Yes.

20 Q Would you expect a crew member to be doing the
21 same thing if he were on the bridge?

22 A No, I wouldn't. He'd probably get --

23 Q What would you expect?

24 A He'd probably get an order for a given rudder to a
25 given course and then to hold that course and I think I've

1 illustrated that in one of the other of these overlays.

2 Q All right. Now having done these simulations, I
3 would like to give you this hypothetical. If ten degrees
4 of right rudder was put on this vessel at a minute and a
5 half after midnight at the speed that this vessel was
6 traveling and that ten-degrees right rudder was held
7 steady, do you have an opinion as to whether this vessel
8 would have missed Bligh Reef?

9 A Yes, I do.

10 Q What's your opinion?

11 A My opinion is the vessel would have missed Bligh
12 Reef by a significant distance.

13 Q What is that distance?

14 A I've scaled this chart and we can see at ten
15 degrees would be Chart 7D which, from the point of the
16 grounding site, the vessel's track would have been just
17 under one-half a mile.

18 Q Okay. Now you also prepared the chart and
19 overlays which we marked as Exhibits BM through BS.

20 A Yes.

21 Q Did you follow the same procedures in preparing
22 these exhibits as you did the previous exhibits?

23 A Yes, I certainly did, starting off with the actual
24 track as plotted from the vessel's course recorder and bell
25 logger. That's shown in purple here and it's called Run

1 7B, the identical run to the one shown previously.

2 Q All right. And then you ran a series of other
3 runs?

4 A Yes.

5 Q Could you tell us what those were?

6 A Certainly. Starting off with Run 7G, that's
7 identified as the vessel providing a three-degree right
8 rudder, starting at the point of the vessel's being abeam
9 and .9 miles off of Busby Island Light --

10 Q At what time was that?

11 A 2355 hours --

12 Q 11:55.

13 A -- Alaska time. Yes.

14 Q Okay, go ahead.

15 A And that track shows here in blue. For example,
16 this point would be 000 hours or midnight and this position
17 here is identified as five minutes after midnight. That's
18 a three-degree track.

19 Q And do you have an opinion as to whether this
20 vessel would have missed Bligh Reef if, at 11:55 p.m.,
21 three degrees of right rudder was put on and held?

22 A Yes, it certainly -- yes, I do.

23 Q And what's that opinion?

24 A It would have missed it by a large amount.

25 Q Okay, what was the next run?

1 A The next run, identified as 7H, and that's a
2 four-degree right rudder starting at .9 miles off and abeam
3 Busby Light at a course of 180.5 and a speed of 11.69
4 knots, shown here with a second blue curve identified by
5 the label 7H.

6 Q If, at 2355, when the vessel was abeam of Busby,
7 four degrees of right rudder was placed on the rudder and
8 held, do you have an opinion as to whether it would have
9 missed Bligh Reef?

10 A Yes, I do.

11 Q What is that opinion?

12 A It would have missed Bligh Reef by a substantial
13 amount, in excess of one mile.

14 Q All right, what was the next run you did?

15 A The next run we did was Run Number 7I, which is a
16 five-degree right rudder starting, again, at .9 miles off
17 and abeam Busby Island, an approach course of 180.5 and a
18 speed of 11.69 knots and that shows with the third blue
19 curve.

20 Q Do you have an opinion, if the turn was started at
21 2355 when the vessel was abeam of Busby, using five degrees
22 of right rudder and holding, whether the vessel would have
23 missed Bligh Reef?

24 A Yes, it would have.

25 Q By a distance greater than the other two examples?

1 A Yes.

2 Q Okay, what's the next overlay?

3 A The next overlay is identified as 7J and 7J is a
4 ten-degree right rudder, again at .9 miles off and abeam
5 Busby Island Light, at an approach course of 180.5 and a
6 speed of 11.69 knots. This is the one where I added to the
7 computer information the tangent to the course to portray
8 the track of the vessel if it were given the order with
9 that ten-degree rudder and, in addition, to reach a course
10 of 245 and to hold that course. This is supplemental to
11 what Mr. Shizume provided.

12 Q Okay, if -- I'd like to give you a hypothetical.
13 If the rudder was turned to ten degrees right at 2355 when
14 the vessel was abeam of Busby and held, do you have an
15 opinion as to whether this vessel would have missed Bligh
16 Reef?

17 A Yes, I do.

18 Q What is that opinion?

19 A It would have missed Bligh Reef by a substantial
20 amount in the turn, had the turn been held, and also if the
21 vessel had held the course of 245.

22 Q What would be the distance that it would have
23 missed Bligh Reef if ten degrees of right rudder was used
24 at 2355?

25 A It would have been -- there's your one-half mile,

1 so it would be about something in excess of one and a half
2 miles.

3 Q Now if I were to give you the same scenario, but
4 asked you to start the turn at 2356, a minute later --

5 A Yes.

6 Q -- would your conclusions be the same?

7 A Yes; they would.

8 Q Would the distance be somewhat less than what
9 you've described? In other words, you said if they use ten
10 degrees of right rudder, it would be in excess of a mile
11 and a half.

12 A Yes.

13 Q How far or how much less would this miss be if
14 they started their turn at a minute after 2355?

15 A That's easy to determine by merely and physically
16 just shifting these overlays down a one-minute interval,
17 which would be about one ship length, and that's about the
18 distance that the vessel would be closer to the grounding
19 site, about a ship length.

20 Q So if they started their turn at 2356 --

21 A Yes.

22 Q -- the distance that it would have missed Bligh
23 Reef if ten degrees of right rudder was used would still be
24 over a mile and a half?

25 A Yes. What that would do, in fact, is at 2355, the

1 vessel is in the position where I'm showing the divider.
2 At 2356, it was here. So that would bring it down in a
3 southerly direction about that much, which is approximately
4 one ship length, 980 feet.

5 Q Do you see some fathom markings of 55 and 38 on
6 this chart --

7 A Yes.

8 Q -- in that area here?

9 A Yes, I do.

10 Q Okay, if the turn were started there and it's
11 using three degrees, four degrees, five degrees or ten
12 degrees, any one of those scenarios, would the vessel still
13 have missed Bligh Reef by a substantial amount?

14 A Yes, it would.

15 Q And with respect to the ten-degree turn that we're
16 talking about, how far would it have missed Bligh Reef if
17 the turn was started in the area of the 55 and 38 fathom
18 marks?

19 A Okay, I can approximate that by taking my divider
20 and putting it in the 55, 38 fathom mark region and that
21 would translate this entire track pattern down this amount,
22 which is about six-tenths of a mile.

23 Q All right.

24 A So on that basis, it would have missed Bligh Reef
25 on the ten-degree right rudder by approximately one mile.

1 Q All right. I'm going to show you one more
2 exhibit. I'm showing you now Exhibit BV. On this exhibit,
3 you plotted the grounded position of the vessel?

4 A Yes, I did.

5 Q Okay, which is the position that this vessel was
6 in when she finally stopped?

7 A The position, as reported, was approximately this
8 lower dotted vessel sketch.

9 Q Right here.

10 A Yes, directly over the six fathom mark.

11 Q Now, looking astern of the vessel for a distance
12 of what appears to be several thousand feet, do you have an
13 opinion as to whether there was sufficient water if the
14 vessel were to back up?

15 A Yes, there's sufficient water behind the vessel up
16 to the point of this singularity, which is the five-fathom
17 mark, slightly in excess of one ship length behind the
18 vessel's position on the reef. That would be -- there's
19 the five-fathom mark here and here's how the ship could
20 have come off the ground, right in this position.

21 Q Now if it were to come off in a straight condition
22 from where she was laying, how much water is behind her?

23 A It ranges from this eight-fathom group here to 11
24 fathoms, 14 fathoms and up to 21 fathoms.

25 Q Okay, this eight fathoms that you're talking

1 about that I read as 86, 87, how many feet is that at low
2 water?

3 A That's -- well, eight fathoms is 48 feet. Nine
4 fathoms would be 54 feet. So around 50-plus feet.

5 Q And if you add ten feet at high tide --

6 A That would be over 60 feet.

7 Q Okay. So is it your opinion that this vessel had
8 plenty of water, if Captain Hazelwood wanted to back up?

9 A Yes, there was adequate water.

10 Q Sir, you viewed this vessel in San Diego, is that
11 correct?

12 A Yes, I did.

13 Q Did you have an occasion to go into the cargo
14 control room?

15 A Yes, I did.

16 Q Did you see any devices in the cargo control room
17 for flooding any of the ballast tanks?

18 A Yes, there were actuators for the remote control
19 valves, yes.

20 Q Did one of those actuators control the ballast
21 tank at the Number 4 port ballast tank?

22 A Yes, it did.

23 Q Do you have an opinion as to how quickly one could
24 ballast down that tank if they wanted to?

25 A Yes, I do.

1 Q What is your opinion?

2 A In a matter of several minutes.

3 Q Why do you say that?

4 A Because you open the tank to the gravity head of
5 the outer water -- when I say several minutes, I mean
6 between five, ten, 15 minutes -- you get a substantial
7 amount of water in the tank on an increasing basis.

8 Q There's been some testimony that the flow of the
9 water is controlled by the size of the vents on deck. With
10 respect to the ballast tanks, is there any way to increase
11 the size of the opening on deck?

12 A Yes, there is.

13 Q How is that done?

14 A That would be to open the ullage access plates or
15 the entire access cover.

16 Q Looking -- let me get a picture and have you show
17 the jury what you're talking about.

18 A Certainly.

19 JUDGE JOHNSTONE: Is it possibly already out, Mr.
20 Chalos?

21 BY MR. CHALOS: (Resuming)

22 Q I show you what we've marked into evidence as
23 Exhibit AP. Is that the opening that you're talking about?

24 A Yes.

25 Q Could you show the jury what you mean by opening

1 the ullage cover?

2 A Yes. On each of the cargo, as well as the
3 ballast, tanks, they have this ullage trunk. That's
4 covered by a lid. On the lid, there's a small,
5 approximately ten- or 12-inch, opening, which can be
6 actuated or opened in a matter of seconds. That ten- or
7 12-inch opening would have provided a substantial
8 additional area for the air to enter or leave the tank.

9 Q So if someone wanted to open the opening. if you
10 will, to provide for more air to come in, would that
11 increase the flow of water into the ballast tanks?

12 A It certainly would.

13 Q And how difficult is it to open one of these
14 covers?

15 A A matter of moments, very simple.

16 Q Okay. Have you ever heard of the term cavitation?

17 A Yes, I have.

18 Q Can you explain to the jury what cavitation is?

19 A Cavitation is the introduction of air or gas in
20 way of the propeller which substantially reduces the
21 effectiveness of the propeller in producing thrust. That
22 air or gas can be caused by three or more things, reasons,
23 one being the proximity of the propeller to the surface of
24 the water, where in fact the propeller sucks water from
25 above the surface and causes a bubbled condition. The

1 second one is when the propeller, not properly threading
2 through the water, causes low pressure areas, which in turn
3 cause the air dissolved in the water to come out in gaseous
4 form and create bubbles. The third is the churning of the
5 propeller at an advanced speed, substantially less than the
6 propeller was designed for. This gives it sort of an egg
7 beater effect where all it does is move water instead of
8 causing a thrust.

9 Q If the engine was cavitating, would that mean that
10 it would overheat?

11 A Not necessarily at all, no.

12 Q Let me take that back, I used the wrong phrase.
13 If the propeller was cavitating, would that mean that the
14 engine would overheat?

15 A No.

16 Q Now there's been some testimony here that when the
17 vessel ran aground, the lube oil alarm went off.

18 A Yes.

19 Q You remember reading that testimony?

20 A Yes, I do.

21 Q Is that an indication to you of the engine
22 overheating?

23 A No.

24 Q What is that an indication of?

25 A It's really an indication that the, in all

1 probabilities, that the oil cooler is ineffective in
2 performing its function of cooling the oil. The oil cooler
3 receives the heated oil which picks up the heat from the
4 engine, at which time it's passed through a cooler to bring
5 it down to the designed temperature and then reintroduced
6 to the engine to provide lubrication.

7 In the even some temporary or other blockage is
8 caused to that cooler on the cooling water side which could
9 be caused by the grounding or contact with the ground, that
10 would plug up the cooler and render it less effective.
11 That would, in turn, set off one of the alarms, high lube
12 oil alarm, which is a warning that something's amiss with
13 the cooling system. It's not necessarily a sign of
14 imminent danger, nor is it a sign of engine overheating.

15 Q You've read the testimony in this particular case,
16 have you not?

17 A Yes, I have.

18 Q Was that problem cleared up by the time the
19 engines were restarted at 12:35?

20 A Yes, it was.

21 MR. CHALOS: I have no further questions of this
22 witness, Your Honor.

23 JUDGE JOHNSTONE: Would you like a glass of water?

24 THE WITNESS: No, thank you, Your Honor.

25 JUDGE JOHNSTONE: If you want one, just ask Mr.

1 Chalos.

2 CROSS EXAMINATION

3 BY MR. COLE:

4 Q Good morning, Mr. Winer. How are you?

5 A Fine, thank you, Mr. Cole.

6 Q After looking at your resumé, it appears that you
7 have been a consultant here for a number of years, is that
8 correct?

9 A Approximately 14 years, yes.

10 Q And your work as a consultant has been in various
11 areas of the maritime industry.

12 A Yes.

13 Q It also sounds like you've testified over a
14 hundred times. Would that be a conservative number?

15 A 17 times in court and quite a lot of times during
16 arbitration, yes.

17 Q But in arbitration, it's the same thing. You have
18 to take an oath and you just talk to a judge, rather than
19 to a jury, correct?

20 A Well, you talk to the panel.

21 Q To the panel. It's the same thing, you have three
22 people and it's very similar to this.

23 A Not really. It's quite different in the
24 informality and the rules and things regarding evidence and
25 discovery. It's quite different.

1 Q But you testify and you have to convince three
2 people that your version of what happened is the correct
3 version, correct?

4 A You provide the answers to questions that are
5 given to you, certainly.

6 Q And your credibility is at issue in those times.

7 A It always is.

8 Q Just like your credibility is at issue in this
9 case.

10 A Of course.

11 Q Now you've also had the opportunity to have people
12 testify in front of you, is that correct?

13 A As an arbitrator?

14 Q Yes.

15 A Certainly.

16 Q And you've been able to watch how they testified,
17 correct?

18 A Yes.

19 Q And I assume that you have been used as an expert
20 because of -- one of the reasons is because of your past
21 experience. Would that be a fair statement?

22 A I would consider that to be reasonable, yes.

23 Q Now when did Mr. Chalos contact you about this
24 case?

25 A I believe it was in June or July 1989.

1 Q And what material did you review in preparing for
2 your testimony in this case?

3 A I reviewed some of the documents which were
4 provided by the ship. That is the course recorder and the
5 bell logger. I reviewed certain transcripts of the
6 witnesses, specifically the chief engineer, chief officer,
7 Third Mate Cousins, AB Kagan and some of the others. I
8 also reviewed the production by Peter Shizume, the CAORF
9 simulation. I reviewed the charts. I reviewed a
10 substantial amount of the vessel's blueprints, both the
11 hull, machinery and piping blueprints. That's about it.

12 Q So it sounds to me like you listed to Mr.
13 Glowacki's testimony. Did you read all of his statements
14 or just the ones that Mr. Chalos provided you?

15 A I read parts of his testimony.

16 Q What parts, was it the Grand Jury transcript, was
17 it his statement to the troopers --

18 A Oh, no.

19 Q -- the NTSB, was it his testimony in here?

20 A Only the testimony here.

21 Q Oh, so the transcripts you reviewed have been only
22 of the witnesses' statements here in Court.

23 A Yes.

24 Q So you haven't reviewed any of their other prior
25 statements, is that correct?

1 A I don't recall -- no, I did not.

2 Q Mr. Chalos didn't send you any of that information
3 or you didn't think it was important?

4 A I just reviewed the information Mr. Chalos sent to
5 me.

6 Q Okay. You read the CAORF simulation of the track
7 line in this case, didn't you?

8 A The report by Mr. Shizume?

9 Q No, the one by CAORF.

10 A Yes, I did.

11 Q And that came out before Mr. Shizume's report.

12 A Yes, it did.

13 Q You're sure about that. I'm not tricking you or
14 anything, I just want to make --

15 A No, all I recall about that is that it did not
16 provide the track to the extent that was required. It was
17 done by someone other than Mr. Shizume. The one I really
18 paid attention to, the one I used in preparing these
19 exhibits were Mr. Shizume's.

20 Q Now did you do a report in this case?

21 A No, I didn't.

22 Q Do you normally not do reports when you act as a
23 consultant or is this not the standard?

24 A It's very normal not to prepare reports because,
25 actually, this case, for me, has not come to a point of any

1 conclusion. The case isn't over. I've provided my
2 observations and opinions as the inspection of the vessel
3 and the case progressed, that's all.

4 Q Well, one reason that people do report is so that
5 the other side can see what you're going to testify to,
6 correct?

7 MR. CHALOS: I object, Your Honor.

8 JUDGE JOHNSTONE: Objection sustained, Mr. Cole.

9 BY MR. COLE: (Resuming)

10 Q Now you worked as a consultant out of New Jersey,
11 correct?

12 A That's where my office is, yes.

13 Q And Mr. Chalos works for a maritime law firm in
14 New York, is that correct?

15 A He works for a law firm, I believe it's maritime.

16 Q Mr. Russo works for Mr. Chalos or with Mr. Chalos
17 in that firm.

18 A Yes, he does.

19 Q In fact, you're presently working on another case
20 that Mr. Chalos is involved in, correct?

21 A Yes, I'm working directly for another firm. Mr.
22 Chalos' firm is also involved in that vessel loss, yes.

23 Q You're working on another case in which Mr. Chalos
24 is involved, correct?

25 A That's correct.

1 Q What have you billed Mr. Chalos so far?

2 A Nothing.

3 Q When do you plan on doing that?

4 A After I've performed my assignment, when it's
5 completed. And if a report is required at that time, I'll
6 so submit, but I haven't billed at all and I haven't
7 provided a report.

8 Q And part of your assignment is testifying in this
9 matter?

10 A Well, it was more than that. It was taking the
11 pictures, studying the pictures and my pictures are not
12 that much different from those provided as exhibits. Just
13 to generally stay abreast of developments.

14 Q Part of your purpose was to testify, correct?

15 A Yes.

16 Q Now I'd like to talk a little bit about the San
17 Diego trip that you went on with Mr. Chalos and Mr. Russo
18 and Mr. Walker. Do you remember that?

19 A Yes, I do.

20 Q You talked for a little bit about the rudder
21 angles that were available up on the bridge, right?

22 A The rudder angle indicators?

23 Q Indicators.

24 A Yes.

25 Q And the turn rate indicators.

1 A Yes.

2 Q You didn't talk about it, but there were gyro
3 repeaters up on the bridge, too, correct?

4 A Yes.

5 Q Did you go through the captain's quarters at all?

6 A I entered the captain's office with the rest of
7 the group, yes.

8 Q Did you see any gyro repeaters in the captain's
9 quarters?

10 A I didn't notice any, no.

11 Q Did you see any rate of turn indicators in the
12 captain's quarters?

13 A No, I didn't.

14 Q Did you see any rudder angle indicators in the
15 captain's quarters?

16 A No, I didn't.

17 Q So in order to see the rudder angle indicators
18 that you mentioned, you'd have to be up on the bridge,
19 either in the bridge or out on the bridge wing, because
20 that's the only place you could see them, right?

21 A Yes, there were no rudder angle indicators in the
22 captain's quarters at all, which is typical actually.

23 Q It's because people don't steer boats from the
24 captain's quarters, right?

25 MR. CHALOS: Objection, Your Honor.

1 MR. COLE: He volunteered it.

2 JUDGE JOHNSTONE: Objection overruled.

3 BY MR. COLE: (Resuming)

4 Q Isn't that right?

5 A Of course.

6 Q Now I think, yesterday, you were asked about
7 whether you had an opinion about how long it took from the
8 time the vessel, Exxon Valdez, had initial contact with the
9 reef and when it came to a rest, correct?

10 A That's correct, yes.

11 Q And you indicated yesterday that that would have
12 taken less than one minute.

13 A About or less than a minute, yes.

14 Q Okay. If a vessel were traveling at 11.74 feet
15 per minute, it would travel at about 19 -- well, let me
16 see, if it's traveling at 11.74 knots per minute, it
17 travels at about 19 feet per second, 18 feet per second, is
18 that correct?

19 MR. CHALOS: Your Honor, I'm going to object. I
20 think Mr. Cole's numbers are convoluted. It can't travel
21 11.4 feet per minute and then 18.7 feet per second.

22 MR. COLE: I'll rephrase it.

23 BY MR. COLE: (Resuming)

24 Q If a vessel is traveling at 11.74 nautical miles
25 per hour, it travels at 19.81 feet per second, isn't that

1 correct?

2 A Approximately, yes.

3 Q And you estimated that the distance that this
4 vessel traveled from the time it hit initially to where it
5 came to rest was about 1,100 feet.

6 A Yes.

7 Q Okay. Going at 19.81 feet per second, how long
8 does it take to go 1,100 feet?

9 A 57 seconds.

10 Q Okay. Well, we know this vessel wasn't traveling
11 at 11.74 feet -- nautical miles per hour when it hit and
12 grounded finally because then people would have been thrown
13 to their feet, right?

14 A No, not at all.

15 Q They wouldn't have been thrown to their feet if it
16 came grounded -- if it stopped and it was going 11. --
17 let's say 19 feet per second and it came to an immediate
18 stop, it wouldn't have caused anybody any concern.

19 A It depends on what you mean by an immediate stop.
20 Say within two or 400 feet?

21 Q No, I mean immediate stop because that's what
22 you're assuming.

23 A No. It appears to me that it came to a stop after
24 contacting the rock, the second contact, within a distance
25 of about two or 400 feet. It ground to a halt quickly.

1 Q Okay. But if you're right when you say it's
2 around a minute, you're assuming that the average speed
3 from the initial contact until when it came to a stop was
4 about 19 feet per second, correct?

5 A No, not really, not at all.

6 Q Well, yesterday, you gave an opinion that said if
7 this was 1,100 feet, it was a little less than a minute,
8 right?

9 A Yes.

10 Q And I just asked you, going 19 feet per second,
11 how long it would take to go 1,100 feet and you just said,
12 what, 57 seconds, right?

13 A In answer to your question, yes.

14 Q So you're assuming that the average speed from
15 here, Point B, to Point A is 19 feet per second, right?

16 A I'd rather work it in real life the way the chart
17 was and show you what I said.

18 Q Well, I'll give you a chance to do that if you
19 want to, but isn't it true that you said yesterday, that
20 you gave an opinion that it was less than 50 -- less than a
21 minute?

22 MR. CHALOS: Your Honor, I think Mr. Cole is
23 badgering the witness. He's already said that's true, 57
24 seconds. He said 19 feet per second was the correct
25 amount.

1 JUDGE JOHNSTONE: Why don't you get to the point,
2 Mr. Cole?

3 BY MR. COLE: (Resuming)

4 Q Okay, if this vessel was traveling at half that
5 speed over the distance from Point B up there to Point A,
6 1,100 feet, how long would it have taken to get from
7 Point B to Point A?

8 A With one part of the vessel being at Point A and
9 one part at Point B -- because my calculations took into
10 account the time that the grounding was observed on board
11 the ship until the time the vessel stopped in the water at
12 the second contact. That was by one minute or less.

13 Q That was your one minute or less.

14 A Yes.

15 Q But I would like to talk about the time from
16 initial contact until the time it essentially became
17 grounded, right, stopped.

18 A Okay.

19 Q You said it traveled approximately 1,100 feet --

20 A That's correct.

21 Q -- from the initial grounding to when it became
22 grounded, right?

23 A Yes.

24 Q And for it to do that in less than a minute, it
25 would have had to have been traveling at approximately 19

1 feet per second, correct?

2 A Yes.

3 Q Now if it was traveling one-half that amount,
4 let's say 9.5 feet per second, how long would it have taken
5 to travel 1,100 feet?

6 A Well, that's easy, that's pure arithmetic. It
7 would have taken twice as long if it were traveling at half
8 the speed, but I have no indication that it was.

9 Q All I asked you is how long it would have taken if
10 it was traveling at half the rate.

11 A Twice the time.

12 Q And that would be about two minutes, correct?

13 A Yes.

14 Q Now by saying that it took less than a minute,
15 you're not taking into account any slowdown in the rate of
16 speed this vessel was traveling from the time of initial
17 contact until it became grounded, correct?

18 A I believe my testimony was from the time that the
19 ship felt the first impact until the time it ended up at
20 the six-fathom mark was about a minute.

21 Q How long, then, did it take from the time it
22 initially -- is that what you're saying, from the time it
23 initially started until the end?

24 A No, I don't believe that the vessel personnel were
25 aware from the initial contact, at the time the vessel

1 contacted the seven-fathom mark. That was not their first
2 indication.

3 Q Your calculation that this took less than a minute
4 to occur, to go the 1,100 feet, does not take into account
5 any slowdown in speed caused by the initial contact with
6 the first rock.

7 A Absolutely, and the reason for that is I don't
8 believe there was a substantial slowdown at all.

9 Q Thank you. There was no slowdown at all after
10 putting a four-foot tunnel from the port, from the fore
11 peak all the way to starboard, no slowdown at all, and
12 that's what your calculations took into consideration.

13 MR. CHALOS: Your Honor, I think Mr. Cole is
14 mischaracterizing the witness' testimony. He said there
15 was no substantial slowdown.

16 JUDGE JOHNSTONE: Do you want to rephrase your
17 question?

18 BY MR. COLE: (Resuming)

19 Q You indicated that there was no slowdown. No
20 substantial slowdown?

21 A No substantial slowdown.

22 Q But your calculations as far as a minute don't
23 take into consideration any slowdown, correct?

24 A They don't take into account any substantial
25 slowdown, no.

1 Q Now you're fairly confident of your time of
2 12:09-1/2 as being the final time that this vessel came to
3 rest.

4 A Yes, I am.

5 Q And that's why you say that the initial contact
6 was about a minute early --

7 A Yes.

8 Q -- and that would have been at about 12:08,
9 correct?

10 A Yes.

11 Q Now if the contact, the ship's initial contact
12 with the vessel -- with the reef had caused it to slow down
13 -- and I'm just saying if -- the initial contact would have
14 been less than 12:08-1/2, correct?

15 A Moderately less, yes.

16 Q And that would depend on the amount of velocity
17 that was reduced by the initial contact, right?

18 A If any, yes.

19 Q And if it was reduced to half, it would have been
20 two minutes and then it would be 12:07-1/2, correct?

21 A Correct. No, wait a minute, I've got to -- start
22 that one again. You say the contact would have been
23 12:07-1/2? No, at 12:07-1/2, the vessel was -- no matter
24 when the contact was, at 12:07-1/2, the vessel was where it
25 shows here, just over the eight-fathom point. So no matter

1 what happened at 12:08-1/2 and onward times, at 12:07-1/2,
2 the vessel was exactly here.

3 Q That's assuming that Mr. Shizume's chart is right.

4 A My entire exhibit here is based on Mr. Shizume's
5 calculations and data.

6 Q So if he's off by a minute or two, then your whole
7 chart is off by a minute or two.

8 A Yes.

9 Q I'm sorry, I want to get another chart here. Do
10 you remember talking about this chart right here?

11 A Certainly.

12 Q And this is a chart Mr. Shizume said that he made,
13 is that correct?

14 A That's correct.

15 Q There's a chart exactly like that in the CAORF
16 model, correct?

17 A I don't know, I'm not sure.

18 Q Would you like to see it?

19 A Sure.

20 Q The CAORF model is only different in that it
21 places the 180 degrees down here and the 280 up here,
22 correct?

23 A This is not the same chart.

24 Q Well, there's one additional simulation and that's
25 Mr. Shizume's simulation. But other than that, they're

1 essentially the same.

2 A No. I analyzed this chart and found it to be in
3 severe contradiction with the numbers provided. I didn't
4 really pay too much attention to this. I focused my
5 analysis on not only Mr. Shizume's chart, but the input
6 that went to create that chart, which is the same data at
7 this point here that shows the reduced change in the
8 vessel's heading from 06-1/2 to 07-1/2 as portrayed here.
9 You'll see the vessel position at 6-1/2, the heading, is
10 substantially the same as 7-1/2 here, as compared to the
11 change between 5-1/2 and 6-1/2. I portrayed it from Mr.
12 Shizume's numbers, pictorially. This is merely another way
13 to show it. I didn't rely at all on the CAORF chart simply
14 because I had several questions about the actual points
15 achieved on that chart. This ties in with this exhibit.

16 Q The CAORF chart, though, was done with the same
17 computer that Mr. Shizume was using, correct?

18 A I'm not sure. But that particular graph you
19 showed me, I recall having seen that and I recall having
20 some serious questions about the points plotted on that
21 chart.

22 Q But you never had any serious questions about Mr.
23 Shizume's work, is that correct?

24 A No, it's only a matter of taking the numbers from
25 the printout of the chart. That's what I had questions

1 about. When I took the numbers from Shizume's and compared
2 it with his chart, I found it to be right on.

3 Q You -- let me just ask again. You had no serious
4 concerns with Mr. Shizume's charts, yes or no?

5 A As to the analysis, correct.

6 Q Now this chart shows the change in heading,
7 correct, of the vessel over time, correct?

8 A Yes.

9 Q And this little blip that you have from here to
10 here, between 12:06 and 12:07, that's not showing this
11 vessel making a left turn at that point, is it?

12 A No, but the --

13 Q Yes or no?

14 A -- change in heading was derived by a calculated
15 left rudder.

16 Q But it's not showing this vessel changing heading
17 to the left, correct?

18 A It just shows a reduction in the change in heading
19 rate, period.

20 Q That's correct, it's not making a left turn. So
21 this shouldn't be interpreted like that, correct?

22 A Oh, I didn't interpret it that way.

23 Q Now decreases in rates of turn can be caused by a
24 number of things, correct?

25 A Absolutely.

1 Q And one of them, as you indicated, is counter
2 rudder, correct?

3 A Yes.

4 Q And another is coming in contact with the ground,
5 correct?

6 A Yes. Not even counter rudder, a reduction in
7 rudder angle alone will do it.

8 Q A reduction in rudder angle alone.

9 A Sure.

10 Q And there's a shallowing effect that causes things
11 to reduce the rate of turn, correct?

12 A The shallowing effect will reduce the consequence
13 of a given rudder at a given vessel speed. The shallower
14 the water is, the slower the response of the vessel to a
15 given rudder, yes.

16 Q Now you indicated that after working the
17 calculations, you had no serious reservations about Mr.
18 Shizume's calculations, is that right, his track line?

19 A I took his track line and I plotted those X-Y
20 locations, as well as the vessel's heading, on my exhibits.

21 Q Now you -- have you seen any pictures of the chart
22 that was used on the Exxon Valdez?

23 A I've seen the -- oh, the actual chart?

24 Q Have you seen the actual chart?

25 A Yes, I have.

1 Q And have you see the 2355 checks on that chart?

2 A I've seen the so-called 2355 location, yes, the
3 depth marks, yes.

4 Q Okay, does that look like 2355?

5 A Yes.

6 Q Now is the dot that's plotted for the 2355 the
7 same point as you have plotted up on this?

8 A What dot are you referring to, dot?

9 Q The fix at 2355, right there.

10 A Okay, yes.

11 Q Does your line run through that?

12 A I'm not sure because I didn't compare this with
13 mine. I merely set mine at the .9 miles from Busby and I
14 realize some of the testimony said that they were 1.0 miles
15 off. There's even reference to a 1.1 mile off. The reason
16 I selected the .9 miles off was because that was the worst
17 case that would have put him closer to the reef, as
18 compared to the 1.1 mile off. So I selected the .9 for
19 that purpose.

20 Q Mr. Winer, would you look at that --

21 A Yes.

22 Q -- and see if your track line goes through that
23 fix at 2355?

24 A Let's see. May I compare it with mine?

25 Q Sure, I'd rather you did.

1 A My track line is closer to Busby Island Light.

2 Q In fact, it's about two-tenths of a mile
3 different, isn't it?

4 A Somewhat, yes. That's the .9 miles from Busby
5 Light as shown in the simulation and as shown in some of
6 the testimony. I did make this chart prior to my having
7 observed the actual ship's chart here, in Anchorage.

8 Q But your chart disregards Greg Cousins' 2355 plot,
9 correct?

10 A My chart was based on the information provided to
11 me for the purpose of making this exhibit.

12 Q And that was by Mr. Chalos, is that correct?

13 MR. CHALOS: Objection.

14 JUDGE JOHNSTONE: Objection overruled.

15 BY MR. COLE: (Resuming)

16 Q That information was provided to you by Mr.
17 Chalos, correct?

18 A If you can call the simulation data information
19 provided by Mr. Chalos, perhaps. But, again, I did take
20 the .9 miles off Busby as being the most dangerous
21 location. That provided the worst, the greatest chance of
22 encounter with Bligh Reef. That's why we selected that.

23 Q Okay.

24 A And I did not, when I prepared this exhibit, have
25 any access to the ship's actual chart.

1 Q Could you have called up Mr. Chalos and asked him
2 to measure how far it was from Busby to the 2355 mark?

3 A Of course, I could, but what you can do to see how
4 that location that Cousins fixed at 2355 would affect the
5 contact with the ground would be merely to have moved the
6 entire pattern of overlays two-tenths of a mile to the left
7 or to the west.

8 Q Well, let's talk about that. How fast -- how long
9 does it take for a vessel going 11.74 knots -- how far does
10 it travel in a mile --

11 A A mile.

12 Q -- in a minute. At 11.74 knots, how far does it
13 travel in a minute?

14 A Well, you take 11.74 knots times 6080, divided by
15 60, a minute. About two-tenths of a mile.

16 Q Two-tenths of a mile. Now I think on direct, Mr.
17 Chalos asked you what happens when a vessel turns and you
18 indicated it slows down, the greater the turn, the more it
19 slows down, is that correct?

20 A I think that answer was in response to a rudder,
21 what happens to the vessel's velocity. And I indicated the
22 rudder position does have an effect on the vessel's
23 velocity, depending upon the degree of the rudder angle,
24 yes.

25 Q And as the vessel begins to turn, it decreases the

1 speed, correct, because of the crabbing of the vessel.

2 A Well, it's more than that.

3 Q But that's one of the reasons.

4 A No, the crabbing is caused by the turn.

5 Q It decreases the speed of the vessel, correct?

6 A The velocity of the vessel decreases, yes.

7 Q And it decreases -- if you're making a hard right
8 turn, it decreases more than maybe a ten-degree turn,
9 correct?

10 A Yes, we can see that here, where it shows the
11 20-degree rudder. You can see the vessel positions on a
12 minute-by-minute basis overlap each other, which shows
13 pictorially the serious reduction in speed at the larger
14 rudders, yes.

15 Q Now if you were to move this over, this track line
16 over two-tenths of a mile --

17 A Yes.

18 Q -- and you wanted to end up in the same place,
19 you'd have to use a greater degree of rudder to do that,
20 wouldn't you?

21 A I don't think so.

22 Q You don't think so.

23 A No.

24 Q Now I'd like to talk for a minute about the LPU,
25 the load program up. And you indicated that there's an

1 override, is that correct --

2 A Yes.

3 Q -- and that that can be used to place the vessel
4 on top speed or top rpm within a matter of minutes,
5 correct?

6 A The instruction book said in a period of 60 to 120
7 seconds, yes.

8 Q But I assume that the instruction book also
9 indicated that that's not the preferable manner of going up
10 to a higher rpm.

11 A Generally, it's for emergencies, only.

12 Q Now you didn't run any of these track lines at
13 12:02 or 12:03, did you, assuming that the vessel would
14 have turned at 12:02 or 12:03?

15 A Yes, I did.

16 Q And what happened?

17 A Well, you can see very easily how that translates
18 at 12:02 or 12:03. What you have to do is take this
19 exhibit. You're talking about the original turn at
20 001-1/2, Mr. Cole?

21 Q Yes.

22 A Okay. I'll keep this down here where it's handy.
23 In order to find out what would happen with this transposed
24 to another time, what you do is shift this down from the
25 original position, say three ship lengths, which would be

1 here, and that would have moved the entire operation down
2 to 12:04-1/2, instead of 12:01-1/2 by just transferring it
3 down on the vertical axis. That would give you then the
4 projected tracks and position at these times, plus a
5 certain amount of minutes, with respect to the bottom and
6 with respect to the point of grounding, yes.

7 Q If you did it at 12:06, what would happen?

8 A You move the whole thing down five more minutes,
9 sure.

10 Q Can you show us what happens then?

11 A At 12:06?

12 Q Yes.

13 A Sure. It would be approximately here. That would
14 be the tracks of the various rudder angles.

15 Q Thank you.

16 A You're welcome.

17 Q Now if the Exxon Valdez' maneuvering
18 characteristics showed that it turned at a slower rate than
19 the maneuvering characteristics of the simulator, that
20 would mean that it would take -- to get to the same point,
21 you would have to turn it a greater amount, correct?

22 MR. CHALOS: Your Honor, I object to Mr. Cole
23 mischaracterizing the evidence. What the maneuvering
24 characteristics show is the rudder at hard right and hard
25 left and that's what he's talking about. And the way he's

1 posing the question is at any angle and I'm objecting.
2 There's no foundation laid for that.

3 JUDGE JOHNSTONE: Mr. Cole.

4 (Tape changed to C-3666)

5 MR. COLE: I'll ask him on this.

6 BY MR. COLE: (Resuming)

7 Q Are you aware that the maneuvering characteristics
8 of the Exxon Valdez on a full speed, sea speed 35-degree
9 rudder turn, fully laden, takes approximately 17 more
10 seconds that on the simulated -- under simulated
11 conditions? Are you aware of that?

12 A Yes, I think I saw that in Table 1 of Peter
13 Shizume's report. I'm also aware of the fact that there
14 was a modification made to the rudder subsequent to the
15 construction of the vessel. I'm not sure whether the
16 turning data was recalibrated; it may have been or may not
17 have been. But for the purpose of the track on Table 2 on
18 Peter Shizume's calculations, the fit between the actual
19 courses and positions during the calibration period of
20 those four fixes shown on Table 2 come out very precisely.

21 I'm really not concerned or I wasn't concerned
22 when I made these exhibits with how Shizume's calculated
23 turns at full speed, full rudder correlated with those
24 posted in the wheelhouse because I really had no foundation
25 on what basis those ones in the wheelhouse were created.

1 Q Well, if Captain Stalzer came in and testified
2 those were posted, based on sea trials that they've done
3 with the Exxon Valdez itself, would you accept those?

4 MR. CHALOS: Your Honor, I object. Captain
5 Stalzer did not say those were based on sea trials. He
6 said those were computer generated maneuver
7 characteristics.

8 MR. COLE: They were compared with the ones that
9 were done with the sea trials is what he testified.

10 JUDGE JOHNSTONE: You can -- I'll allow the
11 question.

12 THE WITNESS: There was a major modification
13 performed on the rudder after the sea trials.

14 BY MR. COLE: (Resuming)

15 Q And if Captain Stalzer said they did sea trials
16 after the rudder modification and that those were the ones
17 that were posted, how would that affect your opinion?

18 A I haven't seen the data for that calculation.

19 Q Now the charts that you showed, the blow-up charts
20 that show the fathom markers right here, you indicated that
21 Captain Hazelwood had plenty of room to maneuver behind
22 him, is that correct?

23 A I indicated there was sufficient water for the
24 ship to have moved aft without contacting the bottom, with
25 the exception of that five-fathom mark, yes.

1 Q Did you find any evidence that that particular
2 chart was on the Exxon Valdez on the 23d?

3 A No, I did not.

4 Q In fact, if the only chart -- well, if one of the
5 charts that was there, where it was plotted, was this
6 chart, what is directly behind the six-fathom mark?

7 A I can't see, this is too marked up. This chart
8 has the same numbers I have here. Do you mind if I use
9 this?

10 Q Sure.

11 A It says, behind there, five fathoms and shoal,
12 about one ship length, a little more than one ship length
13 behind the point of grounding.

14 Q Now when you saw the damage -- you talked about
15 the diagrams that the divers had drawn on the 24th, is that
16 correct?

17 A The 24th, the 25th and the 31st, yes.

18 Q What time did those divers dive that night?

19 A I don't think it showed on the drawing I had. If
20 it did show, I couldn't read it.

21 Q Are you aware that the divers did not get out
22 there until nearly 10:00 o'clock that evening?

23 A Of what day?

24 Q On the 24th?

25 A Well, that's fine because on their first reading

1 on the 24th, as I sketched here, there was no distortion
2 whatsoever.

3 Q And so the two low tides that had occurred, one at
4 8:30 that morning and one at approximately 8:00 o'clock
5 that night, did no damage, no damage that you saw, is that
6 correct, is that what your testimony is?

7 A My testimony is only what the diver's report
8 showed. It showed no damage at all to that portion of the
9 turn of the bilge on the 24th and it showed an increasing
10 amount of damage on subsequent dates, specifically the 25th
11 and the 31st, yes.

12 Q Finally, you testified about -- in this case that
13 you would have assumed that had the turns been made off of
14 Busby Island that corrections would have been made to avoid
15 the ice that was in the -- that they had diverted away from
16 in the first place.

17 A I don't believe I testified to that at all.

18 Q No? When Mr. Chalos asked you about the tonnage
19 and what would have happened at 2355, he asked you about
20 why you extended the lines out the way you did, remember
21 that?

22 A Yes, I do remember that and my reply was that's --
23 those are the positions, the headings and the X-Y locations
24 shown in Peter Shizume's simulation.

25 Q And you also explained that you would expect a

1 mate to change course in order to avoid the ice.

2 A I don't think I mentioned avoiding the ice. I
3 mentioned the fact that I would expect the mate would
4 receive an order to provide a given rudder up to a given
5 course for which purpose I sketched beyond the computer
6 data on this exhibit an example of what the course would
7 be.

8 Q In order to get that order, the mate would have to
9 have a captain on board, on the bridge, right?.

10 MR. CHALOS: I object. I object, Your Honor.

11 MR. COLE: It's what he said, Your Honor.

12 JUDGE JOHNSTONE: Objection overruled.

13 BY MR. COLE: (Resuming)

14 Q In order to get that order, the captain would have
15 to be on the bridge, wouldn't he?

16 A I don't know.

17 Q Thank you.

18 REDIRECT EXAMINATION

19 BY MR. CHALOS: (Resuming)

20 Q Mr. Winer, Mr. Cole asked you if you had prepared
21 a report and you told him that you did not, but you took
22 pictures in this matter, did you not?

23 A I certainly did.

24 Q And you prepared charts?

25 A Yes.

1 Q Now is there any doubt in your mind, sitting here
2 today, as to the time that this vessel ran aground?

3 A Based on the information provided and the exhibits
4 made, they all fit together, comparing that with the crew
5 statements which also fit together, the answer is no, I
6 have no doubt.

7 Q Is it your opinion that the vessel struck the reef
8 for the first time at about eight and a half minutes after
9 midnight --

10 A Yes.

11 Q -- and came to a rest at about nine and a half
12 minutes after midnight?

13 A Yes.

14 Q Do you have any reason to believe that Mr.
15 Shizume's calculations that were made in this case are in
16 error?

17 A No, I don't.

18 Q Do you have any reason to believe that they're
19 correct?

20 A Yes, I do.

21 Q What is the basis for that?

22 A Of all the inputs, every single input that I have,
23 the crew statements, the actual plot, laying this out
24 precisely according to the numbers provided by the
25 simulation gives me a position of the turn, it gives me a

1 time of grounding, it matches with the crew statements as
2 to when they first heard the contact with the reef and when
3 it finally fetched up on the rocks. Everything fits
4 together to support what we've shown here.

5 Q You heard Mr. Greiner's testimony that this vessel
6 ran aground, in his opinion, at five and a half minutes
7 after midnight.

8 A Yes, I did.

9 Q Do you agree or disagree with that?

10 A I disagree with that.

11 Q On what basis?

12 A On the basis of the fact that --

13 MR. COLE: I object. This is outside the scope of
14 cross.

15 MR. CHALOS: I believe Mr. Cole brought that up,
16 Your Honor, by suggesting that perhaps this vessel could
17 run aground in five and a half minutes after midnight.

18 JUDGE JOHNSTONE: Objection overruled. And you'll
19 have another shot at the witness, Mr. Cole.

20 BY MR. CHALOS: (Resuming)

21 Q Go ahead, can you state your opinion, please, or
22 the basis of your opinion?

23 A Yes, the basis of my opinion is that at five and a
24 half minutes after midnight, this vessel was quite far, in
25 ship lengths and parts of miles, away from shallow water.

1 In fact, it was in water of the depth of about 240 feet,
2 far from being able to touch the ground.

3 Q You had the opportunity to observe how Mr. Greiner
4 came to the conclusion that the vessel ran aground in five
5 and a half minutes after midnight, did you not?

6 A Yes, I was provided with a copy of his table
7 showing the track, his track plot.

8 Q Do you have an opinion as to the conclusions that
9 he reached or how he arrived at the conclusions?

10 A Yes.

11 Q What is that?

12 A It seems as if he worked backwards. From the time
13 he thought or assumed or was advised that the vessel went
14 aground, he worked from that point backwards to determine
15 the track upstream, instead of doing what Mr. Shizume did
16 here in finding four significant and separate fixes to
17 provide the input for his simulation and then the
18 extrapolation from 11:55 out to the course, as shown.

19 Q Do you have an opinion as to the accuracy of
20 working backwards in these types of matters?

21 A I certainly do.

22 Q What is that opinion?

23 A It makes the simulation highly inaccurate because
24 you're starting with a conclusion.

25 Q Now Mr. Cole asked you whether crew members would

1 be falling over if the vessel was traveling at 19.74 feet
2 per second and came to a stop within a period of time.

3 A Yes.

4 Q And you said that you didn't believe that would
5 happen.

6 A Yes.

7 Q Can you explain why?

8 A Certainly. If the ship is traveling at about say
9 11-1/2 knots and comes to a complete rest in say 400 feet,
10 it would be a deceleration in the order of about one foot
11 per second, per second. Under the same decelerations, if
12 you were in a car say, traveling at 60 miles an hour on an
13 open road and you decelerated that car at one foot per
14 second, per second, you would proceed for about 7,700 feet
15 or a mile and a half before you came to a stop. You'd
16 hardly notice it.

17 Q On what basis do you say that the vessel came to a
18 stop within a 400-foot distance?

19 A On the basis of the evidence of where the
20 significant resting point of the ship was in the area of
21 Number 2 and Number 3 hatch -- Number 2 and 3 tank, that
22 being the distance from that damaged area or resting area
23 to the point of striking on the bow.

24 Q Could you describe how you, in your mind's eye,
25 see this vessel striking the first reef and then going

1 aground over this 1,100 feet, that distance?

2 A Certainly. The vessel struck on the bow and rode
3 completely over the rock, causing that tunnel at the
4 midship portion, and then veering off to the starboard
5 side, due to the change in the heading of the vessel. The
6 velocity, as I mentioned before, in my estimation, was not
7 sufficiently reduced and the vessel proceeded to the
8 six-fathom mark where it struck the higher rocks and came
9 to a very quick halt.

10 Q Could you illustrate that on the exhibit in front
11 of you for the jury?

12 A Yes.

13 Q What's the number of that exhibit?

14 A BV.

15 Q You can step up there and show them.

16 A Okay.

17 (The witness approaches the jury box.)

18 THE WITNESS: The calculations and the opinion
19 which I've formed from those calculations show the vessel
20 coming upon the seven-fathom mark about 08-1/2.

21 BY MR. CHALOS: (Resuming)

22 Q Eight and a half minutes.

23 A Eight and a half minutes after midnight. It shows
24 the heading as I've positioned the model here. It shows
25 the seven-fathom mark passing underneath, which would be in

1 the way of the Number 5 starboard tank and the slop tank.
2 And then it shows the vessel. At that point, when the
3 seven-fathom mark was in the way of the Number 5 starboard
4 tank and the starboard slop tank, the bow of the vessel was
5 almost upon the six-fathom mark shown here. So within less
6 than half a ship length after passing over the first
7 impediment, the vessel actually struck the six-fathom mark
8 in less than a half a ship length.

9 Q You may resume your seat.

10 A Thank you.

11 Q Finally, Mr. Cole asked you if the -- if your
12 simulations were moved over two-tenths of a mile, would
13 that have significantly affected any of the conclusions you
14 reached with respect to the rudder angle used in these
15 various simulations.

16 A Not significantly, no.

17 Q When you say not significantly, what do you mean?

18 A It would be less than a minute in the time of
19 contact if I moved it over.

20 Q Let me ask you this. If you had moved it over
21 two-tenths, would the distance between the grounding site
22 and the point where the vessel would have missed Bligh Reef
23 if a different angle, rudder angles were used differ at
24 all?

25 A Not significantly.

1 Q When you say not significantly, what do you mean?

2 A Less than half a ship length.

3 Q In other words, if you moved your track line over
4 two-tenths further from Bligh Reef --

5 A Yes.

6 Q -- and ten degrees of right rudder were put on at
7 that particular time, this vessel, at 2355 -- let me start
8 again. If you moved your track line two-tenths of a mile
9 to the west of Busby Island Light --

10 A Yes.

11 Q -- from where you have it in your simulation --

12 A Yes.

13 Q -- and you used ten degrees of right rudder at
14 that point, 2355, she would have still missed Bligh Reef by
15 over a mile and a half, would she not?

16 A Yes, the missing of Bligh Reef by the transfer of
17 two-tenths of a mile to the west would have not changed the
18 distance it missed Bligh Reef at all.

19 Q Okay. Now you called the .9 miles the worst case
20 scenario. What do you mean by that?

21 A I call it the worst case scenario because when you
22 bring the track line to the ship, you simulate the track
23 line here, the further to the east she is, the more likely
24 she would be to strike the reef. The further to the west
25 you bring it, if you bring it far enough west, she'll miss

1 the reef completely. So given the three numbers, the .9,
2 the 1.0 and the 1.1, I selected the one which gave the
3 worst scenario, which gave the need to provide, by the
4 vessel, the greatest evasion of the reef. The most
5 dangerous situation was the .9 and that's the one I worked
6 on here.

7 Q Sir, is there any significance in your mind to the
8 fact that the simulation is two-tenths of a mile different
9 than the fix that was plotted on the chart?

10 A None whatsoever.

11 Q Now at 12:35 when the engine was restarted, was
12 the LPU engaged, at 12:35 a.m.?

13 A No, it was not.

14 Q Now do you have any reason to believe that the
15 vessel's heading started to change at any time after one
16 and a half minutes after midnight? In other words, Mr.
17 Cole asked you to assume three minutes after and four
18 minutes after midnight. Do you have any reason to believe
19 that the turn started at three or four minutes after
20 midnight?

21 A No, on the contrary. I think the course indicator
22 shows clearly that the turn started and the course
23 commenced to change and the heading changed at one and a
24 half minutes after midnight.

25 Q Now Mr. Cole asked you about a command, the mate

1 giving a command. In your opinion, and based on your
2 experience, does the mate on watch give commands as far as
3 the rudder and the heading of the vessel?

4 A The mate on watch has authority, of course, to
5 command a helmsman to do whatever he wants.

6 Q And if that mate has the conn, is he the man that
7 gives the orders?

8 A Absolutely.

9 MR. CHALOS: No further questions.

10 RE CROSS EXAMINATION

11 BY MR. COLE: (Resuming)

12 Q Well, if you didn't see any indication of this
13 vessel turning at 12:06 or 12:07, did you see any
14 indication of this vessel turning at 11:55?

15 A It didn't turn at 11:55. The course recorder
16 shows clearly it continued on 180 at 11:55.

17 Q It didn't turn on 11:56, either, did it?

18 A No, it didn't.

19 Q There's no indication of that. There's no
20 indication that this vessel turned at 11:57, did it?

21 A No, there isn't.

22 Q There's no indication that it turned at 11:58, is
23 there?

24 A No, there isn't.

25 Q And there's no indication that it turned at 11:59,

1 is there?

2 A The same answer, the course recorder shows a
3 course of about 180.

4 Q Excuse me. All I asked for is a yes or no
5 answer. Isn't it, isn't that true?

6 A No, that's true.

7 Q So all these are just hypotheticals, correct?

8 A No, they're based on the course recorder. They
9 aren't hypotheticals.

10 Q They're hypotheticals that the vessel will turn at
11 11:55, but there's no indication that it turned at 11:55.

12 A The plot showing the turns at 11:55? Of course,
13 they're hypotheticals. They're just there to show what
14 track the vessel would have made, had the turn been
15 executed as described in the testimony.

16 Q And if it had turned at 12:06, they would have
17 shown what the turn would have been at 12:06, right?

18 A The course recorder doesn't show that.

19 Q But it doesn't show the 11:55 turns, either, does
20 it?

21 A No. This just shows, and I'm sure the simulation,
22 text of the simulation shows that had these rudder
23 positions been achieved at that time, this is the track the
24 vessel would have gone on, that's all.

25 Q Now you say that all the evidence that you

1 reviewed that this track line is consistent with that, with
2 the track line that was developed by Mr. Shizume, correct?

3 A Yes.

4 Q And you say it was because it was based on four
5 fixes, correct?

6 A That was the calibration of the simulation.

7 Q But you didn't -- you disregarded one of those
8 fixes, the 2355 fix, correct?

9 A No.

10 Q Well, your track line doesn't go with the fix on
11 the chart, itself, does it, the 2355 plot? Does your track
12 line go through there?

13 A No, the simulation takes into account the vessel
14 being abeam Busby at .9 and I indicated that on all of the
15 labels for every single track.

16 Q Well -- and you indicated that that doesn't make
17 any difference.

18 A I worked from the simulation positions on the
19 positions used by Dr. Shizume, purely. When I made these,
20 as I mentioned before, I took into account various
21 descriptions of how far abeam Busby the ship was. I used
22 the .9 miles.

23 Q Now I would like you to assume that you've got a
24 vessel -- you have your little ship there in your pocket?

25 A Yes, but it's not to that scale.

1 Q It's not. Which scale is it to, this one?

2 A Yes.

3 Q Well, I bet my pen comes pretty close.

4 A Oh, a calibrated pen.

5 (General laughter.)

6 BY MR. COLE: (Resuming)

7 Q Would you show the jury what the track line would
8 be if you left -- if you were over .2 miles, yes, .2 miles
9 and you went at the same speed and you did the same turn?

10 A We can do that very simply by taking the overlay
11 and shifting it two-tenths of a mile to the west.

12 Q I'd like to see you do it on this one.

13 A I'd rather do it the other way because you've got
14 an interference there. I'll show you why. What you're
15 doing is you're taking this curve and shifting it over, so
16 what you'd have to do is take each one of these and move
17 each one of these over. So what, in fact, that would do is
18 it would move this one two-tenths of a mile over, as I
19 described in my --

20 Q Well, it would also move it up, wouldn't it?

21 A Absolutely not.

22 Q It would not move it up whatsoever?

23 A No.

24 Q Would you show the jury how that happens?

25 A Sure, if you assume that your vessel position at

1 one and a half minutes after midnight is two-tenths of a
2 mile to the west, that would put every single one of these
3 ship positions two-tenths of a mile to the west. It
4 wouldn't affect the north and south at all, Mr. Cole.

5 Q It wouldn't affect it at all.

6 A No.

7 Q Thank you, Mr. Winer.

8 MR. CHALOS: No further questions, Your Honor.

9 JUDGE JOHNSTONE: You're excused. We'll take our
10 break, ladies and gentlemen. Don't discuss this matter in
11 any fashion among yourselves or with any other person. Do
12 not form or express any opinions.

13 THE CLERK: Please rise. This Court stands at
14 recess.

15 (Whereupon, the jury leaves the courtroom.)

16 (Whereupon, at 10:25 a.m., a recess is taken.)

17 (Whereupon, the jury enters the courtroom.)

18 MR. CHALOS: Mr. Andre Martineau.

19 Whereupon,

20 ANDRE MARTINEAU

21 having been called as a witness by Counsel for the
22 Defendant, and having been duly sworn by the Clerk, was
23 examined and testified as follows:

24 THE CLERK: Sir, would you please state your full
25 name and spell your last name?

1 THE WITNESS: Andre Philip Martineau,
2 M-a-r-t-i-n-e-a-u.

3 THE CLERK: And your current mailing address, sir?

4 THE WITNESS: 30 William Fairfield Drive, Wenham,
5 Massachusetts.

6 THE CLERK: Spell the town, please.

7 THE WITNESS: W-e-n-h-a-m.

8 THE CLERK: And your occupation, sir?

9 THE WITNESS: Master mariner.

10 THE CLERK: Thank you.

11 JUDGE JOHNSTONE: All right.

12 DIRECT EXAMINATION

13 BY MR. MADSON:

14 Q Mr. Martineau, who are you employed by, sir?

15 A Exxon Shipping Company

16 Q How long have you been employed by them?

17 A About 18 years.

18 Q I want to call your attention to September of
19 1986. Do you recall what you were doing with Exxon at that
20 time?

21 A I was port captain.

22 Q And was that an administrative job or at sea?

23 A It was an administrative job.

24 Q Let me show you something, sir.

25 JUDGE JOHNSTONE: Sir, would you take the

1 microphone off of that location and put it at your
2 righthand side?

3 THE WITNESS: On my righthand side?

4 JUDGE JOHNSTONE: Your righthand lapel. Up high,
5 up high, so we can pick you up a little better. Thank you.

6 BY MR. MADSON: (Resuming)

7 Q Mr. Martineau, let me hand you what's been
8 identified as Defendant's Exhibit Number B and ask you --
9 just a minute, let me show it to Mr. Cole a second -- and
10 ask you if you've seen this before, sir.

11 A Yes, sir, I have.

12 Q And when was that?

13 A September 18th, 1986.

14 Q After you -- did you receive this in your capacity
15 as an Exxon manager?

16 A Yes, sir.

17 Q What, if anything, did you do with this after you
18 received it?

19 A I think I attached a short memo to it and sent it
20 out as a fleet letter to the fleet because it bore some
21 operational significance.

22 Q One second.

23 (Defendant's Exhibit BY was
24 marked for identification.)

25 BY MR. MADSON: (Resuming)

1 Q Mr. Martineau, I hand you now what's been marked
2 for identification as Exhibit BY and ask you if you
3 recognize that, sir.

4 A Yes, that's the attached memo here.

5 Q When you say attached, would you explain what you
6 mean by that?

7 A Well, this is a cover letter that more or less
8 briefly explains what the attached letter is all about. It
9 just says to just discuss it with the officers on board the
10 vessel.

11 Q And you would have done that in the normal course
12 of your business.

13 A Yes.

14 Q And that would have -- I presume that's intended
15 to go to all the vessel involved in the traffic trade.

16 A Yes, that went out to the entire fleet at that
17 time.

18 Q Thank you, sir, I don't have any other questions.

19 MR. MADSON: Your Honor, I would offer Exhibit BY
20 into evidence at this time.

21 MR. COLE: No objection.

22 JUDGE JOHNSTONE: BY is admitted.

23 (Defendant's Exhibit BY was
24 received in evidence.)

25 CROSS EXAMINATION

1 BY MR. COLE:

2 Q Captain Martineau, did you review the Coast Guard
3 regs. before you sent that out?

4 A No.

5 Q You didn't?

6 A No, sir, I didn't.

7 Q You didn't think it was important to find out what
8 the actual regulations were before --

9 MR. MADSON: Your Honor, I'll object. The whole
10 purpose of this witness is to say that he received this and
11 sent it out as a fleet letter. His opinions or what he
12 thought about it I think are totally immaterial and
13 irrelevant.

14 JUDGE JOHNSTONE: Mr. Cole.

15 MR. COLE: I believe that I should be able to go
16 into the surrounding circumstances which he sent out this
17 letter. It's relevant to why he did it and whether someone
18 would rely on it.

19 JUDGE JOHNSTONE: Objection overruled.

20 BY MR. COLE: (Resuming)

21 Q You didn't even contact the Coast Guard before you
22 sent out this letter?

23 A No, because I've been involved in this sort of
24 doing away with pilotage up there with the Coast Guard for
25 awhile. This really was just an information. It didn't go

1 out as company policy. It was just purely for
2 informational purposes, only.

3 Q So it wasn't the company policy to follow that,
4 the information that was sent out in that letter?

5 A Well, we were -- we followed it in that we didn't
6 have any Prince William pilotage available in the other
7 masters, so other masters that didn't have the pilotage
8 were allowed to go into Prince William Sound without
9 pilotage.

10 Q Okay. Well -- so this only affected vessels
11 without pilotage, correct?

12 A I don't know, it's ambiguous.

13 Q Maybe you could read the first sentence and
14 explain to me why that's ambiguous.

15 MR. MADSON: Your Honor, I'm sorry, but I, once
16 again, asked this gentleman here to show that he sent the
17 letter and that's all. Now if we want to get into his
18 opinion as to what it means, it's totally outside the scope
19 of direct examination.

20 JUDGE JOHNSTONE: Objection overruled.

21 THE WITNESS: "Effective September 1st, 1988, the
22 U.S.C.G. requirement for daylight passage in Prince William
23 Sound for vessels without pilotage has been waived."

24 BY MR. COLE: (Resuming)

25 Q It says without pilotage, correct?

1 A That's what it says.

2 Q Is that ambiguous to you?

3 A Well, I mean if you go back into the background of
4 this thing here --

5 Q I'm just asking you, yes or no.

6 MR. MADSON: Your Honor, I think let him explain.
7 If he can explain his answer and needs to, I think he's
8 entitled to.

9 JUDGE JOHNSTONE: Can you answer the question yes
10 or no?

11 THE WITNESS: All right, yes.

12 BY MR. COLE: (Resuming)

13 Q That's ambiguous to you.

14 A No, no, it's not ambiguous. The answer to your
15 question is yes, it's black and white. It says it requires
16 pilotage -- vessels without pilotage.

17 Q And the second sentence reads, "All nonpilotage
18 vessels will be able to transit from Cape Hinchinbrook to
19 the pilot station for all hours, as long as visibility
20 remains two miles or greater," correct?

21 A That's correct.

22 Q Is the words "all nonpilotage vessels" ambiguous
23 to you?

24 A No.

25 Q Now a nonpilotage vessel is a vessel that doesn't

1 have a mate or a captain with pilotage for that area,
2 correct?

3 A That's correct.

4 MR. COLE: Nothing further.

5 REDIRECT EXAMINATION

6 BY MR. MADSON: (Resuming)

7 Q Now, Mr. Martineau, since we got into this, you
8 said that when you received this memorandum -- first of
9 all, why did you get this from the Alaska Maritime Agency,
10 rather than the Coast Guard?

11 A Well, Alaska Maritime was just keeping us informed
12 of what was happening in the port, that's all.

13 Q Was there any duty imposed on you to go directly
14 to the Coast Guard and see what they said?

15 A No.

16 Q You also said this wasn't -- you didn't believe
17 this was extremely novel, new, unique or important.

18 A No.

19 Q Why is that, sir?

20 A Well, the Coast Guard was in the process of doing
21 away with pilotage up in Prince William Sound.

22 MR. COLE: Objection, hearsay.

23 MR. MADSON: Your Honor, he answered the question
24 as to why. I think he's entitled to answer it.

25 JUDGE JOHNSTONE: I'm going to sustain the

1 objection, unless you can lay a foundation so it's not
2 hearsay.

3 BY MR. MADSON: (Resuming)

4 Q Well, you were involved, I think you said, in
5 matters of Prince William Sound pilotage, is that correct?

6 A That's correct. I was -- at one point in time, I
7 filled out some sort of a form for the Coast Guard as to
8 whether we thought or I thought that we needed pilotage in
9 Prince William Sound.

10 Q You were requested to fill out a form to that
11 effect?

12 A Well, they sent it to the office and I filled it
13 out.

14 Q Oh, when you say "we," it wasn't you, personally.
15 It was directed somehow to your desk.

16 A That's correct.

17 Q By the Coast Guard?

18 A I believe it was a Coast Guard form.

19 Q And what did you tell them?

20 A I told them that I didn't think we needed to
21 maintain pilotage in Prince William Sound.

22 Q Why is that, sir?

23 MR. COLE: Objection, relevance.

24 MR. MADSON: Your Honor, Mr. Cole opened the door
25 here as to what this means and all the rest of the

1 background and circumstances. He directly used that term,
2 circumstances, so I think I'm entitled to follow up and
3 show what the circumstances were. Secondly, with regard to
4 any hearsay, it's not offered as hearsay. It's an
5 exception because I want to show only for the purpose of
6 what this witness did, not for the truth of the matter
7 asserted. So I think it's certainly an exception.

8 JUDGE JOHNSTONE: I'll rule on the relevance
9 objection. I'm going to overrule the relevance objection.
10 It goes to one of the elements of the offense. As to the
11 hearsay, I haven't heard an objection on the hearsay yet.
12 I'll rule when that's made.

13 BY MR. MADSON: (Resuming)

14 Q And what did you, sir, on this form? How did you
15 fill it out?

16 A I don't remember how I filled it out. I just
17 remember filling it out and what I stated in there was
18 that, in my opinion, they didn't need to maintain pilotage
19 up in Prince William Sound.

20 Q Why, sir, in your opinion?

21 A Well, because it's a very easy area to navigate.
22 It's not very treacherous. The land is excellent as far as
23 navigational aids are concerned and the mountains and
24 rugged coastline provide excellent radar reception, so --

25 Q Did you have further discussions with the Coast

1 Guard after sending out that form?

2 MR. COLE: Objection, hearsay.

3 MR. MADSON: I didn't ask what they were. I just
4 simply asked if there were discussions. I don't think what
5 I'm asking calls for any kind of an answer, except yes or
6 no.

7 JUDGE JOHNSTONE: Okay, as long as the witness
8 will confine himself to a yes or no answer, the objection
9 is overruled.

10 BY MR. MADSON: (Resuming)

11 Q Did you have other discussions or correspondence
12 with the Coast Guard, if you remember?

13 A I can't remember.

14 Q Now Mr. Cole asked you just a couple of questions
15 about the letter, itself, or the document, itself, and you
16 said they were not ambiguous. Taking the document as a
17 whole, reading the whole thing, would you agree or disagree
18 that it's -- do you have an opinion as to whether it's
19 ambiguous or not?

20 A Well, my opinion is that it would be ambiguous if
21 you are involved in pilotage in Prince William Sound.
22 Here, they're saying for non --

23 MR. COLE: Objection, hearsay.

24 JUDGE JOHNSTONE: When you say "they're saying,"
25 what are you referring to, the letter that's in evidence?

1 THE WITNESS: Yes, sir.

2 JUDGE JOHNSTONE: As long as the witness confines
3 himself to what the letter's content is and not what
4 somebody else testified.

5 MR. MADSON: That's fine.

6 BY MR. MADSON: (Resuming)

7 Q You understand that to be the case, sir?

8 A Yes.

9 Q Okay, would you please go ahead and finish your
10 answer?

11 A Well, when you talked about pilotage vessel in
12 Prince William Sound, at that point in time, there were so
13 many vessels that were running up there without pilotage
14 that there wasn't -- didn't seem much point in maintaining
15 the pilotage requirements up there. So whether you had
16 pilotage or didn't have pilotage, you more or less went
17 through the same procedures in navigating the Sound, with
18 the exception that nonpilotage vessels had to report every
19 ten minutes.

20 Q To where, sir?

21 A Montague Point.

22 Q From Montague Point on up through the pilot
23 station?

24 A It's normal reporting. And it didn't -- the
25 letter didn't say you needed a master on the bridge,

1 either.

2 Q What about the pilot station, did it say it had to
3 be at Bligh Reef or was it still at the normal Rocky Point
4 pilot station?

5 A The letter didn't state anything to that.

6 Q Thank you, sir, I have no other questions.

7 RE-CROSS EXAMINATION

8 BY MR. COLE: (Resuming)

9 Q Captain Martineau, you didn't think that there
10 should be pilotage because you couldn't imagine an accident
11 happening in that area, correct?

12 A No, that's not true.

13 Q Well, you thought it was an easy area to navigate,
14 correct?

15 A Relatively easy, compared to other areas that we
16 navigate in.

17 Q You've navigated in and out of the Prince William
18 Sound yourself?

19 A Yes, sir.

20 Q And did you ever strike Bligh Reef?

21 MR. MADSON: Your Honor, we're getting as far
22 afield from the original purpose of his testimony as I
23 could imagine.

24 MR. COLE: I'll withdraw it, Your Honor.

25 BY MR. COLE: (Resuming)

1 Q Now you said that this letter is ambiguous, taken
2 in context. Where is there anything in there that says
3 that the rules for a pilotage vessel have changed?

4 A I'll have to agree with you, it doesn't say that.

5 Q Thank you.

6 JUDGE JOHNSTONE: May the witness be excused from
7 further participation, Mr. Cole?

8 MR. MADSON: He may.

9 MR. COLE: Yes.

10 JUDGE JOHNSTONE: You're excused, sir. You may
11 call your next witness.

12 MR. CHALOS: Your Honor, at this time, the Defense
13 calls Captain Walker, Shiras Walker.

14 Whereupon,

15 SHIRAS M. WALKER

16 having been called as a witness by Counsel for the
17 Defendant, and having been duly sworn by the Clerk, was
18 examined and testified as follows:

19 THE CLERK: Sir, would you please state your full
20 name and spell your last name?

21 THE WITNESS: Shiras Michael Walker, W-a-l-k-e-r.

22 THE CLERK: Spell your first name.

23 THE WITNESS: S-h-i-r-a-s.

24 THE CLERK: And your current mailing address?

25 THE WITNESS: 7969 Little Fox Lane, Jacksonville,

1 Florida.

2 THE CLERK: Your current occupation, sir?

3 THE WITNESS: Bar pilot.

4 JUDGE JOHNSTONE: Would you put that microphone on
5 your right lapel, please, and turn it up?

6 DIRECT EXAMINATION

7 BY MR. CHALOS:

8 Q Captain Walker, what is a bar pilot?

9 A A bar pilot is a person that directs the movement
10 of a vessel from the sea buoy into docks in a river
11 setting.

12 Q Where do you presently work?

13 A In the St. John's River, Jacksonville.

14 Q In Florida?

15 A Florida, yes.

16 Q How long have you been a pilot down there?

17 A I've been there since October '85.

18 Q What were you asked to do in connection with this
19 case?

20 A I was supposed to give my opinion on Captain
21 Hazelwood's actions from the time he boarded the Exxon
22 Valdez on that night up until the time she went on the
23 reef.

24 Q Let's step back for a second. What is your
25 educational background?

1 A I graduated from Kings Point in 1969.

2 Q The U.S. Merchant Marine Academy?

3 A Yes.

4 Q Did you receive a degree?

5 A Yes, a bachelor of science and nautical science.

6 Q And did you receive a license at that time?

7 A Yes, I did, a third mate's license.

8 Q All right, would you briefly describe your
9 employment background for us?

10 A As soon as I graduated from the Merchant Marine
11 Academy, I joined the Master Mates and Pilots Union and
12 sailed --

13 Q What is the Master Mates and Pilots Union?

14 A It's a union of ships officers.

15 Q Yes, go ahead.

16 A -- and proceeded to ship out on two freighters.

17 And then in October of 1969, I came ashore on vacation and
18 when I went back to the union hall to get jobs, Vietnam was
19 winding down at that time and they were very few and far
20 between. And I was so low on the seniority pole that it
21 looked like I was going to stay around for a long time. So
22 in January of 1970, I started calling the oil companies and
23 asking them if they had any jobs.

24 Q And did you ultimately get a job?

25 A In January of 1970, I contacted Cities Service Oil

1 Company and they said they had two jobs. One was I think a
2 one- or two-month job and the other one was a permanent
3 job. But to get the permanent job, I'd have to take a
4 grain ship to India, so I took the grain ship to India.

5 Q You went on that ship as a third mate?

6 A Yes.

7 Q Okay, how long did you work for Cities Service?

8 A From 1970 to approximately January 1st, 1976. The
9 Cities Service people became known as Interocean Management
10 Corporation. They're basically the same people; they just
11 changed the name of the company.

12 Q Between 1970 and 1976, did you work on oil
13 tankers?

14 A Exclusively, yes.

15 Q Did you increase your license from third mate to
16 second mate?

17 A Yes, by 1976, I had worked all the way up to chief
18 mate.

19 Q You were sailing as a chief mate in 1976?

20 A Yes.

21 Q What kind of vessels were you sailing on between
22 1970 and 1976?

23 A In 1970, I started out on about an 18 to 20,000
24 gross ton tanker and in 1975, I was selected for the VLCC
25 sea program.

1 Q What is the VLCC?

2 A Very large crude carrier.

3 Q What is that?

4 A Well, it's anything, I would say, over 200,000
5 dead weight tons.

6 Q When did you first go on a VLCC?

7 A In April 1975, I was assigned to the Massachusetts
8 in Bethlehem Steel Shipyard at Sparrows Point.

9 Q How big was the Massachusetts?

10 A She was 265,000, dead weight.

11 Q Now you worked on the Massachusetts from 1975 to
12 1976?

13 A Just about the end of 1976, yes.

14 Q As a chief mate.

15 A Yes.

16 Q When did you obtain your master's license?

17 A Early in 1977.

18 Q And when did you obtain your first master's job?

19 A August 1977.

20 Q What ship did you become master of?

21 A The New York.

22 Q How big was the New York?

23 A She was a sister ship to the Massachusetts,
24 265,000, dead weight.

25 Q Now have you ever sailed in Prince William Sound?

1 A Yes, I have.

2 Q When did you first come up the Prince William
3 Sound?

4 A Right around August of 1977.

5 Q Your first job as a captain?

6 A Yes.

7 Q Where did you come from?

8 A I obtained my first master's job in Singapore. I
9 moved up from chief mate to master in Singapore and I took
10 the ship from Singapore to Japan, where we went to shipyard
11 for about one week. And then we left from there to come to
12 Valdez.

13 Q This was in, I think you said, August of 1977?

14 A That's correct.

15 Q You were the first ULCC to come up to Valdez?

16 A Yes, we were. VLCC. The ULCC is over 400,000.

17 Q I beg your pardon, you're right. Now when you
18 came up to Valdez the first time, did you have pilotage?

19 A No, I did not.

20 Q What was the procedure in 1977?

21 A 1977, the very first time we came in there, the
22 pilot came on board. I believe he was in a helicopter and
23 landed on deck.

24 Q At what point, geographically?

25 A Right at Rocky -- not Rocky Point, right at Cape

1 Hinchinbrook.

2 Q And the pilot would then take the ship into the
3 berth at the Port of Valdez?

4 A Well, instead of going to the berth that time, we
5 proceeded up to Knoll's Head, Anchorage, because we had to
6 pass inspection. We didn't go to the berth for about
7 another week.

8 Q All right. How long did you work in the Valdez
9 trade, if you will?

10 A It's difficult to tell you, but basically from
11 1977 to 1985. A few years in there, I was in the offshore,
12 I would go foreign.

13 Q What do you mean by going foreign?

14 A Worldwide. We operated a tramp tanker service
15 worldwide.

16 Q How many trips would you estimate you've made into
17 Valdez over the years?

18 A It would just be a guess on my part, but probably
19 between 25 and 30 trips.

20 Q These trips were all on VLCC type ships?

21 A Nothing under 165,000 gross tons -- dead weight
22 tons, excuse me.

23 Q The majority of trips were on VLCCs over 200,000
24 tons?

25 A Yes.

1 Q And all these trips you made, you were the captain
2 of the ship?

3 A That's right.

4 Q Now when did you first obtain your pilotage
5 endorsement for Prince William Sound?

6 A Approximately 1979.

7 Q How many trips had you made into Prince William
8 Sound by the time you got your pilotage?

9 A Six trips.

10 Q That's all you took was six trips?

11 A That's correct.

12 Q And how did you get your pilotage endorsement?

13 A Studied the VTS Manual and the chart and went down
14 to the Coast Guard in Jacksonville, Florida, and they sent
15 the forms and the I guess paper work and the questions that
16 they wanted me to answer from Valdez to Jacksonville and I
17 took the exam in Jacksonville, Florida.

18 Q This exam that you took, was that a written exam?

19 A Yes, partly written and you had to draw the Prince
20 William Sound chart.

21 Q Did this exam test your ability to handle a vessel
22 in Prince William Sound?

23 A No.

24 Q Well, what did the exam test?

25 A A lot of book work, the VTS Manual, the aids to

1 navigation, the characteristics of the aids to navigation
2 and if you could draw the traffic separation scheme in the
3 chart, know where the anchorage is.

4 Q And know, for instance, where Bligh Reef was?

5 A Yes.

6 Q The navigational aids for Prince William Sound,
7 how would you characterize them? Are there a lot of them
8 or --

9 A Very few.

10 Q So you only had to know a few navigational aids
11 and where Bligh Reef was?

12 A Well, a little bit more than that, but basically.

13 Q And the VTS system.

14 A There was a lot of -- you had to know all the
15 little bays and inlets by name and it was kind of a
16 make-work exam.

17 Q Now how many times did you travel into Prince
18 William Sound before you got the pilotage endorsement?

19 A Well, about six round trips.

20 Q And in those round trips, did you always pick up a
21 pilot at Cape Hinchinbrook?

22 A Yes.

23 Q Were the regulations such that you were required
24 to drop off the pilot at Cape Hinchinbrook going out?

25 A Yes.

1 MS. HENRY: Objection, Your Honor.

2 MR. CHALOS: Your Honor, this goes to the
3 regulations as they existed, this whole pilotage issue, and
4 he's got personal knowledge of what was going on.

5 JUDGE JOHNSTONE: I'll overrule the objection, Ms.
6 Henry.

7 BY MR. CHALOS: (Resuming)

8 Q Captain Walker, did you, in those instances, in
9 those six instances, drop the pilot off at Cape
10 Hinchinbrook on the way out?

11 A The very first time I did.

12 Q How about the other five?

13 A No.

14 Q Where did you drop the pilot off?

15 A Around, roughly around Busby, Busby Island.

16 Q Was that the practice at that time?

17 A I don't know, it was my practice.

18 Q Were the actions in contravention of the
19 regulations?

20 A Yes, they were.

21 Q I'm sorry

22 A Yes.

23 Q Now you've been asked to appear here as an expert
24 for the Defense, have you not?

25 A Yes, I have.

1 Q Are you being paid for your appearance here?

2 A Yes, I am.

3 Q What is the fee arrangement that you have with us?

4 A \$500.00 a day, plus expenses.

5 Q Now, sir, on your master's license, you have a
6 radar endorsement?

7 A Yes, I do.

8 Q What is a radar endorsement?

9 A It's basically a 20-minute, used to be a 20-minute
10 exam that would qualify you to be a radar observer.

11 Q That's changed in recent years, has it not?

12 A Yes, it has.

13 Q Now it's -- you have to go to a school and you
14 have to observe the radar?

15 A Right, but it's basically the same thing. It's
16 just that they take you a little bit into a little bit more
17 detail and give you a more detailed exam, an on-the-job
18 exam you might say.

19 Q In your opinion, would you expect someone who's
20 been through the course and has gotten the radar
21 endorsement to be able to identify targets on the radar
22 screen?

23 A Well, you couldn't say, "Yes, that's the North
24 Slope, or, "That's the Benetia."

25 Q Well, I mean be able to handle the radar and plot

1 on the radar.

2 A Oh, surely, surely, that was the whole purpose of
3 the exam.

4 Q All right. Now you mentioned that you've been
5 asked to render or critique Captain Hazelwood's actions in
6 this matter, am I correct?

7 A That's correct.

8 Q What did you review in order -- before you
9 appeared here today?

10 A The National Transportation Safety Board
11 videotapes of I believe Mr. Cousins and Mr. Kunkel. Then
12 we went to the Grand Jury I think they call them
13 depositions of Kunkel, Kagan, Cousins, Beevers and I think
14 that's about all the people. And then I had the course
15 recorder charts, the engine room bell logger, the deck log
16 pages that were relevant, some CAORF statistics on the
17 vessel maneuvering capabilities and I probably left out a
18 few documents, but that's the majority of them, anyway.

19 Q Did you look at charts of Prince William Sound?

20 A Yes, and charts.

21 Q How about the vessel, did you inspect the vessel?

22 A Yes.

23 Q When did you inspect the vessel?

24 A About the first week in September.

25 Q Where was that?

1 A In San Diego.

2 Q Did you review any trial testimony?

3 A Yes, I have.

4 Q Whose trial testimony did you review?

5 A Mr. Kunkel, Mr. Kagan, Mr. Cousins, the female
6 ordinary seaman, I can't remember --

7 Q Maureen Jones?

8 A Maureen Jones. I believe that's about all.

9 Q All right, let's speak about your opinion.

10 There's been some testimony in this case that Captain
11 Hazelwood reboarded his vessel in Valdez approximately 45
12 minutes before they left the dock. Do you have any opinion
13 as to whether that was good, bad, indifferent?

14 A Well, it's good. I have no problem with that. In
15 my company, in the early stages of my career, it wasn't
16 unusual that the captain went down with the gangway and
17 came back up with the gangway, so --

18 Q What does that mean?

19 A He was the first one ashore and the last one back
20 on board.

21 Q So you find nothing unusual about Captain
22 Hazelwood returning to the ship --

23 A None at all.

24 Q -- 45 minutes before sailing.

25 A Not at all.

1 Q Have you read testimony about the fact that the
2 sailing board was changed?

3 A Yes, it was moved back one hour.

4 Q What does that mean?

5 A That means that they were finishing cargo an hour
6 earlier than they had anticipated.

7 Q Now did you review any testimony with respect to
8 the undocking process of this vessel?

9 A Only to the fact that Mr. Cousins was back, aft,
10 and where the various people were. Mr. Kunkel was on the
11 bridge.

12 Q Do you have an opinion of Captain Hazelwood's
13 actions during the undocking process?

14 A I have no fault with Captain Hazelwood's
15 procedures.

16 Q Now you read testimony about the vessel's transit
17 through the Port of Valdez?

18 A Yes, I have.

19 Q Do you have an opinion as to Captain Hazelwood's
20 actions during the transit through the Port of Valdez?

21 A Well, they were perfectly normal.

22 Q When you say perfectly normal, what do you mean?

23 A I understand there's been some business here about
24 whether or not he should have left the bridge and it's my
25 experience, even as a pilot now, that about 25 percent of

1 the U.S. ships that I piloted in and out of the St. John's
2 River, the captain is down below. And we are in much
3 closer waters than they ever dreamed of being up there.

4 Q Well, could you explain that, please?

5 A Well, the maximum width we have in the St. John's
6 River is 1,100 feet. The narrowest point in Prince William
7 Sound is 3,000 feet. So there was quite a discrepancy
8 there. Our average channel is 600 feet wide.

9 Q There's been some testimony here that Captain
10 Hazelwood left the bridge in the Port of Valdez right on
11 through the Narrows, up to Potato Point. Do you have an
12 opinion as to those actions?

13 A I find no fault there.

14 Q What is the basis for that?

15 A There's no regulations saying where he has to be,
16 on the bridge, or he can be anywhere he feels like being.

17 Q Do you have an opinion as to whether the waters in
18 the Narrows are dangerous waters or not?

19 A In the Narrows, don't forget, they have the speed
20 limit there, so the ship isn't going very fast, it's only
21 going about six knots. Using the two scenarios of what
22 could happen in there, one would be an engine failure. As
23 long as the ship had its steering, it would be in good
24 shape. These VLCCs can coast quite a long ways. As long
25 as he had his rudder, he'd be in good shape.

1 The other factor is if he lost his steering.
2 Well, there's an escort tug that's assigned to each vessel
3 and in case she lost her steering, the escort tug would
4 come up on the stern, put up two lines, one on each
5 quarter, and be used as a rudder, at least as effective as
6 the ship's rudder.

7 Q Do you know Pilot Murphy?

8 A Yes, I do.

9 Q What's the nature of your familiarity with him?

10 A He's been a pilot on my vessel numerous times. He
11 was also the pilot, the first pilot I took in Valdez the
12 very first time.

13 Q Do you have an opinion as to Captain Murphy's
14 competence?

15 A Captain Murphy is an excellent pilot.

16 Q Now there's been some testimony that the captain
17 returned to the bridge some time prior to the pilot leaving
18 and there's a conflict in the testimony. One witness said
19 it was about 30 minutes before the pilot left and another
20 said about 15 minutes before the pilot left. Do you have
21 an opinion as to those actions, whether it's 30 minutes or
22 15 minutes?

23 A Well, as long as he came up in time to sign the
24 pilot's bill and exchange the normal pilot-captain
25 information, I see no problem there.

1 Q How long would that normally take?

2 A Less than five minutes.

3 Q Now you said the regulations don't require the
4 captain to be on the bridge at any time. What regulations
5 are you referring to?

6 A The Coast Guard regulations.

7 Q Now you reviewed testimony about the exchange of
8 the command of the vessel between the pilot and Captain
9 Hazelwood at around 11:20 on the evening of March 23d.

10 A Yes, I did.

11 Q Do you have any opinion as to the actions taken at
12 that point?

13 A Well, the testimony that I saw was very vague on
14 that point, just that they apparently got together and the
15 pilot went down below. There was no testimony as to who
16 said what or who said this and so I have no opinion on
17 that.

18 Q Well, did it appear to you to be the routine
19 exchange between a pilot and the captain?

20 A I would assume so. Knowing Ed Murphy, I would
21 assume that that's what would happen.

22 Q Now there's also been some testimony about
23 communications that Captain Hazelwood had with the VTC, the
24 Vessel Traffic Control Center. You reviewed that
25 information?

1 A Yes, I did.

2 Q I'm talking now of the time period between let's
3 say 11:25 and about 11:40 on the evening of the 23d.

4 A Yes.

5 Q You reviewed that communication?

6 A Yes, I did.

7 Q Do you have any opinion as to those
8 communications?

9 A No, I have no opinion on that. It was a routine
10 exchange of information. In fact, since I have left,
11 they've gotten even a little more lax since I left on their
12 communications procedures.

13 Q Well, let me ask you this. You're familiar with
14 the VTS system in Prince William Sound?

15 A Yes, I am.

16 Q Have you had occasion in the past where you
17 communicated with the VTS Center to -- with respect to your
18 course or speed?

19 A Yes, I have.

20 Q Were you ever called and told that your vessel was
21 not in the proper position?

22 A Yes, we were.

23 Q When did that occur?

24 A On the very first year of going in and out of
25 Valdez, the Coast Guard was very concerned about the Valdez

1 Narrows area, which is kind of a wide open area with one
2 small rock in the middle. They call it Middle Rock. And
3 they had drawn on a chart a line and they called it the
4 optimum track. And they wanted all the ships that came in
5 and out of there to be on that optimum track. And, of
6 course, the pilots are doing their job by eye. The optimum
7 track line that they had was a curve. There was no steady
8 course on there, it was just a vague curve, "Hell, that
9 looks good, let's draw that." So the pilots were a little
10 one way or the other all the time and they would call up
11 the pilots and say, "You're a hundred feet off the center
12 line of the optimum channel," and really give them hell.

13 Q In the years that you operated in Prince William
14 Sound, did you believe that the Coast Guard was monitoring
15 you on the radar?

16 A Yes.

17 MS HENRY: Objection, relevancy as to time.

18 JUDGE JOHNSTONE: Let's get a foundation for when
19 we're talking about.

20 BY MR. CHALOS: (Resuming)

21 Q You operated in Prince William Sound between 1977
22 and I think you said 1985?

23 A That's correct.

24 Q During that period, the eight-year period, did you
25 believe that you were being monitored by the Coast Guard on

1 the radar.

2 JUDGE JOHNSTONE: Don't answer the question. Just
3 a minute, please. When you see her stand, give us a second
4 to resolve this.

5 MS HENRY: Objection, relevancy and the Protective
6 Order that was discussed several weeks ago.

7 JUDGE JOHNSTONE: I'm afraid I don't remember.
8 There were so many discussed several weeks ago. Why don't
9 you come on up here and we'll --

10 (The following was said at the bench.)

11 MS HENRY: (Inaudible.)

12 MR. CHALOS: (Inaudible.)

13 JUDGE JOHNSTONE: Well, you had a broad range
14 there and if you can tie it down to the period of time that
15 the procedure was (inaudible).

16 MR. CHALOS: (Inaudible.)

17 JUDGE JOHNSTONE: Well, you can ask him about
18 (inaudible). You have to couch your question in terms of
19 the radar as it appeared in 1985.

20 (The following was said in open Court.)

21 BY MR. CHALOS: (Resuming)

22 Q Captain Walker, directing your attention to 1985,
23 did you believe, at that time, in 1985, that the Coast
24 Guard was monitoring you on the radar system that was in
25 place at the VTS Center?

1 A They were very proud of that radar and, at one
2 time, they even took me in there and showed me what they
3 could do.

4 MS HENRY: Your Honor, I object and move to
5 strike. His answer is not responsive and he's going to a
6 different time period.

7 BY MR. CHALOS: (Resuming)

8 Q I'm talking about the period 1985. Did you
9 believe that --

10 MS HENRY: Excuse me, Mr. Chalos, I have a motion
11 on the floor.

12 MR. CHALOS: Sorry. I withdraw the --

13 JUDGE JOHNSTONE: The question didn't ask you if
14 they took you in there. It asked you what you thought
15 about what they were doing at that time, if they were
16 monitoring you in 1985. So restate your question and try
17 to answer the question.

18 BY MR. CHALOS: (Resuming)

19 Q Captain Walker, in 1985, did you believe that the
20 Coast Guard was monitoring you on the radar system that
21 they had in place at that time?

22 A Yes.

23 Q To what geographical point did you believe you
24 were being monitored at that time?

25 A Approximately 18 miles from Potato Point, which

1 would put you somewhere several miles southwest of Bligh
2 Reef.

3 Q Let me get a chart of the area, so we're all
4 talking about the same -- Captain Walker, would you point
5 to the jury the geographical point which you believe the
6 Coast Guard was monitoring you down to on their radar?

7 A Approximately right down in here, in this
8 vicinity.

9 Q The area that you pointed to is several miles
10 south of Bligh Reef?

11 A Yes.

12 Q Sir, in 1985, if your vessel was standing into
13 danger, did you have a belief that the Coast Guard would
14 warn you of that fact?

15 A That was the whole purpose that they were there.

16 Q What do you mean by that?

17 A Well, in the beginning of the manual was that they
18 spent the \$70 million to build that place was to prevent
19 collisions and groundings.

20 Q It said so right in the manual?

21 A Yes, it did, and you're not going to go aground if
22 you're staying in the traffic separation scheme that they
23 have right there.

24 Q What do you mean by that?

25 A Well, I would assume that as soon as you left that

1 traffic separation scheme that that would be the time of
2 intense monitoring because you're not going to have a
3 collision and you're not going to go aground if you're in
4 the traffic separation scheme.

5 Q So you believe that if you were outside the VTS
6 system for whatever reason north of Bligh Reef that the
7 Coast Guard would be monitoring you and warning you if you
8 got into danger?

9 A I believe they should be monitoring me even more
10 than normal.

11 Q Because you're out of the traffic lanes.

12 A Absolutely.

13 Q I'd like to speak a little bit about ice. Have
14 you ever had occasion to encounter ice in Prince William
15 Sound?

16 A Yes, I have.

17 Q On how many occasions has that happened?

18 A I believe at least three occasions.

19 Q On those occasions, what did you do?

20 A One time, I went through and two other times, I
21 went around it.

22 Q The time that you went through, was it daylight,
23 night?

24 A It was daylight.

25 Q And what did you do in that instance?

1 A Well, the ice was fairly heavy across both traffic
2 lanes and I just picked a spot to go through the ice that I
3 believed was the thinnest, you know, had the least amount
4 of ice in that vicinity.

5 Q And on those two occasions that you diverted
6 around the ice, when was that, what time of day?

7 A That was at night.

8 Q And what did you do in those instances?

9 A Came -- did about the same maneuver that the Exxon
10 Valdez is supposed to have done.

11 Q What do you mean by that?

12 A Come down around Busby Island and come right close
13 by the buoy at Bligh Reef.

14 Q Why don't you take a pointer? There should be a
15 pointer either to your right or on the chalkboard there.

16 JUDGE JOHNSTONE: Just behind your elbow there.

17 BY MR. CHALOS: (Resuming)

18 Q Why don't you point to the jury the maneuver that
19 you made on those occasions where you diverted around ice?

20 A Around the ice?

21 Q Yes.

22 A It's very hard to tell you exactly where I was
23 because that was six or seven years ago. But the ice would
24 come out of this place right here and it would generally
25 come out and come around into this vicinity here.

1 Sometimes, if it had got up a little further, it would tend
2 to even come along the shoreline here. And on your way
3 out, about right here would be where the pilot would get
4 off. I would normally come around this buoy to check and
5 make sure that I was in the center line here and then do
6 approximately what Captain Hazelwood had done right here.

7 Q And at what point would you start to come back
8 into the lanes?

9 A Depending on where the ice was, how far around the
10 ice I had to go. If the ice was only into the separation
11 scheme, of course you'd come down and just come down, come
12 back on -- I like to use this light here, abeam.

13 Q What's that?

14 A That's the light on Glacier Island.

15 Q Now on those occasions, did you steer a course
16 around 180 when you were changing, coming out of the lane?

17 A I couldn't really tell you right now, but it's a
18 logical course to steer.

19 Q Why do you say it's a logical course to steer?

20 A Well, for one thing, it's a convenient course,
21 it's a cardinal point.

22 Q What do you mean by cardinal point?

23 A Okay, it's a north, south, east or west line.

24 Q And 180, is that a north-south line?

25 A 180 -- your course line is very easy to plot

1 because all your longitude lines here are north and south.
2 It's just very convenient to steer at.

3 Q On those occasions when you diverted around ice,
4 did you leave the traffic separation lanes?

5 A Yes, I did.

6 Q Let me ask you about your experience with ice over
7 the years. Have you found, let's say from the early days
8 until you stopped sailing in 1985, that the ice had gotten
9 worse or better?

10 A In the early days, we never even saw it. We used
11 to come up here and about this position here, everybody
12 would come up on the bridge to see if they could see
13 Columbia Glacier. We were like tourists, you know, up
14 there, we wanted to see the ice and glacier that everybody
15 had said, you know, this is up here. Nobody had ever seen
16 it before. After the years started to go by, we started to
17 notice ice would start -- little bergy bits would start
18 coming out of there and of course everybody oohed and ahed,
19 "Oh, look, there's one over there," you know. And towards
20 the end, around 1984, 1985, it was getting very heavy. The
21 glacier was starting to calve a whole lot.

22 Q Okay. Now was it the customary practice of
23 vessels to divert outside the lanes to avoid the ice, as
24 best as you knew when you were sailing up there?

25 A Some vessels would go through it, but most went

1 around it.

2 Q You don't have any problem with the fact that
3 Captain Hazelwood diverted to go around the ice on this
4 particular night, do you?

5 A None at all, no.

6 MR. CHALOS: Your Honor, I'm going to get into
7 another subject and I have to get some more exhibits.
8 Shall we take a break at this point?

9 JUDGE JOHNSTONE: That will be fine, we'll take
10 our next break. Ladies and gentlemen, please don't discuss
11 this case among yourselves or with any other person.
12 Please do not form or express any opinions.

13 THE CLERK: Please rise. This Court stands at
14 recess.

15 (Whereupon, the jury leaves the courtroom.)

16 (Whereupon, at 12:02 p.m., a recess is taken.)

17 (Whereupon, the jury enters the courtroom.)

18 JUDGE JOHNSTONE: Raise your hand if you need a
19 tablet. I thought you said you were out.

20 MS. : (Inaudible.)

21 JUDGE JOHNSTONE: Okay, you may resume, Mr.
22 Chalos.

23 MR. CHALOS: Thank you, Your Honor.

24 BY MR. CHALOS: (Resuming)

25 Q Captain Walker, I've put before you what we've

1 marked as Exhibit F, which is the chart of the ARCO Juneau,
2 which is the vessel that immediately preceded the Exxon
3 Valdez out of the Port of Valdez. Have you had an
4 opportunity to look at that chart?

5 A Just in the last few minutes, yes.

6 Q There's been some testimony here that the ARCO
7 Juneau made some course changes and maneuvers in and around
8 the Bligh Reef area. Can you see those on the chart?

9 A Yes, I can.

10 MR. CHALOS: Your Honor, may the witness approach
11 the jury?

12 JUDGE JOHNSTONE: Yes.

13 BY MR. CHALOS: (Resuming)

14 Q Step over here by the jury and show them what the
15 ARCO Juneau --

16 JUDGE JOHNSTONE: Captain, put that black box in
17 your pocket and you can take the microphone with you that
18 way.

19 BY MR. CHALOS: (Resuming)

20 Q Would you describe for the jury what the captain
21 of the ARCO Juneau was doing to divert around the ice? You
22 have to step aside so the jury can see.

23 A I'm sorry. The marks on the chart are very faint,
24 not too good of a reproduction here. It looks like an
25 18-something fix right here. Right now, he's started to

1 deviate out of the traffic separation scheme, appears to be
2 headed down this way. At some point in time, he starts to
3 make a rather radical course change right here. It looks
4 like he used the sector on Busby Island Light to make his
5 course change. You see he's very, very close to that
6 reef. The course change that he had to make here was
7 probably, it looks to me to be about 70 or 80 degrees
8 course change, very little maneuvering around here. I
9 don't like this maneuver at all.

10 Q Why is that?

11 A Well, he doesn't leave himself any sea room if
12 anything should happen to his vessel. The two things you
13 have to worry about on a ship are mechanical failure --
14 well, the big thing is mechanical failures and the two
15 things that you have there are the engine and the steering
16 gear. You always have to be alert to that fact. If the
17 engines had failed here, he might have been able to get his
18 vessel out of the way of Busby Island -- of Bligh Reef,
19 rather. But if his steering gear had failed at that time,
20 I feel that he's beyond the point of no return and he has
21 no other choice but to hit Busby -- Bligh Reef.

22 Q Let me ask you this. There's been testimony that
23 the captain was steering a course -- the captain of the
24 ARCO Juneau was steering a course of 175, headed for Bligh
25 Reef at about 16 knots. Do you have an opinion as to that

1 maneuver?

2 A Well, again, like I said, he's really taking a
3 chance here. If anything should go wrong, if his
4 quartermaster put the wheel the wrong way when he ordered
5 right rudder -- it's common, not too common, thank God, but
6 it's not an uncommon mistake for a quartermaster to put the
7 rudder the wrong way or the helm the wrong way. If that
8 had happened, he doesn't have a whole lot of room to
9 recover from that situation.

10 Q There's also been testimony that he started to
11 make his final maneuver away from Bligh Reef about half a
12 mile north of it. Do you have any opinion on that?

13 A Well, like I say, a half a mile at 16 knots is not
14 a whole lot of time. There's not -- again, he's giving up
15 all his maneuvering room, his margin of error, let's put it
16 that way.

17 Q Do you have an opinion as to whether the maneuver
18 the captain of the ARCO Juneau was making is a risky
19 maneuver?

20 A I would say it's a risky maneuver.

21 Q Now I also placed in front of you Exhibit AF,
22 which is Captain Knowlton's master's license that indicates
23 that he has pilotage to Busby Island Light. Do you see
24 that?

25 A Yes, I do.

1 Q Okay, I'd like to give you a hypothetical. If the
2 pilot, according to the bell log of this vessel, departed
3 at Rocky Point and this captain's license only has pilotage
4 to Busby Island Light, between Rocky Point, up here, and
5 Busby Island Light, here, is how far?

6 A I would say about close to three miles.

7 Q In that three-mile stretch, would that captain be
8 in violation of the pilotage regulations?

9 A Well, it's -- are you talking pre this Bob Art's
10 letter or as I knew it in 1985?

11 Q As you knew it in 1985.

12 A In 1985, he would have been in violation, yes.

13 Q You referred to Exhibit B, the letter from Arts,
14 from Alaska Maritime. Have you reviewed that letter?

15 A Yes, I have.

16 Q Would your opinion as to the violation that you
17 just spoke about be different, having reviewed that letter?

18 A Yes, it would.

19 Q In what way?

20 A I think this eliminates him from having to take a
21 pilot for that.

22 Q You mean Exhibit B, the letter from Alaska
23 Maritime?

24 A That's correct, as long as his visibility is over
25 two miles, I don't see any problem. They've let pilotage

1 go. Obviously, looking at this letter here, that's the end
2 of pilotage.

3 Q And that's how you interpret Exhibit B.

4 A As long as the visibility is over two miles,
5 pilotage is no longer required.

6 Q I'd like to talk about the course changes that
7 were made by Captain Hazelwood after he dropped off the
8 pilot. There's been testimony, and I'm sure you've read
9 the testimony, that he went from Course 219 to Course 200
10 and then, ultimately, to Course 180 over a period of about
11 20 minutes. Do you have an opinion as to those course
12 changes?

13 A No, I think they're real -- if you get down to the
14 180 course --

15 Q No, you don't have an opinion or, yes, you do?

16 A Yes, I do have an opinion. The 218 or 219 was
17 when the pilot got off and I think he waited a few minutes
18 there to come to Course 200 and then, in a few more
19 minutes, came to 180. He was setting himself up for a very
20 nice maneuver around the ice. I think he started well back
21 from the ice to assess where he was going to have to be
22 when he had to go by Busby Island and Bligh Reef.

23 Q When you say he was setting himself up for a nice
24 maneuver, what do you mean?

25 A He's never putting his vessel in any grave danger

1 there, as the ARCO Juneau captain did. He's leaving
2 himself plenty of room to maneuver there. If anything
3 would have happened at any point in there in his planned
4 maneuver, he had several miles that he could either stop
5 the vessel, using his engines, or if the steering gear
6 failed or if his engines failed, he had plenty of time to
7 make a turn out of there.

8 Q Now there's been some testimony that at 11:52, the
9 load program up was engaged to move the vessel from 55 rpms
10 to ultimately full sea speed in a period of about 45
11 minutes. Do you have an opinion as to the engagement of
12 the load program up at 2352 or -53?

13 A Well, I'm just surprised that he waited so long.
14 I would have done it --

15 Q Why do you say that?

16 A Well, I would have done it as soon as the pilot
17 got off because you just want to get the ship moving and
18 get the voyage going. You're not paid to lollygag around.

19 Q It was a customary practice to set sea speed, once
20 you dropped the pilot off?

21 A Mine was, yes.

22 Q Did you do the same thing when you diverted around
23 ice?

24 A Yes.

25 Q You set it for sea speed.

1 A Yes.

2 Q Now there's been some testimony that this vessel
3 was traveling at 11.75 knots at the time of the grounding.
4 Do you have an opinion as to that speed?

5 A It's a nice maneuvering speed. We, on the St.
6 John's River, use about 12 knots as full ahead speed, so
7 that's a nice maneuvering speed.

8 Q When you say full ahead, what do you mean?

9 A Full ahead maneuvering. When I talk full ahead, I
10 mean full ahead maneuvering. If I want more than full
11 ahead, I say full ahead sea speed.

12 Q Did you find, in those years that you operated up
13 there, that your vessel responded better traveling at a
14 speed of about 11.5 or 12 knots than it would have if you
15 were going much slower?

16 A I really don't understand the gist of --

17 Q Well, if you wanted to make a course change in a
18 short period of time, did you find that your vessel
19 responded better at a higher speed?

20 A Well, on a slower speed, you actually made the
21 turns tighter than at a higher speed. A higher speed will
22 give you a much wider turn for the same angle of rudder.
23 It just appears that it's not, but it is.

24 Q These vessels, these VLCCs handle well at 11-1/2,
25 12 knots?

1 A The ones I've been connected with have.

2 Q Now there's been some testimony about the use of
3 the automatic pilot. In your experience is the use of or
4 not use of the automatic pilot at the captain's discretion?

5 A Yes, it is.

6 Q Anywhere he might --

7 A At any time, yes.

8 (Tape changed to C-3667)

9 Q Now the testimony in this case was that the auto
10 pilot was engaged at 2350, 11:50, and it was disengaged at
11 about 11:53. First of all, do you have any opinion as to
12 the use of the auto pilot in Prince William Sound?

13 A Well, it was my practice never to use it.

14 Q Do you have any opinion as to the use of the
15 automatic pilot in this situation?

16 A I find no problem with that.

17 Q Do you find -- do you have an opinion as to the
18 use of the automatic pilot for three minutes?

19 A I find it kind of strange for only three minutes,
20 but I don't find any fault for using it or not using it.

21 Q There's been some testimony that the automatic
22 pilot played absolutely no role in the grounding of this
23 vessel. Do you agree or disagree?

24 A I agree.

25 Q Now to the best of your knowledge, are there any

1 Coast Guard regulations that prohibit the use of the auto
2 pilot in Prince William Sound?

3 A None that I know of.

4 Q Again, it's left up to the discretion of the
5 master.

6 A That's correct.

7 Q There's been some testimony in this case about the
8 lookout, the AB lookout being placed on the bridge wing, as
9 opposed to the fore part of the vessel. Do you have an
10 opinion on that?

11 A Well, I never had a hard and fast rule of thumb.
12 Sometimes, I put them on the bow. Sometimes, I've put them
13 on the bridge wing and sometimes they would be traveling
14 from one place to another.

15 Q Again, at the discretion of the master.

16 A At the discretion of the master, yes.

17 Q Now I take it you read the testimony with respect
18 to what Captain Hazelwood wanted the mate to do when he
19 came abeam of Busby Island Light?

20 A Yes, I have.

21 Q Do you have an opinion as to the instructions that
22 were left by Captain Hazelwood for the mate?

23 A I find no problem with the instructions.

24 Q On what basis do you say that?

25 A It was a very gentle turn. He had set everything

1 up. He had plenty of maneuvering room.

2 Q Well, let's take it one step at a time. What do
3 you mean, he had set everything up?

4 A He had set it up beautifully there. He came abeam
5 of Busby Island on a cardinal point. He made the turn on
6 an abeam bearing, which is you look out the door and say,
7 "Yes, it's abeam and start your turn," one mile off or .9
8 or 1.1, whatever. It's a mile off, it's a nice round
9 number. He had plenty of sea room in there.

10 Q Now what about the instructions he left with the
11 third mate, do you have an opinion on that?

12 A Well, he just said come back into -- "As soon as
13 you get abeam of Busby Island, start coming back into the
14 traffic separation scheme," and it's obvious what he meant
15 by that.

16 Q What do you mean?

17 A Just make a righthand turn and start coming back
18 into the traffic separation scheme.

19 Q Do you have any problem with those instructions?

20 A No, they were real -- again, he had plenty of room
21 to maneuver, plenty of time. He didn't have to make an
22 extreme rudder command. It was just nice. He had, like I
23 say, again, sea room, he had plenty of sea room.

24 Q How much room did the third mate have between
25 abeam of Busby Island Light and Bligh Reef?

1 A Oh, just an eyeball, I would say two, two and a
2 half miles.

3 Q Do you consider that to be sufficient distance to
4 make a simple course change?

5 A Oh, it's more than ample distance.

6 Q Now there's also been testimony that Captain
7 Hazelwood, a few minutes before the vessel got abeam of
8 Busby Island Light, left the bridge. Do you have an
9 opinion as to those actions?

10 A No, I find no fault with that because he left
11 proper instructions with his mate and he also left a
12 check. And what I mean by a check is he didn't just say,
13 "Okay, I'm going down below." He gave instructions on what
14 he wanted done and he gave a lawful command and he gave
15 another lawful command to the third mate to call him when
16 he started to make the turn. That was Captain Hazelwood's
17 check to make sure that his orders were being followed as
18 he gave them.

19 Q There's been testimony that at about 2357 or two
20 minutes after the vessel was abeam of Busby Island Light,
21 the mate, Third Mate Cousins, called the captain and told
22 him what he was doing, that he had started his turn. Do
23 you have an opinion on that?

24 A The mate did exactly as he was instructed to. He
25 called the captain when he thought he was making a turn.

1 Q If you found yourself in the position of Captain
2 Hazelwood, would a call like that assure you that your
3 command had been carried out?

4 A Yes, it would put me at ease.

5 Q Now you saw the ship down in San Diego, did you
6 not?

7 A Yes, I did.

8 Q You saw the bridge of the ship?

9 A Yes, I did.

10 Q You had a chance to inspect the navigation
11 equipment?

12 A Yes, I did.

13 Q Could you tell us what you saw?

14 A A very well designed ship. The wheelhouse is very
15 well set up for -- I'm a pilot and it was beautifully set
16 up for a pilot.

17 Q Did it have all the modern navigational equipment?

18 A Absolutely, everything.

19 Q Did you have a chance to look at the various
20 rudder angle indicators?

21 A Yes, I did.

22 Q All well placed?

23 A Very well placed.

24 Q Could be seen from anywhere on the bridge?

25 A Yes, it could.

1 Q Did you happen to notice two rudder angle
2 indicators on the bridge wings?

3 A Yes, I did.

4 Q Where were they?

5 A The one on the port -- on the starboard wing was a
6 small one that was over the top of the wheelhouse door.
7 The one on the port side was a larger one. It looked like
8 it had been removed from either the console or the
9 wheelhouse overhead and placed out there so they could see
10 it a little bit better for the docking and undocking
11 maneuvers that they had to --

12 Q Were both rudder indicators on the wings easy to
13 see?

14 A The one on the port side was far better, far
15 easier to see than the one on the starboard side.

16 Q How much bigger was the one on the port side than
17 the one --

18 A Oh, I would say double, double the size.

19 Q Did you have any problem seeing the one on the
20 starboard side?

21 A With my glasses on, I could make it out. It
22 wasn't very good. I thought they could have done a little
23 bit better job.

24 Q In any event, the one on the port side, you had no
25 problem.

1 A Oh, no.

2 Q There was a big rudder angle indicator on the
3 overhead, was there not?

4 A Right.

5 Q And that was sort of in front of the chart room?

6 A Yes.

7 Q There were also other instruments on the front
8 panel of the wheelhouse.

9 A Yes, there were.

10 Q There was a rate of --

11 A Of turn indicator, yes.

12 Q And that was visible?

13 A Yes, it was.

14 Q Now, sir, in your experience, is a ten-degree
15 right rudder command a simple order?

16 A A very simple order.

17 Q Is the task of turning the helm ten degrees to the
18 right, is that a simple task?

19 MS HENRY: Your Honor, I'm going to have to object
20 to the series of leading questions. It's been going on for
21 quite awhile and I'm objecting at this point.

22 JUDGE JOHNSTONE: Objection sustained as to
23 leading questions.

24 BY MR. CHALOS: (Resuming)

25 Q Okay, sir, can you describe, in terms of

1 difficulty, the task of turning the helm ten degrees right?

2 A It's a very simple thing. You just turn the
3 wheel. It's all electrohydraulic, so there's no strain or
4 pain. It's even easier than steering some cars.

5 Q Do you have an opinion as to whether or not a
6 third mate holding a second mate's license would be able to
7 carry out a command of a ten-degree right rudder?

8 A In the first minute of his career, he should be
9 able to do that.

10 Q Sir, there's been testimony that if the -- if
11 ten-degree right rudder were placed on this vessel and held
12 at 2355 or 2356, when the vessel was abeam or just a little
13 bit south of Busby Island Light, she would have cleared
14 Bligh Reef by at least a mile and a half. Do you agree or
15 disagree with that?

16 A I agree with that opinion.

17 Q There's also been testimony that if a ten-degree
18 right rudder was placed on this vessel at a minute and a
19 half after midnight and held, she would have missed Bligh
20 Reef by over a half-mile. Do you agree or disagree with
21 that?

22 A I agree with that opinion.

23 Q Captain Walker, how would you compare the waters
24 in the area from Potato Point down to Bligh Reef to other
25 areas of the world that you've operated in?

1 A You mean in other -- like confined waters?

2 Q Yes, in terms of confined and danger.

3 A Well, this was like a mill pond. It's -- after
4 the Straits of Mallaca --

5 Q Where are the Straits of Mallaca?

6 A In Singapore. That's a choke point where --

7 Q What does that mean?

8 A That means where you have a lot of traffic, very
9 shallow bottom. Sometimes you're running through there one
10 or two-foot clearance from the bottom of the sea floor.
11 Some ships even have to slow down because they're squat, so
12 they can't get over the shoal spots.

13 Q What do you mean by squat?

14 A Well, a ship -- the faster it moves through the
15 water, it will tend to sink down and we call that squat.
16 It will gain in draft. Some of this VLCCs that are going
17 through the Straits of Mallaca had to slow down because,
18 otherwise, they'd strike the bottom, that's how close we
19 were. And some points, it was only a half-mile wide with
20 very heavy traffic, fishing boats, you name it.
21 Everything, pirates, was in those waters.

22 The English Channel is another place, very close
23 to the bottom, very heavy traffic, what would be another --

24 Q What about the St. John's River that you operate
25 in?

1 A Well, the traffic's not very heavy, but a lot of
2 places there, we were very close to the bottom, very narrow
3 channel. We're only minutes -- not even minutes, sometimes
4 only seconds away from catastrophe at any one time. That's
5 what the pilot is there for.

6 Q Sir, groundings and collisions -- do you have an
7 opinion as to the occurrence of groundings and collisions
8 in the maritime business?

9 A I don't understand what you mean.

10 Q Well, I mean have you found in your experience
11 that groundings occur?

12 A Oh, yes.

13 Q Now you described the area as a mill pond. What
14 do you mean by that?

15 A Very easy maneuvering. There's good radar
16 targets, good visual bearings, navigation aids, and it's
17 very deep, so you don't have to worry about the bottom, and
18 very little traffic.

19 Q All right. Now with respect to the company that
20 you work for, did you have a bridge organization manual on
21 board?

22 A No, I did not.

23 Q Did your company then leave to you, the captain,
24 the discretion of doing whatever was necessary at a
25 particular moment in time?

1 A Yes, they did. They wouldn't even put a satellite
2 communication on there.

3 Q I'd like to speak now about the grounding. You're
4 familiar with the vessel running aground at about,
5 according to the testimony here, between 8-1/2 minutes
6 after midnight and 9-1/2 minutes after midnight?

7 A Yes, I am.

8 Q I take it you reviewed Mr. Cousins' testimony and
9 Mr. Kunkel's testimony and Ms. Jones' testimony with
10 respect to the events following the grounding.

11 A Yes, I did.

12 Q And I take it you read the testimony of the
13 captain coming back up to the bridge after the grounding.

14 A Yes.

15 Q Okay. Do you have any opinion as to the actions
16 that he took immediately upon coming onto the bridge?

17 A No. Well, I do have an opinion. I think he did
18 the proper thing, find out what was going on, what
19 happened, see where the vessel is. I think he had the
20 third mate get a bearing position.

21 Q Well, the testimony has been that when the captain
22 came up on the bridge, he went to the bridge wing, looked
23 over the side, then came in and told the mate to take a
24 fix. Do you have an opinion as to that action?

25 A Oh, I think it's very good. I think he looked to

1 see, number one, is he dead in the water. That's a very
2 quick way of seeing if you're dead in the water, is looking
3 over the side.

4 Q What does that tell you?

5 A Well, that tells you you're stopped, you're hard
6 aground at that point. The other things was to see if
7 there was any oil coming up. You know, it's obviously very
8 easy to know if you've been holed, you see the oil in the
9 water.

10 Q There's been some testimony also that he told the
11 helmsman to put the rudder amidships at that time. Do you
12 consider that to be a proper action?

13 A Very proper, yes.

14 Q Okay. There's been some testimony that the
15 captain instructed the third mate to call the engine room
16 and have them stop the engines. Do you have any opinions
17 as to that action?

18 A Well, I think what he did there was give the
19 engine room notice before he started to bring it down on a
20 manual lever so that they would be prepared that the order
21 was coming down. I find no problem with that.

22 Q You find that to be a proper procedure?

23 A That's very proper, yes.

24 Q There's also been testimony that he told the third
25 mate to go down and wake up the crew. Do you have an

1 opinion as to that action?

2 A I thought that was a very good action.

3 Q Why do you say that?

4 A In lieu of sounding the general alarm, it
5 prevented panic on board.

6 Q Let me ask you about that. There's been some
7 criticism of Captain Hazelwood for not sounding the general
8 alarm. Do you have an opinion on that?

9 A Yes, I do.

10 Q What is your opinion?

11 A I think it was a very good thing that he did go
12 down and -- not he, but he sent somebody down to wake them
13 up, rather than ring the general alarm. There's only two
14 signals that are authorized on the general alarm. One is
15 fire and one is abandon ship and either one of those would
16 create panic at 1:30 in the morning or whatever time he
17 was --

18 Q 12:30.

19 A 12:30. Either one of those would have created
20 panic at that point in time and it might have created --
21 somebody might have gotten hurt.

22 Q If you found yourself in Captain Hazelwood's
23 position at that time, what would you have done with
24 respect to the general alarm?

25 A I would have done exactly what Captain Hazelwood

1 did.

2 Q Now there's been testimony that Captain Hazelwood
3 called the engine room at some point before 12:30 and told
4 them to sound the voids and the tanks in the engine room.
5 Do you have an opinion as to that action?

6 A I think it was a very good action.

7 Q Why do you say that?

8 A Well, that -- in case the engine room hadn't
9 thought of sounding their void tanks, you could find out if
10 the area in the way of the engine room had been holed.
11 That's one way of doing it, is to have the engineers go
12 back and sound their tanks, make sure that there's no water
13 in them or the water that's in there has been in there.

14 Q Now what was the purpose of that command at that
15 time, do you know?

16 A Well, the purpose was to find out if he had been
17 holed in the way of the engine room, that would be my
18 guess.

19 Q Why is that important to know?

20 A Well, you want to know every place you're holed
21 and if you're holed in the engine room, that's probably one
22 of the biggest areas of reserve buoyancy that you have on a
23 vessel, a tanker, a loaded tanker.

24 Q Do you consider the command to sound the voids and
25 the tank spaces to be a proper one?

1 A Very proper.

2 Q There's been testimony that the captain had a
3 discussion with the chief mate and the chief mate relayed
4 some information to him by 12:30 about the vessel being
5 stable. And there's been some testimony that the captain
6 had told him to go back down to the cargo control room and
7 continue ascertaining the damage and how much oil was being
8 lost, as well as the stability. Do you find that
9 instruction to -- do you have an opinion on that
10 instruction?

11 A I think it was a very good instruction.

12 Q Why do you say that?

13 A Well, the captain, at that time, needed
14 information and the chief mate was probably was, besides
15 the captain, the second most knowledgeable person on board
16 as relating to cargo and piping and anything forward of the
17 engine room and he would have been the one man that Captain
18 Hazelwood would use to lean on to find out the various
19 things, the various factors that Captain Hazelwood needed.

20 Q If you found yourself in Captain Hazelwood's
21 position, what would you have done at that point with
22 respect to your chief mate?

23 A Exactly what he did.

24 Q Now there's been testimony that, at that time, the
25 captain told the chief mate to go below and lower the life

1 boats to the embarkation deck and to get the fire mains
2 ready. Do you have an opinion as to that action?

3 A I think he was really thinking, really thinking.
4 It's amazing that he had the presence of mind, with all the
5 crushing pressures on him at that one point in time, to
6 think that clearly. It just amazes me.

7 Q Why do you say that?

8 A Well, I've been in the way of an oil spill or two
9 myself and it's -- the feeling is the equivalent of being
10 punched in the stomach. And I'm talking about a little
11 one- or two-barrel spill. I'm not talking about the
12 magnitude that he faced. And to bear up under that, just
13 amazing.

14 Q Now there's also been testimony that in the midst
15 of the actions that I'm describing to you, he called the
16 Coast Guard and reported that the vessel was hard aground
17 and leaking oil. Do you have an opinion as to that action?

18 A I think that was a proper action to take. I think
19 the law at that time said that you had to report any oil
20 spills.

21 Q Now there's been some testimony by experts,
22 State's experts, that have faulted Captain Hazelwood for
23 not taking soundings. I want you to assume, because there
24 hasn't been any evidence that soundings weren't taken, but
25 I want you to assume that soundings were not taken. Do you

1 have an opinion as to that?

2 A I don't think they would have done him a whole lot
3 of good.

4 Q Why do you say that?

5 A Well, he was on a pinnacle bottom and this is, of
6 course, looking at hindsight, but every -- I'm not going to
7 say every tanker captain. But if I went aground, I would
8 look around to see what kind of -- what the scenery looked
9 like because, usually, what you have up on top is also what
10 you have down below. And in the area of Valdez, you have a
11 lot of pinnacles and peaks and boulders and stuff and
12 that's what I would assume would be what I was also sitting
13 on. So to go around and take soundings, to me, at that
14 point in time, unless I knew that I was on a sand bar or a
15 mud bank, wouldn't help me a whole lot.

16 Q Why do you say if you were on a sand bar or a mud
17 bank, you would take soundings?

18 A Because on a sand bar or a mud bank, you have a
19 relatively stable bottom. In other words, the -- well, the
20 soundings might change radically in height, but it's more
21 or less like a level surface. It's not you have have ten
22 feet of water here and 20 feet of water two feet away. It
23 tends, on a mud or a sand bar, to be a more uniform
24 surface.

25 Q Do you have an opinion as to taking soundings

1 through oil?

2 A It would be rather difficult.

3 Q Why do you say that?

4 A Well, because the sounding line that you use is a
5 cotton line and your marks would be all covered in oil the
6 first time you dropped it. That would eliminate a lot of
7 your marks.

8 Q What do you mean by marks?

9 A They use -- they tie rags and ropes with -- they
10 use various things to indicate every six feet on that line.

11 Q So it's your opinion that after you dropped the
12 line in the water once through the oil that you wouldn't be
13 able to read it accurately any more?

14 A Yes, it would be rather difficult to read it
15 accurately after that.

16 Q With respect to soundings, what points would --
17 let me start again. The sounding mechanism that you use,
18 you drop over the side of the vessel, right?

19 A That's correct.

20 Q And all it would tell you is what you're
21 experiencing at that point next to the vessel.

22 MS HENRY: Objection, leading..

23 BY MR. CHALOS: (Resuming)

24 Q Well, what do soundings tell you?

25 MR. CHALOS: I'll withdraw the previous question.

1 BY MR. CHALOS: (Resuming)

2 Q What do soundings tell you?

3 A Well, the soundings with a hand line tells you
4 exactly the depth in that little, small area, about three
5 square inches, what is the depth of the water at that one
6 specific point.

7 Q If you found yourself in Captain Hazelwood's
8 position on that particular night, given the situation as
9 we've discussed, in the list of priorities, where would
10 soundings come in?

11 A Very low down on that list.

12 Q In your opinion, if soundings were taken,
13 hypothetically, at that time, would they have told the
14 captain any more information than he already had?

15 A Maybe a little bit more information, but nothing
16 substantial.

17 Q Now if you were the captain of this vessel,
18 finding yourself in the position of Captain Hazelwood on
19 that particular night, if you wanted to get off this reef,
20 what would you do?

21 A I would call up the engine room and tell them I
22 wanted maximum speed astern.

23 Q Why would you go astern?

24 A Well, you know that's where the deep water is?

25 Q How do you know that?

1 A Well, because you came from the deep water to the
2 shallow water by going forward. The obvious thing is go
3 back.

4 Q If you had wanted to stay on the reef, what would
5 you have done if you were in Captain Hazelwood's position?

6 A I would have either done nothing or if -- I assume
7 that he looked at the tide tables and saw that the tide was
8 coming in or the current was coming in and the tide was
9 rising. Just maintain a little astern -- I mean ahead to
10 keep the vessel on the reef.

11 Q What engine order would you have used in that
12 situation?

13 A Half ahead.

14 Q Do you find the use of full maneuvering ahead of
15 55 rpms to be -- do you have an opinion on that?

16 A Well, it's a little bit more than I would use, but
17 I don't have any problem with it.

18 Q Now, sir, do you have an opinion as to whether or
19 not the engine would have overheated if this vessel were
20 put to full sea speed ahead in the grounding condition she
21 was in?

22 A The only time it would overheat is if the intakes
23 were -- the engine cooling water intakes were obstructed.

24 Q Do you have an opinion as to the use of the ship's
25 engine and rudder by Captain Hazelwood after the grounding?

1 A In what respect?

2 Q Well, do you think it was bad, good, indifferent?

3 A Well, having the -- knowing -- having the data
4 that he had at the time, I think he didn't want to come off
5 that reef at that point in time and to use his engines
6 ahead was a proper order.

7 Q Do you have an opinion as to whether the rudder,
8 just using the rudder by itself, would have gotten him off
9 the reef?

10 A Oh, absolutely not.

11 Q There's been some testimony that Captain Hazelwood
12 stopped the engine about 17 minutes before the tide was at
13 its highest point. Do you have an opinion on that?

14 A Well, I think probably a half an hour before the
15 highest tide, I think he knew at that point in time that
16 there was no hope of coming off that. As you get closer
17 and closer to high water, closer and closer to refloating,
18 you can feel that on a ship.

19 Q There's been some testimony that the difference in
20 the rise of tide between the time the engine was shut off
21 and high water was one inch. Would that have significantly
22 changed any of the information that Captain Hazelwood had
23 at that point?

24 A Well, if Captain Hazelwood felt that the vessel
25 was about ready to come off the reef, then obviously one

1 more inch might have done it. But if he felt that she was
2 hard aground at that point, you might as well shut them
3 down, you're just -- you're not doing anything.

4 Q There's been some testimony in this case that,
5 hypothetical testimony, that if the vessel had come off the
6 reef, it would have sunk within 95 minutes if the crew did
7 absolutely nothing. I would like for you to put yourself
8 in the position of the master of a vessel that's been holed
9 to the extent that the Exxon Valdez was holed, coming off
10 the reef at some point, hypothetically. What action would
11 you, as a master, taken?

12 A You mean if I knew she was starting to sink?

13 Q Well, let's say you started to notice her listing
14 to starboard and perhaps even her head starting to go down
15 a little bit. What would you do as the master?

16 A As a master, if she started to list to starboard
17 and her head was going down, I think I'd find out exactly,
18 try to find out as much information as I could on where --

19 Q Where would you get that information?

20 A From the chief mate -- where the water is coming
21 in because, obviously, water is coming in, and at what rate
22 it's coming in and if she's going to continue to go over.
23 If she's going to continue to go over, I would start
24 looking at my ballast tanks that are on the port side.

25 Q What would you do with those tanks?

1 A Well, the Number 2 -- if I'm going down by the
2 head, there's two ballast tanks on the port side, Number 2
3 and Number 4. I would hold off on filling Number 2,
4 putting water in Number 2.

5 Q Excuse me one second, let me get a model and you
6 can demonstrate to the jury what you're talking about. Let
7 me show you what's been marked as Exhibit 154, the model of
8 the Exxon Valdez. Now would you explain to the jury what
9 you're talking about?

10 A All right, if I'm captain on this ship and let's
11 assume that she's on an even keel right now and she's run
12 aground, backed off the reef and, for some reason, water is
13 coming into Number 2 and Number 4 starboard and also into
14 the fore peak tank. So she's starting to come down and
15 she's starting to take --

16 Q You have to stand up and show the jury because I
17 think they're --

18 A Okay, maybe it would be better just to do this.
19 I'm trying to get the proper aspect so they can see when I
20 start tilting it.

21 Q Why don't you move closer to the jury?

22 A Okay.

23 (The witness approaches the jury box.)

24 THE WITNESS: All right. Now she's run aground.
25 I've taken her off the reef. The damage is on the

1 starboard side and she's --

2 BY MR. CHALOS: (Resuming)

3 Q Excuse me, Captain Walker. Every time you mention
4 how you take this vessel off the reef, you show a backing
5 motion. Is that your instinctive way of getting the vessel
6 off the reef?

7 A Yes.

8 Q All right, go ahead.

9 A It's the only way to get it off. There's water
10 coming into the Number 2 starboard and Number 4 starboard
11 and the fore peak tank. That's the scenario I've been
12 given. The ship is starting to go to starboard and
13 starting to go down by the head.

14 A ship is like a seesaw, in other words, two kids,
15 one on each end. Obviously, the kid on this end is going
16 -- weighs a little bit more than the kid on this end. So
17 what we have to do in order to counteract that is to put
18 water either here, in this ballast tank, or -- as I
19 understand, there were some ballast tanks in the engine
20 room -- to bring her back onto an even keel.

21 I would hold off on putting water here to bring
22 her back this way because she is going down by the head, so
23 you know you're adding weight up here, so you don't want to
24 add any more weight up here.

25 MR. : (Inaudible.)

1 THE WITNESS: She's like a seesaw, just like a
2 seesaw, both ways. If you want to think of it as a simple
3 seesaw, that's the easiest way to visualize it.

4 So she's going down by the head, got a starboard
5 list. Put water in here or the tank back here on the port
6 side and bring her back.

7 BY MR. CHALOS: (Resuming)

8 Q What would be the effect on her continued flooding
9 if you were to put ballast in the port side to straighten
10 out her list?

11 A Well, it would depend on how much water had
12 already come into these two tanks here. You've got to
13 figure that these two tanks are going to seek -- water is
14 going to seek its own level, so they're going to come up to
15 the water line, they're going to fill up to the water
16 line. So if you -- and, also, you've got water coming in
17 up here that will also come in and water will seek its own
18 level and will fill up to the water line.

19 So the obvious thing to do is fill this tank here
20 and if you can pump it full -- I understand that this was a
21 10,000-ton tank. Probably she would have come even. But
22 the think you don't want her to do is keep going because
23 these tanks are -- again, they fill up to wherever the sea
24 level is and the more she's listing, the higher the water
25 is going to come into these tanks and the more weight will

1 be on that side, so she's going to tend to keep going.

2 Q So you're counterbalancing.

3 A What we call it is -- a cross flooding is what we
4 call it. Some ships have a valve, an actual pipe, that
5 goes from one side of the ship to another. And in the
6 middle of that line, that pipeline, is a valve and they
7 call it the cross flooding valve. And the naval architects
8 put that in there in case a ship gets rammed, starts taking
9 on water on this side. You just -- the crew, all they have
10 to do is go and open up a valve and it will flood from one
11 side to the other. That compartment will automatically, as
12 the water comes into this compartment, will automatically
13 go to this compartment and stabilize the ship.

14 Now the Andrea Dorea I think is a prime example of
15 that where she got in a collision and was holed on one
16 side. The crew abandoned ship without ever opening up the
17 cross flooding valve and they suspect that that's why she
18 sank. She just continued to go over because the crew never
19 did a simple thing like open up the cross flooding valve.

20 Q Captain Walker, if you had the ability to ballast
21 out Number 4 starboard, the one on this side, and your
22 vessel was off and you're starting to list a little bit to
23 the right, progressively list more to starboard, would you
24 pump out your Number 4 tank?

25 A You mean Number 4 --

1 Q Number 4 starboard.

2 A The water is coming into Number 4 starboard?

3 Q Yes, but you have the ability to pump it out.

4 A Well, if you can get the water out faster than
5 it's coming in, that's great.

6 Q You would do that as --

7 A Oh, yes, but I'm assuming that you had a
8 catastrophic crack back here and that the pump would have
9 been more or less useless.

10 Q No, the testimony with respect to the Number 4
11 starboard tank, ballast tank, is that she had a small crack
12 in the bottom and that her ballast pumps were available
13 then to be used.

14 A Oh, well, now you're in even better shape than the
15 scenario that I had.

16 Q Why do you say that?

17 A Well, because now you can -- as long as you can
18 put a pump on here and keep the water from coming into this
19 tank -- in fact, if your pump is bigger than the water
20 that's coming into this tank, then you could possibly pump
21 the tank dry, keep it dry.

22 Q And that would tend to bring you back.

23 A Oh, yes. Oh, yes. You're taking the weight off,
24 again the seesaw, you're taking the weight off.

25 Q And if you get the ship to a relatively even keel

1 at that point, is it your opinion that she'll stay afloat,
2 given the amount of oil she had?

3 A Oh, sure, you're full of something that's going to
4 float, so obviously -- tankers are very hard to sink, very
5 hard.

6 Q When you say you're full of something that would
7 float, what do you mean?

8 A Well, you're full of oil or at least partially
9 full of oil, anyway, and that will tend to also keep you
10 up. The Germans, in World War II, found tankers -- if they
11 didn't explode, they're extremely difficult to sink.

12 Q Okay, you may return to your seat.

13 A What do you want me to do with this?

14 Q Oh, let's not have another accident here.

15 (General laughter.)

16 (The witness returns to his seat.)

17 BY MR. CHALOS: (Resuming)

18 Q Captain Walker, there's been testimony that when
19 this vessel grounded, approximately eight tanks were holed,
20 eight cargo tanks were holed. Do you have an opinion as to
21 whether the fact that you have holes in the bottom of your
22 ship to the extent that the Exxon Valdez did, would that in
23 itself mean the vessel would sink if she came off the reef?

24 A No, it wouldn't.

25 Q Why do you say that?

1 A Well, number one, he didn't know how many holes he
2 had or the size of the holes at that one point in time. So
3 I thin the ship had plenty of reserve buoyancy. She's full
4 of oil. I don't think she was going to sink. Now she
5 might have capsized and that's a whole different ball
6 game. But, again, I showed you how you could prevent that.

7 Q I'd like to read to you a definition of reckless
8 and ask you some questions. "A person acts recklessly with
9 respect to a result or circumstance described by the law
10 when the person is aware of and consciously disregards a
11 substantial and unjustifiable risk that the result will
12 occur or the circumstances exist. The risk must be of such
13 a nature and of such a degree that the disregard of it
14 constitutes a gross deviation from the standard of conduct
15 that a reasonable person would observe in the situation."

16 Now, sir, based on the evidence you've reviewed,
17 based on the testimony that you've read, was there anything
18 in what Captain Hazelwood did from the moment the vessel
19 left the dock in the Port of Valdez until the time that he
20 shut his engines down for the final time while he was on
21 the reef that, in your opinion, constituted reckless
22 conduct on his part?

23 A No.

24 MR. CHALOS: I have no further questions of this
25 witness, Your Honor.

CROSS EXAMINATION

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BY MS. HENRY:

Q Good afternoon, Captain Walker.

A Good afternoon.

Q Sir, how many times have you testified in a trial?

A One time.

Q And how long ago was that?

A That was in 1981, I believe.

Q And what state was that in?

A New York.

Q Okay. Was it -- what kind of trial was it?

A It was a civil case where the captain of the VLCC had fallen in the fore peak tank and hit his head and the chief mate ran out of the tank and more or less abandoned him and then, shortly thereafter, went back down and found out that the captain was still alive and they took him out of the tank and brought him back to the superstructure and put him in his bed and --

Q Okay, was that a personal injury suit, then?

A Yes, personal injury.

Q Okay. Now going back to some of your employment prior to starting the Prince William Sound rounds, I think you said or your resumé indicates that in 1974 you were working for Cities Service tankers, is that correct?

A Cities Service Tanker Corporation, yes.

1 Q And how long had you been working for them at that
2 point?

3 A I started with them in January 1970.

4 Q All right. And then some time in 1975, you began
5 working for Interocean Management Corporation?

6 A Yes, it's basically Cities Service Oil Company
7 personnel, but they just changed the name.

8 Q Okay, why did they do that?

9 A At that time, I think the ARGO Merchant had gone
10 aground and everybody was concerned about oil and it's my
11 opinion that Cities Service wanted to get their company's
12 name off of their ships. We had ships called the Cities
13 Service Miami, the Cities Service Baltimore, et cetera, and
14 it doesn't look too good if your ship's name is also
15 indicated with your oil company.

16 Q It wouldn't look good if a ship's name is
17 connected to an oil spill, either, I suppose.

18 A Right.

19 Q In your opinion, were they concerned about
20 groundings of their tankers?

21 MR. CHALOS: Your Honor, I object, it's irrelevant
22 in this case.

23 JUDGE JOHNSTONE: It's pretty long ago, Ms. Henry.

24 MS HENRY: All right.

25 BY MS. HENRY: (Resuming)

1 Q I think you also indicated to me last evening that
2 during some period of time in this area, you were working
3 for a company and were asked to inspect I think it was the
4 Baltimore.

5 A Yes, we were -- the company had tried to get the
6 contract to operate these three VLCCs and the first one,
7 the Massachusetts, was supposed to come out in April of
8 1975. And I was the first chief mate assigned there. So
9 they assigned -- you know, they thought that she was going
10 to sail. We were going to go on the sea trial. A week
11 later, we were going to sail. Well, she was so bad that we
12 just stayed there for I think about six and a half more
13 months.

14 Q Doing what?

15 A We were originally ship's crew and then we kind of
16 got relegated to owner's representatives. We were kind of
17 a gray area that nobody really knew what we were.

18 Q And that was for about six months?

19 A Yes, from April until about October of '75.

20 Q Now did somebody from the company ask you to
21 inspect the vessel and find things that were wrong with it?

22 A Not from my company, but from the owner's company,
23 yes.

24 Q From the owner's company.

25 A Right.

1 Q Did they, in fact, ask you to stall?

2 A Yes, they asked us to delay the sailing on that
3 vessel as much as we could possibly do it.

4 Q Why was that?

5 A Apparently, the first vessel, the Massachusetts,
6 was supposed to come out and about that time, there was a
7 bill in Congress that said I think it was the oil imports
8 to the United States were supposed to be -- I think about
9 five percent were supposed to be carried in American
10 bottoms. Well, if that would have passed, that tanker
11 would have quadrupled in value. And so when they had those
12 three tankers built, the last two were supposed to have
13 charters, but the first one was supposed to be sold at
14 speculation to pay for the next two tankers.

15 Q So, basically, they wanted to stall so they could
16 make more money.

17 A Well, what happened was that the --

18 MR. CHALOS: Your Honor, I don't know what
19 relevancy that has to this case.

20 MS HENRY: I'll withdraw the question, Your Honor.

21 BY MS. HENRY: (Resuming)

22 Q Now during the time that you were doing the Valdez
23 runs, what kind of work schedule did you have?

24 A You mean myself on a daily basis?

25 Q Yes, as a master -- no, as far as through the

1 year.

2 A I was six months off and six months on.

3 Q Okay, you worked six months straight or --

4 A Yes.

5 Q And then you'd have six months off?

6 A Yes, our company tried to make it that way. We
7 tried to get it four on and four off, but they said, "No,
8 we've got to pay an extra man's air fare ticket," so six
9 months on and six months off. They tried to enforce that.

10 Q All right. And the company you're referring to,
11 again, is Interocean Management Corporation?

12 A In 1977, yes.

13 Q All right. Now you last sailed out of Valdez in
14 1985?

15 A October of 1985.

16 Q And how much money were you making, per year, at
17 that point?

18 A At that point --

19 MR. CHALOS: Your Honor, what relevance does that
20 have to this case?

21 JUDGE JOHNSTONE: Are you going to tie this up
22 some how to prove something that's relevant?

23 MS HENRY: No, Your Honor, I'll withdraw the
24 question.

25 BY MS. HENRY: (Resuming)

1 Q The resumé that you gave me last evening, who
2 wrote that resumé?

3 A I did.

4 Q You did, personally?

5 A Yes.

6 Q And you wrote the last paragraph of it, too, is
7 that right?

8 A Yes, Ma'am, I did.

9 Q Okay. Now you've told us that you were hired to
10 talk about or I guess critique --

11 A Yes.

12 Q -- critique what Captain Hazelwood did from the
13 Port of Valdez out to Bligh Reef, is that correct?

14 A From the time he boarded the vessel until the time
15 it went aground, yes.

16 Q Now as part of your job, I guess, or why you were
17 hired, did you ever try to plot the course of the Exxon
18 Valdez, yourself?

19 A Yes, I did.

20 Q And did you actually draw it on a navigational
21 chart?

22 A Yes, Mr. Chalos brought a chart for me and when I
23 took it home, I plotted according to the bell book and as
24 much information as I had available. I tried to reproduce
25 exactly what they had done.

1 Q Okay, when did you do that?

2 A It was about the middle of September, last
3 September.

4 Q All right. Did you also rely on the tracks, I
5 guess, that were charted by CAORF?

6 A Not at that one point in time and not on the chart
7 at all.

8 Q Did you rely on anything from CAORF?

9 A What -- the information that Mike gave me, that
10 Mr. Chalos gave me from CAORF I took and separately plotted
11 on a piece of tracing paper, the coordinates starting at
12 zero, and I used zero as Busby Island every minute or two
13 minutes or -- positions according to the data that CAORF --
14 see CAORF just gave us numbers and that doesn't mean
15 anything. It's totally meaningless to me, unless I could
16 see exactly --

17 Q CAORF just gave you numbers?

18 A Yes, Ma'am.

19 Q You didn't get any of the charts from CAORF?

20 A No.

21 Q Mr. Chalos didn't provide those to you?

22 A No, just numbers.

23 Q Oh. What I'd like to talk about for a couple of
24 minutes is pilotage and now I think your testimony -- well,
25 I don't know if you did tell us. Did you have pilotage for

1 Prince William Sound?

2 A Yes, from 1979 on.

3 Q So you had pilotage endorsement --

4 A Yes.

5 Q -- is that what it's called, and it's on your
6 license?

7 A Yes.

8 Q Now you got that when?

9 A Some time in 1979.

10 Q All right, so you had been going in and out of
11 Prince William Sound for a couple of years before you got
12 your pilotage, is that right?

13 A Approximately one year, I think one -- I was off
14 one tour of duty on a foreign trip in that period. I think
15 '78 was kind of a foreign year for me.

16 Q Okay, well, let's back up a minute. You started
17 going into Valdez what year?

18 A In August of '77.

19 Q All right, and --

20 A And I spent six months on that trade at that time,
21 then a six-month vacation. Now we come back in '78. In
22 about the middle of '78, I think I went on a foreign trip
23 that again lasted six months. So by the time I get back
24 onto the Valdez trade, it's '79 again.

25 Q And that's when you got your endorsement.

1 A Right.

2 Q So you probably only sailed into Valdez that
3 six-month period of the first year.

4 A Just enough to get six trips.

5 Q Now why is it that you got pilotage endorsement?

6 A The company required me to have it.

7 Q Did you disagree with their decision to have you
8 get it?

9 A No.

10 Q That was fine with you?

11 A That was fine with me.

12 Q You didn't resent the fact that they were
13 requiring you to get it?

14 A No.

15 Q All right. Now from back when you did have
16 pilotage and you were traveling in and out of Prince
17 William Sound, from Rocky Point to Cape Hinchinbrook, you
18 were -- and you were the master on the pilotage vessel and
19 you had the pilotage endorsement, you were personally
20 required to be on the bridge during that transit, is that
21 correct?

22 A At that time, under those rules, yes.

23 Q All right. Now -- and that's where I assume you
24 would be, is that correct?

25 A That's where I was, yes, except for one time.

1 Q Except for one time?

2 A Yes.

3 Q Did you have someone else on the bridge that had
4 pilotage endorsement?

5 A No, I didn't.

6 Q How long were you off the bridge?

7 A About 14 hours.

8 Q Was that due to an illness or an injury?

9 A No. Here's another long story. I departed
10 Hinchinbrook, checked out of the VTS system and -- again,
11 to set the scene, I'd been up approximately about 50 hours
12 at that point in time, very, very tired. We had set our
13 course and about an hour had gone by. I got a call from
14 the third mate, so he said to come up on the bridge, so I
15 came up on the bridge and I saw exactly what he saw. We
16 were not making any headway. The weather was extremely
17 rough. We were actually going sideways, instead of ahead.

18 Q You're trying to get in now?

19 A No, I'm leaving.

20 Q Oh, leaving.

21 A I'm leaving. And to the southwest of the entrance
22 is a group of rocks called Russell's Reef and it appeared
23 to me that we were setting down on Russell's Reef. I had
24 several options that I could have done.

25 Q Perhaps to make it short, you were --

1 A To be brief, we turned around and that's the final
2 thing, we turned around, I turned the ship around and
3 brought it back into the Port of Valdez and I called the
4 Coast Guard and said, "I'm coming back in." They said,
5 "No, you can't do that." I said, "Why not?" He said,
6 "Well, you've already checked out of the system." I said,
7 "Well, I'm coming back in. I don't care what you say."
8 " Well, we've got to check with Washington." I said, "You
9 call anybody you want . . ."

10 Q All right, again, sir, if you could make your
11 story shorter so we're not here all day.

12 (General laughter.)

13 THE WITNESS: All right. Well, we argued back and
14 forth. I said, "I'm coming in anyway," so okay.

15 BY MS. HENRY: (Resuming)

16 Q Did you come in? Did you go in?

17 A Yes, I came in.

18 Q So despite what they said, you were going to get
19 in.

20 A You bet.

21 Q And you did.

22 A Yes.

23 Q Okay. So we came in there and I got about in the
24 middle of the sound. You don't have a large chart here,
25 but in the middle of the sound, a lot further south than

1 this, there's a big, wide area in the thing. We got up in
2 there and the Coast Guard tried to make me anchor, but the
3 weather was too rough, as far as I was concerned, better
4 off drifting around. So what I did was I drew a box on the
5 chart, just a square box, and I told the mate, I said,
6 "Don't get out of the box. Stay in the box." And the
7 Coast Guard was making them report their position every ten
8 minutes. So I went down below and told the radio operator,
9 I said, "I need a weather report and the next one is in two
10 hours. Now I'm going to lay down on my settee. Now make
11 sure you call me." And he acknowledged that. I went back
12 and laid down on the settee and the next thing I knew, like
13 14 hours had gone by.

14 Q They let you sleep in.

15 A Well, he didn't wake me up. He just -- there's a
16 hook on my door and he just put it on the door and walked
17 away. Well, about 4:00 in the morning, I woke up and, "Oh,
18 my God," you know.

19 Q Okay, end of story?

20 A End of story.

21 Q All right.

22 JUDGE JOHNSTONE: End of trial day, too. We'll
23 recess until Monday morning. The same instructions. Pay
24 particular attention to avoid media information about the
25 case. And be safe. Don't discuss the case with anybody at

1 all and don't form or express any opinions concerning it.
2 I'll see you back at 8:15 a.m. on Monday and we're still on
3 the 8:30 to 1:30 schedule next week, as well.

4 Anything I can take up with Counsel?

5 MR. CHALOS: No, Your Honor.

6 MS HENRY: No, Your Honor.

7 JUDGE JOHNSTONE: We're at recess.

8 THE CLERK: Please rise. This Court stands at
9 recess.

10 (Whereupon, at 1:30 p.m., proceedings concluded.)

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SUPERIOR COURT

)

) Case No. 3ANS89-7217

STATE OF ALASKA

) Case No. 3ANS89-7218

I do hereby certify that the foregoing transcript was typed by me and that said transcript is a true record of the recorded proceedings to the best of my ability.

Doris A. Cutler

DORIS A. CUTLER

VOLUME 27

STATE OF ALASKA

IN THE SUPERIOR COURT AT ANCHORAGE

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	:	
In the Matter of:	:	
	:	
STATE OF ALASKA	:	Case No. 3ANS89-7217
	:	
versus	:	Case No. 3ANS89-7218
	:	
JOSEPH J. HAZELWOOD	:	
	:	
-----	x	

Anchorage, Alaska

March 12, 1990

The above-entitled matter came on for trial by jury before the Honorable Karl S. Johnstone, commencing at 8:35 o'clock a.m., on March 12, 1990. This transcript was prepared from tapes recorded by the Court.

APPEARANCES:

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WITNESSES

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E X H I B I T S

STATE'S

FOR IDENTIFICATION IN EVIDENCE

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DEFENDANT'S

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P R O C E E D I N G S

(Start Tape C-3667.)

THE COURT: Do you want to recall your witness so we can resume, Mr. Chalos?

Whereupon,

SHIRAS P. WALKER

called as a witness by counsel for the Defendant, and having been previously duly sworn by the Clerk, was further examined and testified as follows:

THE COURT: Captain, you're still under oath.

(State's Exhibit Number 174 was marked for identification.)

MS. HENRY: May I proceed, your Honor?

CROSS EXAMINATION (Resumed)

BY MS. HENRY:

Q Good morning, Captain Walker.

A Good morning.

Q How are you this morning?

A Fine.

Q I guess when we left off last Friday, you were telling us of the one time that you left the bridge while your tanker was in Prince William Sound, is that right?

A That's right.

Q Now, that time did that you did leave the bridge because you were pretty tired, is that right?

1 A No, not because I was pretty tired, but because I
2 went down to get a weather report.

3 Q Okay.

4 So before you left the bridge, you left some
5 instructions with the mate on watch about what you wanted
6 him to do, is that correct?

7 A Yes, I did.

8 Q And in fact I believe you said last Friday that
9 you drew a box and said I don't want you to leave or go
10 outside of this particular box --

11 A Yes, I did.

12 Q -- is that correct?

13 Did you actually draw a box on a navigational
14 chart?

15 A Yes, I did.

16 Q All right.

17 Sir, the chart that is next to the -- that is
18 basically a chart of part of the Gulf of Alaska and Prince
19 William Sound, is that right?

20 A That's correct.

21 Q Okay.

22 MS. HENRY: And for the record, that has been
23 marked as Plaintiff's Exhibit Number 25.

24 BY MS. HENRY: (Resuming)

25 Q Sir, if you would -- and you must have already

1 anticipated, you grabbed the pen there -- can you mark on
2 there approximately, as best you remember, the box that you
3 marked on the navigational chart for your watch officer?

4 A Okay.

5 It's approximately right in here.

6 Q You can go ahead and use the pen itself.

7 A Oh, okay.

8 It must have been somewhere right in here.

9 Q All right.

10 Essentially what you told them was they should
11 stay in this area and not go outside of it?

12 A Yes.

13 Q Did you expect them to what, just turn and then
14 turn and then turn, just keep going around in circles?

15 A No. What I had done was I had stopped the vessel
16 and she was just drifting in this area here. So they, you
17 know, they'd just watch how she was drifting, and as she got
18 towards the edge of the box, just turn the rudder and kick
19 her and bring her back the other way.

20 Q Did you have the engines on?

21 A The engines were always available for the mates,
22 yes.

23 Q All right. But it wasn't going then like dead
24 slow ahead.

25 A No. They were stopped.

1 Q They were stopped.

2 A Uh-huh.

3 Q You did not anchor it either, did you?

4 A No, un-un. They tried to get me to anchor up in
5 here but the wind was blowing too hard.

6 Q Okay. And so you didn't want to anchor here
7 either because --

8 A Well, I can't anchor there. I don't have enough
9 chain.

10 Q Okay.

11 So it's pretty deep in this area.

12 A Very deep.

13 Q Can you give us any idea what -- how big this is
14 as far as distances? And do you need a protractor -- if you
15 can just estimate it.

16 A Oh, I guess five by five. Five miles by five
17 miles.

18 Q Five miles by five miles by five miles?

19 A Uh-huh.

20 Q Okay. You can go ahead and resume your seat.

21 Now you said that you went down to get a weather
22 report. Did you also take a nap?

23 A I laid down while -- you have to understand that
24 the weather reports only come about every four to six hours.
25 So there was another two hours to go. So there was no sense

1 on me staying on the bridge. I had already given them my
2 instructions. So I went down and laid down, yes.

3 Q And you had intended that the person giving you
4 the weather report would wake you up.

5 A I had instructed him to do that, yes.

6 Q Now, the persons that you instructed on the bridge
7 with respect to this box, what watch officers were they?

8 A It was a third officer.

9 Q The third mate?

10 A Yes, ma'am.

11 Q All right.

12 Were there any other watch officers on the bridge
13 at the time?

14 A No.

15 Q Now -- sir, showing you what's been marked as
16 Plaintiff's Exhibit Number 174 for identification, do you
17 recognize that exhibit?

18 A Yes, I do.

19 Q And what is that?

20 A That's my resume.

21 Q Now I think you said last Friday that you wrote
22 that resume yourself, is that right?

23 A Yes, ma'am.

24 Q And when -- what is the date on the resume? When
25 did you write it?

1 A 26 August 1989.

2 Q And when did you send it to Mr. Chalos?

3 A That date.

4 Q All right,

5 By Panofax or something?

6 A Yes, he had asked me to do that, uh-huh.

7 Q He asked you to do that?

8 When was it that you were actually hired by Mr.
9 Chalos? Approximately?

10 A It was when we went to San Diego. About the first
11 week in September.

12 Q Okay.

13 All right. So you had already sent your resume to
14 him the last part of August, and then you went to San
15 Diego, and that is when things got turned up?

16 A Yes, ma'am.

17 Q Now, as far as you know, I received a copy of that
18 last Thursday evening, is that correct?

19 A I haven't the slightest idea when you got it.

20 Q Do you remember when I asked you for a CV or a
21 resume? One of the first questions I asked you that night,
22 if you had a CV, and then I --

23 A Oh, right, okay. And I slid it across the desk.
24 Okay.

25 Q Did you ever do a report in this particular case?

1 A No.

2 Q Now, I think on the resume it says that you
3 currently reside in Jacksonville?

4 A Yes, ma'am.

5 Q During the time that you were at sea, particularly
6 on the Valdez to Panama runs, where was your home?

7 A It was in Merritt Island, Florida.

8 Q All right.

9 MS. HENRY: Your Honor, at this time the State
10 would move into evidence Plaintiff's Exhibit 174.

11 MR. CHALOS: I object, your Honor. It's
12 irrelevant. He has testified as to his qualifications.

13 MS. HENRY: Your Honor, the relevancy goes to the
14 final paragraph, and that paragraph goes to interest and
15 bias in this case.

16 THE COURT: The objection as to relevance is
17 overruled.

18 MR. CHALOS: Well then I would object as to
19 hearsay, your Honor.

20 THE COURT: Make all your objections at once, Mr.
21 Chalos, in the future, so we don't have to do it piecemeal.

22 May I see the document, please?

23 (Pause.)

24 THE COURT: You are referring to the last
25 paragraph of the third page?

1 MS. HENRY: Yes, your Honor.

2 THE COURT: The summary paragraph?

3 MS. HENRY: Yes, your Honor.

4 (Pause.)

5 THE COURT: The objection is hearsay. Do you want
6 to be heard on that?

7 MS. HENRY: Yes, your Honor. It's for the purpose
8 of impeachment for interest and bias.

9 THE COURT: You can ask him questions, but until
10 there is a reason to show an inconsistency, the document
11 will not come in.

12 BY MS. HENRY: (Resuming)

13 Q Sir, in the last paragraph of your resume, you
14 refer to yourself in the third person, is that correct?

15 A Yes, ma'am.

16 Q And specifically in the last paragraph of the
17 resume, you state that he -- referring to you -- has a
18 spotless record with the Coast guard and to the best of his
19 knowledge is held in high esteem by all vessel owners, is
20 that correct?

21 A Yes, owners, that's correct.

22 Q Owners. And you specifically added Exxon, is that
23 right?

24 A Yes, ma'am.

25 Q Thank you, sir.

1 Okay, now, as you stated about the first part of
2 your testimony on direct last Friday, you were hired to
3 critique Captain Hazelwood's performance from the time he
4 reboarded the vessel in Valdez until the actual grounding
5 itself, is that right?

6 A That's right.

7 Q And in doing so, I assume you took into account
8 various statements by witnesses, including trial testimony
9 by certain witnesses?

10 A Yes, ma'am.

11 Q Going specifically to trial testimony, what
12 witnesses did you -- whose testimony did you read?

13 A Kunkel, Kagan, Cousins, and about half of Beevers.

14 Q All right.

15 Half of Beevers -- Captain Beevers. All of
16 Kagans?

17 A Yes, ma'am.

18 Q And that was the trial testimony as opposed to
19 anything else?

20 A I believe I did that, uh-huh.

21 Q All right.

22 I assume also in -- during your critique of
23 Captain Hazelwood's performance, you also have looked at
24 various documents in this case, is that correct?

25 A Yes, I have.

1 Q And I assume you also took into account your own
2 experience as a tanker captain?

3 A Yes, ma'am.

4 Q Now, this would include not only your experiences
5 in Prince William Sound, but just generally your experiences
6 as a captain of very large oil tankers, is that right?

7 A Yes, ma'am.

8 Q Now, I assume that after you have been on a tanker
9 for a period of time, you tend to get to know the particular
10 tanker well, is that right?

11 A That's correct.

12 Q The way she handles?

13 A Yes, ma'am.

14 Q Maybe some oddities with the particular tanker?

15 A You should.

16 Q Problems with the engine?

17 A Yes, ma'am.

18 Q And just maybe generally the way she moves through
19 water, the way she turns, is that right?

20 A Yes, ma'am.

21 Q In fact, probably after a while you can tell, say
22 if you are in the cabin or in the mess hall, if she makes --
23 starts making a turn and slows down, is that right?

24 MR. CHALOS: I object, your Honor. No foundation
25 for that question. What speed, what load.

1 THE COURT: Objection overruled. The witness is
2 qualified to give his opinion on these things.

3 BY MS. HENRY: (Resuming)

4 Q After as while, you get to -- you have such a feel
5 for her that you can tell if she is starting to turn or
6 slowing down, is that right?

7 A Exactly what the counsel said there. You really
8 have no feel under a certain speed if the vessel is going to
9 make a turn. Now, at high speed, of course if a man puts a
10 few degrees of rudder on, you're going to feel it. But
11 also, even if he doesn't put the rudder on, occasionally the
12 ship will shudder and it will feel like it's -- it will --
13 if you're sitting in the captain's cabin, you'll think its
14 turning. Precisely because of that I had, on the Bay Ridge
15 --

16 Q All right.

17 Well, let's assume the vessel is going 11.75 knots
18 and a 10 degree right rudder is ordered and executed. You
19 would feel that, wouldn't you?

20 A Depends on what ship I was on.

21 Q Let's assume you were on the Exxon Valdez or one
22 similar to the Exxon Valdez.

23 A I have no idea about that. I have never been on
24 the Exxon Valdez under way.

25 Q All right.

1 Let's assume that you were on any of the tankers
2 that you were the captain of in transiting Prince William
3 Sound.

4 A Ma'am, if I was on the Atlantic, that ship
5 vibrated all the time. There was no way you could tell if
6 it -- it just vibrated all the time. You could put anything
7 you want on there and you wouldn't know it.

8 Q Okay.

9 So you're saying that you know a tanker very well,
10 but you would not be able to tell if it is making a turn of
11 10 degrees right rudder going 11.75 knots, is that right?

12 MR. CHALOS: Objection, your Honor. That is not
13 what the witness said. The specific question was on the
14 Exxon Valdez.

15 THE COURT: Miss Henry?

16 BY MS. HENRY: (Resuming)

17 Q On the Exxon Valdez, isn't it true that if it is
18 going 11.75 knots and a 10 degree right rudder is ordered
19 and executed, you would be able to tell?

20 A I have never been on the Exxon Valdez underway. I
21 can't give you --

22 Q You are familiar with the Exxon Valdez and how she
23 works, are you not?

24 A In a drydock setting, yes.

25 Q Are you familiar with any other vessels that are

1 similar to the Exxon Valdez?

2 A None of the vessels I sailed on were remotely
3 similar to the Exxon Valdez.

4 Q Yet you have been called in as an expert in this
5 case to criticize Captain Hazelwood's performance on the
6 Exxon Valdez, which apparently you know nothing about, is
7 that correct?

8 MR. CHALOS: Your Honor, I don't think he has been
9 called to criticize Captain Hazelwood. He has been called
10 to critique.

11 THE COURT: You can rephrase your question. It is
12 argumentative the way you phrased it.

13 BY MS. HENRY: (Resuming)

14 Q So is it true you have been called as an expert to
15 critique Captain Hazelwood's performance on the Exxon Valdez
16 when you have no idea how the Exxon Valdez works, is that
17 right?

18 A I don't get the general drift. Captain's work the
19 same. Different ship, different long squires, ma'am.

20 Q Don't you think the performance of a captain
21 depends on the ship?

22 A To a small degree.

23 Q All right.

24 Now when you were asked to critique Captain
25 Hazelwood's performance, you were not asked to go to what he

1 was doing before he reboarded the Exxon Valdez, is that
2 right?

3 A That's correct.

4 Q During the time that you transited in and out of
5 Valdez and Prince William Sound, how many times did you go
6 ashore for any length of time in Valdez?

7 A Very seldom.

8 Q Would you go ashore maybe to conduct some
9 business?

10 A Yes. Usually to Alamar would bring me to the
11 agent's office and then bring me right back. Maybe I'd stop
12 for a haircut, that's all.

13 Q Okay.

14 But that would be it?

15 A Yes, ma'am.

16 Q Now specifically regarding Captain Hazelwood's
17 activities in Valdez, the testimony has been that he was
18 seen having at least two drinks in the Pipeline Club early
19 on the afternoon of March the 23rd; that he was later seen
20 in the same club having at least two more drinks with his
21 chief engineer and later his radio officer; and that he had
22 at least one more drink at the Valdez Club; and according to
23 Captain Hazelwood, he had two Moussy beers in his office or
24 cabin before the undocking began.

25 Given those facts, do you have an opinion with

1 respect to his having at least five drinks prior to
2 reboarding the Exxon Valdez to navigate the vessel out of
3 Valdez?

4 MR. CHALOS: I object to the mischaracterization
5 of the evidence. There's been a dispute as to whether the
6 Captain was in the Pipeline Club at the time that Miss
7 DeLozier put him there. Another witness had him someplace
8 else.

9 MS. HENRY: Your Honor, I think I am permitted to
10 summarize the evidence as it has come in.

11 THE COURT: Objection overruled.

12 BY MS. HENRY: (Resuming)

13 Q Do you have an opinion?

14 A No, I have no opinion.

15 Q Doesn't matter either way?

16 A Ma'am, the test that he passed was the two gates
17 guards that I was sitting in the audience when --

18 Q I am asking you if you have an opinion. Not what
19 the Alyeska guard's opinion was. Do you have an opinion or
20 not?

21 A The man was not impaired according to all the
22 testimony that I have read. And that is my decision. If he
23 is not impaired, I have no problem with it.

24 Q So there's no problem with having five drinks
25 before you start navigating a vessel, is that right?

1 A If he is not impaired, I see no problem, ma'am.

2 Q And you are basing that on people's subjective
3 observations of Captain Hazelwood, is that correct?

4 A Yes, ma'am.

5 Q You are aware of course that what Captain
6 Hazelwood did is a violation of the Coast Guard regs about
7 not drinking four hours prior to reboarding for purposes of
8 navigating a vessel, is that correct?

9 A Ma'am, even I didn't know about the four hour rule
10 until this case came up. The Coast Guard operates in a
11 vacuum.

12 Q So you don't bother to check the Coast Guard regs
13 that cover your performance?

14 A There is no publication that it is published in
15 that I would normally read, ma'am.

16 Q You don't bother to see what the Coast Guard regs
17 that cover your performance are?

18 A I do not subscribe to the Federal Register, and
19 that is where they publish all their data.

20 Q Of course it is in the law library and it is in
21 the public library isn't it?

22 A I don't go to the law library every day, ma'am.

23 Q So you just don't care what the regs are, is that
24 right?

25 A I do care what the regs --

1 MR. CHALOS: Objection, your Honor.

2 THE COURT: Objection overruled.

3 BY MS. HENRY: (Resuming)

4 Q You don't care what the regs are. You didn't even
5 bother to check, did you?

6 A I don't go to the public law library every day.
7 It is not my habit, ma'am.

8 Q Now you are also aware that what Captain Hazelwood
9 did was a violation of Exxon policy, are you not?

10 A I don't know what Exxon policy is.

11 Q You have never been the master of a ship that
12 belonged to Exxon?

13 A No.

14 Q Or that was chartered to Exxon?

15 A I was chartered to Exxon, yes, ma'am.

16 Q And when you mastered a ship that was chartered to
17 Exxon, you weren't aware of what the Exxon policy was?

18 A No, I was not.

19 Q Let's move on to just prior to undocking. On
20 direct examination you were asked your opinion of Captain
21 Hazelwood returning to the Exxon Valdez 45 minutes prior to
22 undocking. If the evidence were to show that in fact it was
23 only 30 minutes prior to the first undocking procedures
24 beginning, does that change your opinion any?

25 A Not at all.

1 Q Now assuming for a moment that except possibly for
2 a containment boom, the Exxon Valdez was in fact waiting for
3 Captain Hazelwood so it could depart. The tugs were in
4 place, Captain Murphy was ready to go. The agent was
5 waiting to get paperwork from Captain Hazelwood. Given
6 these facts, since everyone was simply waiting for Captain
7 Hazelwood to return, do you see anything wrong with his
8 waiting until 8:30 to return?

9 A Not at all.

10 Q Now in your experience, the sailing board quite
11 often changes, depending on how quickly or how slowly the
12 loading is going, is that right?

13 A Not quite often. I wouldn't characterize it you
14 change it every hour.

15 Q Well, change it every trip, maybe?

16 A Well, obviously you don't sail the same time every
17 trip.

18 Q And it is very easy to find out if the time on the
19 sailing board has changed, isn't it?

20 A You could call the Alyeska gate.

21 Q Or you could call the -- Alamar or the agent?

22 A If they had been informed, which I would assume
23 they had, yes.

24 Q All right.

25 Now, let's go ahead to after the undocking and the

1 transit through the narrows itself, you testified that you
2 saw nothing wrong with Captain Hazelwood leaving the bridge
3 for more than an hour while his vessel was transiting
4 through the Narrows, is that right?

5 A That's right.

6 Q And one of the reasons you gave for this opinion
7 was that Captain Murphy, in your opinion, is a very capable
8 pilot, is that right?

9 A That's correct.

10 Q Now, one of the reasons that local pilots are
11 required in certain areas, such as the Narrows, is because
12 they know the area quite well, is that correct?

13 A That's correct.

14 Q And although they may know the area quite well,
15 they don't necessarily know the vessel that well, do they?

16 A Captain Murphy obviously knew the Exxon Valdez
17 fairly well.

18 Q Although they know the area quite well, they do
19 not necessarily know the vessel quite well. Yes or no?

20 MR. CHALOS: Your Honor, I object. I think the
21 witness answered the question. I think Miss Henry is
22 talking generally and the witness answered specifically.

23 THE COURT: Well then, the witness didn't answer
24 the question.

25 MR. CHALOS: Well then, she is asking generally.

1 I would object; no foundation.

2 THE COURT: Objection overruled.

3 BY MS. HENRY: (Resuming)

4 Q Isn't that true, sir?

5 A In what respect? Obviously he wouldn't know where
6 the staple gun is, but the ship is going to handle the same
7 way.

8 Q All ships handle the same way?

9 A No, all ships do not handle the same way. But
10 it's the pilot's job, he makes one turn --

11 Q Please answer my question, sir.

12 A Okay.

13 Q The person who knows the vessel the best is the
14 master, isn't that true?

15 A I would hope so.

16 Q The reason that you thought it was okay for
17 Captain Hazelwood was, I think you said the only problem
18 that might come up would be possibly engine failure or
19 steering failure, is that right?

20 A That's correct.

21 Q All right.

22 Now in transiting through the Narrows, your vessel
23 come as close to one quarter mile to shore, does it not?

24 A I would have to go back and review the chart, the
25 optimum track line.

1 Q If you need the protractor or whatever this is --

2 A No, I can eyeball it.

3 Q At one point at least it comes within a quarter of
4 a mile from shore, is that right?

5 A That's correct.

6 Q And isn't it true that either one of the problems
7 that you mentioned, engine failure or steering failure, puts
8 the vessel at risk of hitting the rock and spilling oil when
9 you're within a quarter mile of shore, isn't that right?

10 A That's not correct.

11 Q Isn't it true that you criticized Captain
12 Knowlton's maneuver because he got so close to the rock --

13 A Ma'am, I don't think you understood what I said.

14 Q Let me finish the question.

15 A I said that is not correct.

16 Q Let me finish the question, sir.

17 THE COURT: Captain Walker, let the question be
18 asked and then if you can answer it, try your best to answer
19 it.

20 BY MS. HENRY: (Resuming)

21 Q One of your criticisms of Captain Knowlton's
22 maneuver around the ice was that he was so close to the
23 shore that if the steering went, he would have hit the reef.
24 That was one of your criticisms of Captain Knowlton's
25 maneuver, isn't that right?

1 A That's correct, uh-huh.

2 Q Isn't it true that other problems could occur
3 while transiting the Narrows besides steering failure or
4 engine failure, such as a helmsman making the wrong turn?

5 A You mean putting the rudder over the wrong way?

6 Q That's right.

7 A That's correct.

8 Q And in fact that is another one of the criticisms
9 that you have of Captain Knowlton's maneuver, is that
10 correct?

11 A That's correct.

12 Q And if the helmsman makes the wrong rudder --
13 rudder order, did you say?

14 A Rudder order, uh-huh.

15 Q That would not give the captain or whoever is
16 navigating the vessel very much room to recover, is that
17 right, in that small area?

18 A In this instance, he has plenty of room to
19 recover.

20 Q Within a quarter mile?

21 A Oh, long before a quarter mile.

22 Q But that was a criticisms you had of Captain
23 Knowlton who was also within less than half mile of shore,
24 that if the rudder order had been incorrectly completed, it
25 wouldn't have, and I quote you now, given him a whole hell

1 of a lot of room to recover, is that right?

2 A But there's a big difference --

3 Q Is that right? Is that what your criticism was of
4 Mr. Knowlton?

5 A Yes, ma'am.

6 Q Thank you.

7 Q Now, you are currently a pilot on Saint Johns
8 River in Florida, is that right?

9 A That's correct.

10 Q By the way, is that mud or sand or both?

11 A Sand, mud and rock, uh-huh.

12 Q And as you are piloting boats through that river,
13 you don't pilot them from down in the mess hall, do you?

14 A No, I don't.

15 Q And you don't pilot them from the captain's
16 quarters, do you?

17 A No, I don't.

18 Q And you don't pilot from the pump room, do you?

19 A No, I don't.

20 Q You do it from the bridge, don't you?

21 A That's correct.

22 Q While transiting through the Valdez Narrows, you
23 would not expect the State pilot to pilot the vessel from
24 anywhere but on the bridge, would you?

25 A No, I wouldn't.

1 Q If I were to tell you that other tanker captains,
2 for instance, Captain Beevers and Captain Stalzer, said that
3 the master should be on the bridge no matter how competent
4 the State pilot is, during the transit through the Narrows,
5 you would agree with them, wouldn't you?

6 A Now repeat that question now?

7 Q If I were to tell you that other tanker captains,
8 including Captain Beevers and Captain Stalzer, said that the
9 master should be on the bridge in transiting the Narrows,
10 even though the pilot is competent, you would agree with
11 them, wouldn't you?

12 A That's their opinion.

13 Q You would disagree with their opinion, is that
14 correct?

15 A That's correct.

16 Q Now, you stated that you were under the impression
17 that the watch standers at the VTC were monitoring your
18 progress, I think you said as far as 18 miles south of Bligh
19 Reef, is that right?

20 A 18 miles south of Potato Point.

21 Q Of Potato Point?

22 A Uh-huh.

23 Q Which puts you someplace south of Bligh Reef?

24 A Yes, ma'am, uh-huh.

25 Q In fact I think you said during the early years

1 they would often call -- often call on the radio, and as you
2 put it, nitpick at the pilots for not staying in the optimum
3 lanes?

4 A Ma'am, if I remember right, they were proceeding
5 against some of the pilot's licenses because they were a
6 hundred feet off the track.

7 Q Isn't it true that in the early years the watch
8 standers would often call on the radio, and as you put it,
9 nitpick at the pilots for not staying in the optimum lanes,
10 yes or no?

11 A That's correct.

12 Q Now, when you said that you assumed that the watch
13 standers were monitoring you, you also have to assume that
14 they can see you, is that right?

15 A See me on radar you mean?

16 Q Yes.

17 A Yes.

18 Q And there are various things that affect one's
19 ability to see something on radar, is that correct?

20 A That's correct.

21 Q For instance, if there is any weather interference
22 such as snow squalls between your vessel and the radar site,
23 it might be very difficult if not impossible to see you, is
24 that right?

25 A That's correct.

1 Q And is it also true that the farther away you are,
2 the more difficult it is to see you?

3 A That's correct.

4 Q All right.

5 Now, the bottom line then, sir, is that you would
6 not depend on the watch standers at the VTC as a second pair
7 of eyes guiding you through hazardous areas, would you?

8 A Absolutely -- well, it depends. What are you
9 saying? Am I going to rely on them to navigate my vessel
10 from the shore? Absolutely not. Am I going to rely on them
11 to be monitoring me when they are supposed to be monitoring
12 me, yes.

13 Q My question was, you would not depend on the watch
14 standers at the VTC as a second pair of eyes, guiding you --
15 not monitoring -- guiding you through hazardous areas, would
16 you?

17 A No.

18 Q Okay, let's talk about the autopilot for a minute.
19 You testified that you saw nothing wrong with Captain
20 Hazelwood putting the helm on autopilot in Prince William
21 Sound, is that right?

22 A That's correct.

23 Q Although you personally would not do that, would
24 you?

25 A No.

1 Q But it's okay for Captain Hazelwood to do it?

2 A If he wants to do it, he is master of the ship,
3 not me.

4 Q You also gave an opinion that putting it on
5 autopilot when Captain Hazelwood did, played no role in the
6 grounding itself, is that right?

7 A Yes.

8 Q All right.

9 Now, that was based upon an assumption that Mr.
10 Chalos gave you that the autopilot was only on for three
11 minutes.

12 MR. CHALOS: Objection, your Honor. I was talking
13 about the evidence in this case, not an assumption.

14 MS. HENRY: I'll withdraw the question.

15 BY MS. HENRY: (Resuming)

16 Q That was based upon Mr. Chalos's view of the
17 evidence in this case, is that correct?

18 A That's the parameters he gave me, yes.

19 Q All right.

20 Well, assuming that the evidence actually showed
21 that the autopilot was put on right after they steadied on a
22 course of 180, or shortly after 11:40, and that it wasn't
23 taken off until sometime after Captain Hazelwood left the
24 bridge after 11:53, which would be a little more than 10
25 minutes, would it still be your opinion that it had nothing

1 to do with the grounding?

2 MR. CHALOS: Your Honor, I object to Miss Henry
3 characterizing her scenario as the evidence. I think the
4 evidence is clear that the autopilot was put on at 2350,
5 11:50, and taken off at 11:53. If Miss Henry wants to give
6 a scenario of the gyro being on at 11:40, that's fine. But
7 I object to her characterization that that's evidence.

8 MS. HENRY: Your Honor, I am referring to Mr.
9 Carr's testimony.

10 THE COURT: Objection is overruled.

11 BY MS. HENRY: (Resuming)

12 Q Now, assuming that the Exxon Valdez did not begin
13 its turn, its right rudder turn, until 12:01, one minute
14 after midnight, and assume that it did not begin its turn
15 because the autopilot was still on for some reason, and
16 assume that as a result of the fact that it did not begin
17 its turn until 12:01, it hit the reef, then the autopilot
18 would have played a role in the grounding, wouldn't it have?

19 A If the autopilot was on when they tried to make
20 that turn, he could have made the turn on autopilot. I
21 don't see the problem there.

22 Q You are saying that if it is on autopilot, he
23 could have made the turn?

24 A Absolutely. Probably would have been a better
25 turn than what they made.

1 Q Without disengaging the autopilot?

2 A Without disengaging the autopilot.

3 Q Did you -- are you familiar with the autopilot
4 system on the Exxon Valdez?

5 A I am familiar with it, yes.

6 Q And in your opinion that if you keep the autopilot
7 on after it has steadied up on a course heading of 180, you
8 do not have to take the autopilot off and it will still
9 turn?

10 A Yes, ma'am. All you have to do is program in what
11 heading you wanted to put on it. It'll automatically come
12 to that heading.

13 Q Well, you have to do something. You can't just
14 order the helmsman to turn?

15 A Oh, it doesn't -- the helmsman does it. I don't
16 do it.

17 Q If you gave the helmsman an order, 10 degrees
18 right rudder, and the autopilot was still on, and the
19 helmsman turned the helm, the vessel would not turn, would
20 it?

21 A That's correct.

22 Q And if that is the case in this situation, that it
23 did not turn until Captain -- or until Cousins realized the
24 autopilot was on and turned it off at 12:01, and because of
25 that late turn it hit the reef, the autopilot would have

1 played a role in the grounding, correct?

2 A If the scenario you are setting up is true, or is
3 -- I wouldn't say true -- how would I put it? In your
4 scenario, that the man on the wheel did not know it was in
5 automatic pilot, and turned the wheel, nothing would happen,
6 the ship would have kept going.

7 Q And the autopilot would have been a factor in the
8 grounding, correct?

9 MR. CHALOS: Your Honor, I am going to object.
10 There is a lack of foundation as to what rudder was used
11 subsequent to the 12:01 1/2 as Miss Henry is talking about.

12 THE COURT: Objection overruled.

13 BY MS. HENRY: (Resuming)

14 Q The autopilot would have played a part in the
15 grounding, correct?

16 A That's correct.

17 Q All right.

18 Now, there was some testimony, or you made some
19 comments with regard to Captain Hazelwood putting the engine
20 into load program up. In fact, I think your comment was
21 that you were surprised he hadn't done it earlier, is that
22 right?

23 A That's right.

24 Q All right.

25 Now, isn't it true that in a vessel like the Exxon

1 Valdez, it responds to turns better at slower speeds?

2 A It will make a turn slower -- the rate of turn
3 will be slower, but the turning -- the actual radius of the
4 turn would be smaller.

5 Q In fact I think the way you put it is it makes
6 tighter turns than at higher speeds, is that right?

7 A That's correct.

8 Q And isn't it true that the slower that you go, the
9 more time you have to make course changes if something goes
10 wrong, correct?

11 A That's correct.

12 Q And in fact in this case if they had been going
13 half the speed they were going, then instead --

14 (Pause.)

15 And have you seen this before?

16 A Yes, I have.

17 Q And so you recognize that this is the tracking
18 that was done with some of the approximate times as to the
19 position of the vessel up to the grounding, is that correct?

20 A That's correct, uh-huh.

21 Q And so you are familiar that right here is one and
22 a half minutes after midnight, which is just before it began
23 its turn, is that right?

24 A That's right.

25 Q All right.

1 So if you had been going half the speed, then from
2 the time it started its turn until I believe the testimony
3 is the grounding was not at 8 1/2 minutes after, but about
4 11 after, is that correct?

5 A I don't really know exactly the time. A minute or
6 two won't make much difference.

7 Q All right.

8 Well, let's assume that if you were going half the
9 speed from 1 1/2 minutes after 'til 8 1/2 minutes after is
10 seven minutes, is that right?

11 A Uh-huh.

12 Q So if you were going half the speed, then you
13 would only have been here at 8 1/2 minutes after, is that
14 right?

15 A That's correct.

16 Q And you might have been able to miss the reef, is
17 that correct?

18 A Depends on whether or not they were watching. You
19 know, we can go backwards down this place too, you know,
20 Sooner or later we have to complete this voyage.

21 Q Excuse me. Just answer my questions, don't make
22 speeches.

23 A Okay.

24 Q All right.

25 Do you understand?

1 MR. CHALOS: Your Honor, I don't think there is a
2 need for that kind of reprimand of the witness.

3 THE COURT: Maybe if you can just answer the
4 questions that are addressed to you and not volunteer
5 anything. Mr. Chalos will have an opportunity to do some
6 redirect if there is any need to clear up things.

7 THE WITNESS: Okay. I thought that she was trying
8 to misrepresent something.

9 THE COURT: I think there was room for dispute on
10 both of those, so rephrase them.

11 BY MS. HENRY: (Resuming)

12 Q Sir, assuming that the rudder order was given at
13 11:55, then Mr. Cousins would have had 12 minutes instead of
14 only 6 1/2 minutes to realize the turn wasn't occurring if
15 they had been going half the speed, is that correct?

16 A That's correct.

17 Q And given the maneuver that you are aware of
18 occurring here from 12:01 1/2 'til 12:08 1/2 or 12:10, isn't
19 it true that you personally would not have done this
20 maneuver at 11 to 12 knots?

21 A If I'd of load programmed up a lot earlier, we'd
22 been a probably 15 or 16 knots.

23 Q And at the time that you were trying to make this
24 maneuver, you would have slowed down and not gone 11 to 12
25 knots, isn't that correct?

1 A I never said that, no. I don't see any reason to
2 slow down.

3 Q You in fact would be going faster, is that right?

4 A Yes, ma'am.

5 Q And you found that Captain Knowlton going as fast
6 as 16 knots was acting reckless, is that right?

7 A Captain Knowlton's course was different than my --
8 than the course that this vessel took. There's a big
9 difference.

10 Q Captain Knowlton only got within a half a mile of
11 the rocks, didn't he?

12 A Yes, ma'am.

13 Q The Exxon Valdez got right on top of them, didn't
14 it?

15 A Only because of a misdirection.

16 Q The Exxon Valdez got right on top of it, didn't
17 it?

18 A Yes, ma'am.

19 Q There is a difference then, isn't there?

20 A It depends on how far you want to take this.

21 Q Now, let's go to specific hazardous situations
22 that you have encountered in your experience and that tanker
23 captains have encountered. As a tanker captain, safety is
24 your main concern, isn't it?

25 A Yes, ma'am.

1 Q And that would include concern for the safety of
2 your crew?

3 A My crew came first, my ship came second, and my
4 cargo came third.

5 Q So safety would include concern for the safety of
6 your crew, correct?

7 A Yes, ma'am.

8 Q And it would include safety of your vessel?

9 A Yes, ma'am.

10 Q And it would include safety of your cargo, is that
11 right?

12 A Yes, ma'am.

13 Q And it would also include concern for the
14 protection of the environment, is that right?

15 A Yes, ma'am.

16 Q In fact, one of the tanker captain's biggest fears
17 is that his vessel will either ground or perhaps collide
18 with another vessel with the risk that it will cause the
19 loss of lives or the loss of cargo, is that right?

20 A That's correct.

21 Q So when an oil tanker is going through a
22 particularly hazardous area, extra care should be taken,
23 correct?

24 A Yes, ma'am.

25 Q Potentially hazardous situations would include

1 traveling very close to shoals, rocks, or reefs, is that
2 right?

3 A It depends on the course, ma'am.

4 Q Potentially hazardous situations would occur
5 traveling close to shoals, rocks, and reefs, is that right?

6 A I don't agree with you right there.

7 Q It is not a potential hazard to be very close to
8 shoals, rocks, and reefs?

9 A No.

10 Q Potentially hazardous situations would include
11 traveling or transiting in very bad or heavy weather, is
12 that right?

13 A Come back with that one?

14 Q Potentially hazardous situations would include
15 traveling through very bad or very heavy weather, I think we
16 should put it?

17 A Yes, ma'am, uh-huh.

18 Q Potentially hazardous situations include traveling
19 with highly restricted visibility, is that correct?

20 A Yes, ma'am.

21 Q Potentially hazardous situations include traveling
22 in high density traffic areas, is that correct?

23 A Yes, ma'am.

24 Q And potentially hazardous situations include
25 traveling near or through...

1 (Start Tape C-3668.)

2 Q And potentially hazardous situations include
3 traveling near or through ice, is that correct?

4 A Yes, ma'am.

5 Q Now, speaking of ice, you faced, I think you said,
6 conditions approximately three times in which you either had
7 to go through ice or maneuver around it in Prince William
8 Sound, is that right?

9 A That's right.

10 Q And I think you said that twice you maneuvered
11 around it and once you went through it?

12 A Yes, ma'am.

13 Q Now the one time that you went through it, you had
14 to slow down, didn't you?

15 A Yes, ma'am.

16 Q Do you remember how slow you had to go?

17 A I put her on about a half bell.

18 Q Pardon?

19 A A half bell. About 8 or 9 knots.

20 Q And the time that you actually went through the
21 ice, you did not hit any ice, did you?

22 A No.

23 Q And that was because as you got closer to the ice,
24 you realized that it was -- the bergs or the bits were a lot
25 farther apart than you first realized, is that right?

1 A Right. We passed them off at about 50 feet.

2 Q 50 feet off each side?

3 A Right.

4 Q Now, if you faced ice conditions again such as
5 those you faced in Prince William Sound, would you go around
6 it if you could rather than through it?

7 A Yes, ma'am.

8 Q And is that because going through it really can be
9 a pain?

10 A I think it would be safer to go around it than go
11 through it.

12 Q Okay.

13 Do you remember telling me the night that I talked
14 to you that going through the ice was really a pain?

15 A Yeah.

16 Q Now, the two times that you maneuvered around the
17 ice, was the ice in both lanes? And if you need to split
18 them from one incident to another, go ahead.

19 A It's very far back. I mean, you're talking seven
20 years back. And if I remember, it was pretty extensive ice
21 that I passed.

22 Q Both times that you maneuvered around the ice, did
23 you have to go completely out of the TSS?

24 A Oh, yes, uh-huh.

25 Q So completely out of the northbound lane?

1 A Right.

2 Q Now, when you started these maneuvers, the first
3 thing obviously you do is move from the southbound lane to
4 the separation lane, is that correct?

5 A Well, that's where you're going to pass through.
6 That would be the first thing you pass through.

7 Q And into the northbound lane, is that right?

8 A Yes, ma'am.

9 Q And you were supposed to notify the VTC when you
10 go into the northbound lane, is that correct?

11 A Whenever you are starting a maneuver across the
12 lanes, you tell them what you are doing.

13 Q And so I assume you did?

14 A Yes, ma'am.

15 Q Additionally, when you leave these lanes entirely
16 on the other side of the northbound lane, you are required
17 to notify the VTC once again, is that correct?

18 A I believe so, uh-huh.

19 Q Now, you saw nothing wrong with the fact that
20 Captain Hazelwood failed to tell the VTC when he was going
21 out of the lanes entirely, is that correct?

22 A You have to give them I think a five or ten minute
23 call before you do it and then just acknowledge that you
24 have crossed over.

25 Q You see nothing wrong with the fact that Captain

1 Hazelwood failed to notify the VTC that he was about to or
2 had left the TSS entirely, is that right?

3 MR. CHALOS: Your Honor, I object. That is a
4 mischaracterization of the evidence. I think the evidence
5 is clear that he called the VTC twice to tell them he was
6 making these maneuvers.

7 THE COURT: Objection overruled.

8 BY MS. HENRY: (Resuming)

9 Q Sir, you listened to the tapes of Captain
10 Hazelwood notifying the VTC, is that correct?

11 A No; un-un.

12 Q If I were to tell you that the first time he
13 called the VTC about this, he said -- he advised that in
14 fact he was going to have to go into the northbound lane
15 because of the ice. All right, that's fine, that's what
16 you're supposed to do, is that right? Is that right?

17 A Yes.

18 Q The second time that he called he did not tell
19 them that he was leaving the TSS entirely, although he was
20 required to do so. You see nothing wrong with that, is that
21 correct?

22 A A little minor foul-up --

23 Q A minor foul-up?

24 A Yeah, uh-huh.

25 Q All the times, the three times, I guess, that you

1 encountered ice in Prince William Sound and either went
2 through it or around it, you were on the bridge all three
3 times, is that correct?

4 A Yes, ma'am.

5 Q And that's because you want to be cautious or safe
6 when you're doing a maneuver like that, is that correct?

7 A I love to pilot. If I could be on the bridge to
8 maneuver, I was Johnny on the spot. I didn't care where we
9 were.

10 Q So you didn't care about safety, you just liked to
11 be on the bridge?

12 A I loved it.

13 Q You did not care about safety, you just wanted to
14 be on the bridge.

15 A Well, that came with me being on the bridge.

16 Q All right.

17 So safety was a concern, is that correct?

18 A Safety is always a concern.

19 Q And in fact, a vessel like this is probably in its
20 safest hands when you're on the bridge, isn't that right?

21 A I should hope so.

22 Q Okay.

23 Let's move to pilotage for a moment. I think you
24 said sometime in '79 is when you obtained your pilotage
25 endorsement?

1 A Yes, ma'am.

2 Q And I think part of the requirement was you had to
3 transit the Narrows at least six times?

4 A You had to transit the -- from Hinchinbrook to
5 Rocky Point six times.

6 Q And you had done that the year before?

7 A Yes.

8 Q Or two years before actually, I think.

9 A Well, starting in '77, I think the trips added up
10 to six trips -- at least six trips by the time I got the
11 endorsement.

12 Q And the other part of the requirement to get a
13 pilotage endorsement for Prince William Sound was to take
14 some sort of a written test?

15 A Yes.

16 Q And I think you referred to that written test as
17 mark-work?

18 A Yes, ma'am.

19 Q And that test was basically trying to identify
20 reefs and navigational aids in the area?

21 A You had about six navigation aids, I believe, at
22 the time, and you had to draw the courses in there. And
23 they had the reefs and everything already on the chart. All
24 you had to do was put the names on them.

25 Q And some navigational aids?

1 A And place the navigational aids on the chart at
2 their specific locations.

3 Q Okay.

4 So the reefs are on the chart, you have to name
5 the reefs. But you had to actually place where the
6 navigational aids were on the chart?

7 A Right.

8 Q Now, prior to you actually getting your pilotage
9 endorsement for Prince William Sound, I think the six times
10 that you went into the Narrows without endorsement, you
11 picked the pilot up once at Cape Hinchinbrook, and the other
12 five times somewhere around Busby, depending on --

13 A No, I picked them all up at Hinchinbrook all the
14 time.

15 Q You picked all the pilots up at Hinchinbrook all
16 the time?

17 A Yes, ma'am, uh-huh.

18 Q All right.

19 You didn't tell us last Friday that in fact
20 sometimes the pilots did not want to be picked up until
21 Busby?

22 Q You didn't say that?

23 A No, ma'am. I told you I dropped them off on the
24 outbound side.

25 Q Oh, I'm -- excuse me. So going in, you always

1 picked them up at Hinchinbrook?

2 A The reason for that is --

3 Q Going in you always picked them up at
4 Hinchinbrook?

5 A Yes, ma'am.

6 Q Coming out, once you dropped them at Hinchinbrook,
7 the other times you dropped them at Busby?

8 A Yes, ma'am.

9 Q That of course was a violation of the regs at the
10 time, is that correct?

11 A Yes, ma'am.

12 Q Showing you what has been marked as Defendant's
13 Exhibit Number B and which has also been admitted, do you
14 recognize that exhibit?

15 A Yes, ma'am.

16 Q And what is that exhibit?

17 A That's the Bob Arts memo.

18 Q That's the Bob Arts memo?

19 A Yes, ma'am.

20 Q Now, when you were transiting through the narrows
21 -- well, back up. What's the date on that memo?

22 A I think '86, September 19th, 1986.

23 Q So is it fair to say that when you were transiting
24 through the Narrows, that letter hadn't even existed yet, is
25 that right?

1 A That's right, uh-huh.

2 Q When is the first time you saw that letter?

3 A About September last year.

4 Q Of '89?

5 A Yes, ma'am.

6 Q And is that when Mr. Chalos showed it to you or
7 sent it to you?

8 A Yes, sent it to me.

9 Q All right.

10 And then you reviewed that letter and gave an
11 opinion based upon that letter, is that correct?

12 A Yes, ma'am.

13 Q After looking at that letter, did you check with
14 anyone from the Coast Guard to see if Bob Arts'
15 interpretation of the regulations or the modifications of
16 the regulations was even accurate?

17 A Along with this letter, he sent me the Captain of
18 the Port Order, so I had them right there to compare.

19 Q Did you have the previous Captain of the Port
20 Order?

21 A The one that this was based on.

22 Q All right.

23 Did you have any of the other Captain of the Port
24 -- the earlier Captain of the Port Orders that were
25 purported to be modified?

1 A I don't understand what you -- the only Captain of
2 the Port Order that I know of was the one that he sent me,
3 that this was, you know, taken from.

4 Q You didn't have the other Captain of the Port
5 Orders that the Captain of the Port Orders you were sent
6 purported to modify, did you?

7 A I still don't know what you are talking about.
8 The only one I had was where he came out and I believe he
9 waived the pilotage requirements.

10 Q All right.

11 You are referring to a Captain of the Port Order
12 that Mr. Chalos sent you with that, is that right?

13 A Yes, ma'am, uh-huh.

14 Q And you did not bother to check with anyone from
15 the Coast Guard to see if this letter interpreting the
16 Captain of the Port Order and interpreting the regs, was
17 accurate, did you?

18 A Well, it was obvious when you had them right next
19 to each other.

20 Q You didn't bother to check with the Cost Guard,
21 did you?

22 A I never check with the Coast Guard on something
23 that small.

24 Q Now, assuming that the letter is even accurate --

25 A This Bob Arts letter you're referring to?

1 Q Yeah -- as far as his interpretation of the
2 Captain of the Port order and the regulations, the letter
3 only changes some of the requirements for nonpilotage
4 vessels. It does not change the requirement for pilotage
5 vessels, is that correct?

6 A I disagree.

7 Q You disagree with the fact that that letter is
8 limited to nonpilotage vessels?

9 A This letter is for everybody.

10 Q It is not limited to nonpilotage vessels?

11 A No, un-un.

12 Q Sir, why don't you go ahead and read the first
13 sentence out loud?

14 A Effective September 1, 1986, the U.S. Coast Guard
15 requirement for daylight passage in Prince William Sound for
16 vessels without pilotage has been waived.

17 Q Vessels without pilotage means nonpilotage
18 vessels, is that correct?

19 A That's correct.

20 Q Now read the second sentence.

21 A All nonpilotage vessels will be able to transit
22 from Cape Hinchinbrook to the pilot station at all hours as
23 long as visibility remains at two miles or greater.

24 Q That sentence begins, all nonpilotage vessels, is
25 that correct?

1 A That's correct.

2 Q That sentence does not contain the phrase,
3 pilotage vessels, does it?

4 A Doesn't have to.

5 Q And your opinion is still that that purports to
6 change the regulations with respect to pilotage vessels as
7 well?

8 A Yes, ma'am.

9 Q In spite of the clear language in the first two
10 sentences of the letter, is that correct?

11 A Yes, ma'am.

12 Q All right.

13 Let's move on to Captain Hazelwood leaving the
14 bridge after the pilot had disembarked. Specifically let's
15 go to approximately 11:52 in the evening of March the 23rd,
16 1989. At this point in time, Captain Hazelwood had put the
17 helm on autopilot, is that right? I am not saying at that
18 time, but by that time it was on.

19 A I believe he had taken it off by that time. Not
20 him, but Mr. Cousins had taken it off.

21 Q All right.

22 You are aware that the testimony is that Mr.
23 Cousins didn't take it off until after Captain Hazelwood
24 left the bridge?

25 A Okay, I stand corrected.

1 Q And assuming that he left the bridge at about
2 11:53, I am talking a minute before he left the bridge,
3 okay?

4 A Oh, okay.

5 Q So a minute before he left the bridge, he had
6 already put -- Captain Hazelwood had already put the helm on
7 autopilot, okay?

8 A All right, uh-huh.

9 Q He had already put the engine on load program up
10 to sea speed.

11 A Uh-huh.

12 Q And he had put the vessel on a course of 180
13 degrees, is that correct?

14 A That's correct.

15 Q And that course of 180 degrees is heading straight
16 for Bligh Reef, is that right?

17 A Not directly.

18 Q Assuming you don't turn, it's going to hit some
19 rocks in that area, is that right?

20 A It's headed more -- almost between Bligh Reef and
21 Reef Island.

22 Q And you think that if it had headed that way, it
23 wouldn't have hit any rocks?

24 A It probably would have gone aground somewhere on -
25 - probably on Reef Island, I assume.

1 Q It would have gone aground somewhere anyway, is
2 that right?

3 A Well, anywhere in Hinchinbrook you're going to go
4 aground.

5 Q Assuming it had gone straight.

6 A Yes, uh-huh.

7 Q So we have the vessel on a course of 180, heading
8 towards some rocks then, is that correct?

9 A Any course you head in that whole place you're
10 headed for rocks.

11 Q He had the vessel on a course of 180 heading
12 straight for some rocks, rocks around Bligh Reef, correct?

13 A Yes, ma'am.

14 Q Now, he also knew that the Exxon Valdez would come
15 approximately one mile or less of Busby Island light on one
16 side given that course, is that right?

17 A That's correct, uh-huh.

18 Q And he also knew that he would come within one
19 mile or less of ice on the other side?

20 A At that point in time he probably knew that it
21 would be about a mile.

22 Q He also knew that at 11:52, a turn would have to
23 be made within a matter of minutes, is that correct?

24 A Yes, ma'am.

25 Q In fact, the plan was abeam of Busby?

1 A Uh-huh.

2 Q Which occurs at 11:55?

3 A Right.

4 Q So at 11:52, he knew within a matter of minutes a
5 turn was going to have to be made, is that right?

6 A Yes, ma'am, uh-huh.

7 Q And yet you see nothing with Captain Hazelwood
8 leaving the bridge at that point?

9 A No.

10 Q Let's also add the fact that Captain Hazelwood
11 left the bridge in the hands of a helmsman, Mr. Kagan, who
12 Captain Hazelwood's chief mate, his second mate, and Captain
13 Stalzer, had all told him had problems steering. Does that
14 added fact concern you at all?

15 A He's going to use a rudder order. There's a big
16 difference between steering and using a rudder.

17 Q Does the fact that he left the helm -- or the
18 bridge in the hands of a helmsman who had problems steering,
19 doesn't concern you at all?

20 A Not really.

21 Q In fact, to you a helmsman is just a body anyway,
22 is that right?

23 A That's correct. Just another piece of the
24 machine.

25 Q Now, you made some comments -- excuse me, another

1 piece of the machine, is that what you called him?

2 A Yes, ma'am. In my pilotage career, I have guided
3 people that didn't even speak English.

4 Q So he is just another piece of machinery, is that
5 right?

6 A He's just there, as I give him the order and he
7 moves the wheel, that's all.

8 Q Now, you said that in your opinion the
9 instructions that Captain Hazelwood gave just prior to
10 leaving the bridge were, quote, proper instructions. I
11 think at another point you called them legal instructions.

12 A Right. He gave a legal order, a lawful order.

13 Q As opposed to something that would violate the
14 regulations?

15 A Well, an unlawful order would be one that would
16 put the ship in -- you know, when you get abeam of Busby
17 Island, put a hard left. That's an unlawful order.

18 Q All right.

19 Is your -- so your opinion is that he gave him
20 proper instructions, sufficient instructions?

21 A Yes, ma'am.

22 Q Now isn't it true that the proper, legal,
23 sufficient instructions that Captain Hazelwood gave to Mr.
24 Cousins were first of, he pointed at the radar, we'll assume
25 probably he pointed abeam of Busby, and told Mr. Cousins to

1 turn when abeam of Busby, and told Mr. Cousins to call him -
2 - Captain Hazelwood -- when he began to make the turn, is
3 that correct?

4 A Yes, ma'am.

5 Q And that's all the instructions that he gave him?

6 A I think he gave him a little bit more, didn't he?

7 Q Well, did Captain Hazelwood even refer to the
8 navigational chart when he gave these instructions?

9 A I think he told him to come back into the Traffic
10 Separation Scheme when he came abeam of Busby Island.

11 Q In fact, what he said was when you come abeam of
12 Busby Island, begin to turn back into the lanes, is that
13 right?

14 A Yes, ma'am.

15 Q All right.

16 Did Captain Hazelwood look at a navigational chart
17 when he was giving Mr. Cousins these instructions, do you
18 know?

19 A Not that I know of.

20 Q Did Captain Hazelwood even show him on the chart
21 where he wanted to start to turn?

22 A He showed him on the radar.

23 Q He did not show him on the chart, did he?

24 A No.

25 Q Did Captain Hazelwood draw a track line on the

1 chart or even bother to mark the beginning of the turn on
2 any kind of navigational chart for Mr. Cousins?

3 A Not that I know of.

4 Q Captain Hazelwood also didn't tell Mr. Cousins the
5 specific heading to take for this turn, did he?

6 A He left it at his discretion.

7 Q Captain Hazelwood did not give Mr. Cousins a rate
8 of turn, did he?

9 A No.

10 Q Captain Hazelwood did not give Mr. Cousins a
11 position or a time when he should stop the turn?

12 A No, he did not.

13 Q Captain Hazelwood did not wait around for two more
14 minutes to make sure that the turn was executed, did he?

15 A No, he did not.

16 Q All right.

17 Let's go back to your box. Now, when you left
18 instructions for your -- was it third mate?

19 A I believe it was the third mate. It's been almost
20 ten years since that incident happened.

21 Q Okay. One of the watch officers.

22 A One of the mates, yeah.

23 Q When you left instructions for that watch officer,
24 you didn't simply point to the radar, did you?

25 A no, un-un.

1 Q You gave much more specific instructions, did you
2 not?

3 A Yes, ma'am.

4 Q But in your view it's okay for Captain Hazelwood
5 to simply point to the radar, tell him to turn when abeam of
6 Busby, and head back into the lanes?

7 A Well, ma'am, I couldn't mark that on a radar
8 scope.

9 Q That's right, you couldn't, could you?

10 A No, un-un.

11 Q Now, one of the things that you said on Friday was
12 that you felt that it was a good idea for Captain Hazelwood
13 to have a check on Mr. Cousins, and you referred to the
14 check as being telling him to call me when you begin the
15 turn, is that right?

16 A Yes, ma'am.

17 Q All right.

18 This means that when Cousins -- Mr. Cousins did in
19 fact call Captain Hazelwood, Captain Hazelwood -- and tell
20 him that he was making the turn, Captain Hazelwood could be
21 assured that his order was being carried out, is that right?

22 A Yes, ma'am.

23 Q However, isn't it true that in this case, when Mr.
24 Cousins did call him and tell him that he had begun to make
25 the turn, that wasn't true? The order had not in fact been

1 carried out.

2 A That's correct.

3 Q And of course Captain Hazelwood wasn't on the
4 bridge to realize that the order had not been carried out,
5 was he?

6 A That's correct.

7 Q All right.

8 And do you recall that in addition to telling
9 Captain Hazelwood that he had begun the turn, Cousins also
10 told Captain Hazelwood that, quote, we might get into the
11 bottom edge of the ice?

12 MR. CHALOS: Your Honor, I object. If Miss Henry
13 is going to read testimony, then I demand that she reads the
14 whole answer in that regard.

15 THE COURT: Miss Henry?

16 MS. HENRY: Your Honor, I'll do that.

17 BY MS. HENRY: (Resuming)

18 Q I'm quoting from Mr. Cousins testimony at this
19 trial at page 138. Mr. Cousins is speaking. There was a
20 short conversation but I told him it looked like we may get
21 in to the bottom edge of the ice. And he -- referring to
22 Captain Hazelwood -- responded by saying, is it going to be
23 -- does it look like it is going to be a real problem. I
24 said, no, I don't think that it will, but my intent was to
25 just ease it around the corner.

1 Now, if you had been -- assuming that you had left
2 the bridge in the first place, and you had been given this
3 information, that they might -- that you might get into the
4 bottom edge of the ice, you would have immediately returned
5 to the bridge, wouldn't you?

6 A If he -- I'm trying to figure out how to phrase
7 this. When he said he was going -- possibly going to skirt
8 the bottom edge of the ice, Captain Hazelwood said, is it
9 going to be a problem, the mate had said yes, I would have
10 been there immediately.

11 Q Well, Captain -- Mr. Cousins did not say skirt the
12 ice, he said get into the bottom edge of the ice.

13 A Right, okay. I stand corrected.

14 Q Now would you have gone up to the bridge
15 immediately if you had gone below earlier?

16 A If I had done exactly what Captain Hazelwood said,
17 and asked him, is it going to be a problem, all he had to do
18 was say yes, and I would have been there. He said no, I
19 have no problem with that.

20 Q Going through ice can be hazardous, can it not?

21 A It can.

22 Q And every time you went through ice, you were on
23 the bridge, weren't you?

24 A Yes, ma'am.

25 The third mate told him he was not going to go

1 through the ice.

2 Q Sir, again, please, don't make speeches, just
3 answer my question. Do you understand that?

4 A Yes, ma'am.

5 Q Do you have any problem with that?

6 A Yes, I do.

7 Q Well, unfortunately you're going to have to follow
8 the rules in this Courtroom, okay?

9 A Yes, ma'am.

10 Q Let's get to the grounding for a moment. You've
11 never personally grounded a vessel yourself, have you?

12 A No, I have not.

13 Q Is it fair to assume that if you, Captain Walker,
14 had been on the bridge of the Exxon Valdez March 23rd and
15 March 24th, if you had been on the bridge the whole time, it
16 probably wouldn't have grounded?

17 A I would hope so, uh-huh.

18 Q Now, you testified on Friday that you felt Captain
19 Hazelwood took proper actions by calling the Coast Guard to
20 report the spill, is that right?

21 A Yes, ma'am.

22 MR. CHALOS: Your Honor, I object. There was a
23 whole series of things that Captain Hazelwood did, and the
24 question was were those proper, not just -- not just one
25 thing.

1 THE COURT: Objection overruled.

2 BY MS. HENRY: (Resuming)

3 Q You said last Friday that in your opinion Captain
4 Hazelwood took proper action by calling the Coast Guard to
5 report the spill, is that correct?

6 A Yes, ma'am.

7 Q But of course he's required to do that, isn't he?

8 A He doesn't have to, but he's required to.

9 Q He doesn't have to obey the law, but he should, is
10 that right?

11 A Well, they put a little incentive in there so that
12 you will do it, and that's the immunity that they give you.

13 Q He doesn't have to.

14 A He could hide it. He could try to hide it.

15 Q He could certainly hide it, but we would
16 eventually figure it out, wouldn't we?

17 A Oh, yes, uh-huh.

18 Q So it's okay to violate the law, but you really
19 shouldn't.

20 A No, I'm not saying that.

21 Q In this case because he did obey at least one of
22 the regulations that the Coast Guard had set out, you find
23 his action proper, is that correct?

24 A Yes, ma'am.

25 Q Now, you are aware, aren't you -- let's get back

1 to the violations for a moment. You also view other Coast
2 Guard regulations, such as the regulations regarding
3 pilotage, as a joke, don't you?

4 A Yes, ma'am, pilotage in this case, in Prince
5 William Sound.

6 Q You view certain Coast Guard regulations as a
7 joke, don't you, yes or no?

8 MR. CHALOS: Objection, your Honor. No basis for
9 that question, no foundation.

10 THE COURT: Will counsel approach the Bench
11 please.

12 (An off the record Bench conference was had.)

13 THE COURT: Objection overruled.

14 BY MS. HENRY: (Resuming)

15 Q You personally viewed certain Coast Guard
16 regulations, particularly the pilotage regulations in Prince
17 William Sound, as a joke, didn't you?

18 MR. CHALOS: Your Honor, now I object. There was
19 no discussion of other Coast Guard regulations.

20 THE COURT: He can answer the question. Objection
21 overruled.

22 BY MS. HENRY: (Resuming)

23 Q As a joke, didn't you? Yes or no?

24 A Could you repeat the question now?

25 Q You personally view the Coast Guard regulations,

1 specifically the pilotage regulations for Prince William
2 Sound, as a joke, don't you?

3 A The pilotage regulations in Prince William Sound
4 were --

5 Q Yes or no?

6 A -- a joke.

7 Q They were a joke, is that right?

8 A Yes, ma'am.

9 Q In your opinion?

10 A Yes, ma'am.

11 Q And in addition to violating a regulation by not
12 reporting an oil spill, you don't see any problems violating
13 Prince William Sound pilotage endorsement regulations
14 either, do you?

15 MR. CHALOS: Your Honor, that's not the testimony
16 in this case. Miss Henry has been standing here for an hour
17 and a half testifying with a question mark on the end. I
18 think that's improper. And the witness didn't testify to
19 what she just said.

20 THE COURT: This is cross examination, Mr. Chalos.
21 She can do that. Objection overruled.

22 BY MS. HENRY: (Resuming)

23 Q Is that correct?

24 A Come back with that one now? Because there was
25 two of them in there.

1 Q All right.

2 In your view, although it might not be wise, you
3 have no problem with someone violating the Coast Guard
4 regulation regarding reporting oil spills?

5 A I do have a problem with that.

6 Q All right.

7 I thought just a few minutes ago that you
8 indicated when I asked you, well, it's the law, they have to
9 do it, you said, well, it's a good idea to but you don't
10 have to report it.

11 A yeah, but I think you're taking me out of context.

12 Q You said earlier that you don't have to report an
13 oil spill, even though it is the law.

14 A It's the law, you'd better report it.

15 Q But you don't have to?

16 A Of course, you don't have to, but you had better.

17 Q And you also don't have to, in your opinion,
18 follow or obey the pilotage endorsement -- or the pilotage
19 regulations either?

20 A Ma'am, I always obeyed the pilotage regulations.

21 Q But in your view you don't have to?

22 A They were overlay -- an overkill, let's put it
23 that way.

24 Q And so because you feel that it's overkill, you
25 feel you don't necessarily have to obey them, is that

1 correct?

2 A I always obeyed the pilotage --

3 Q I know you always obeyed them, but in your view
4 you don't have to obey them, is that correct?

5 A I always obeyed the regulations, ma'am.

6 Q In fact, didn't you tell me last Thursday night
7 that it is not a violation unless you get caught?

8 A Of what?

9 Q Of the Prince William Sound regulations --
10 pilotage regulations?

11 A That's correct.

12 Q Now you said that you always obeyed the pilotage
13 regulations. By dropping the pilot off at Busby when you
14 did not have Prince William Sound pilotage endorsement, you
15 violated the pilotage regulation, yes or no?

16 A That's like did you stop beating your wife. it's
17 hard to answer with a yes or no.

18 Q The regulations did not allow you to drop the
19 pilot at Busby, did they, when you did not have pilotage
20 endorsement, yes or no?

21 A I had a valid reason to drop him where I did.

22 Q You did not obey the regulations, did you?

23 A I did not.

24 Q Going back to Captain Hazelwood's proper action in
25 reporting the oil spill, are you aware that he didn't even

1 report it until 15 minutes after the grounding?

2 A Yes, ma'am.

3 Q All right.

4 Let's go to what happened after the grounding.

5 THE COURT: Excuse me. Counsel approach the
6 Bench, please. Mr. Madson?

7 (An off the record Bench conference was had.)

8 BY MS. HENRY: (Resuming)

9 Q Let's go again now to after the grounding. One of
10 the areas that you discussed with Mr. Chalos last Friday was
11 the effort to wake up the crew, is that right?

12 A Yes, ma'am.

13 Q All right.

14 Now, in a situation where -- I'm awful dry. Are
15 you? Do you want some water?

16 A No, ma'am.

17 Q Okay.

18 In a situation when you have just hit a reef, you
19 know that you have holed at least ten of your tanks, you
20 know that you have lost at least 12% of your cargo, which is
21 about 100 to 115,000 barrels of crude oil, you don't know if
22 you're going to be coming off the reef or not, and if you
23 do, whether you'll capsize, and you don't know if you remain
24 on the reef, whether you will break up. Don't you think
25 given those facts that it is important that your crew is

1 aware of those dangers and is prepared for it?

2 A That's a judgment call there.

3 Q You don't think, given all --

4 A There's a tradeoff.

5 Q Okay.

6 So given all of these dangers and all of these
7 risks and all of these possibilities, you don't think it's
8 necessarily -- given the circumstances -- important that
9 your crew is aware of the danger?

10 A The crew -- I think he did tell them about the
11 danger, that she was aground.

12 Q My question is, you've hit a reef, you've holed
13 ten tanks, you've lost 12% of your cargo, if you get off the
14 reef you might capsize, if you stay on the reef you might
15 break up. Don't you think that it is important that your
16 crew is aware of that danger?

17 A if you want to get them aware -- you might cause a
18 panic on board, ma'am, by telling them --

19 Q I am not asking how you make them aware, I am just
20 asking you don't you think it is important that they be made
21 aware?

22 A That they are aware that the ship is aground, yes,
23 ma'am.

24 Q Don't you think it important that they be aware of
25 the potential risks?

1 A Well, when you're aground, there is always a
2 potential risk.

3 Q So it is important that they be aware of those
4 risks, is that correct?

5 A I am sure he is not going to go down and tell them
6 exactly every risk. He just --

7 Q Don't you feel that it is important for the crew
8 to be aware of the danger they are in?

9 A Yes, it is important to be aware.

10 Q And don't you think it is important that the crew
11 be prepared for what might happen?

12 A Yes, they should be prepared.

13 Q They can't be aware of the danger if they sleep
14 through it, can they?

15 A No, they can't.

16 Q And they can't be prepared for it if they aren't
17 told exactly what's going on and are told to stay in their
18 rooms, can they?

19 A I don't think they were ever told to stay in their
20 rooms.

21 Q Do you deny that they were told to stay in their
22 rooms? Stand by in their rooms?

23 A I don't remember that testimony, no.

24 Q Now on Friday you talked a little bit and we have
25 talked a little bit today about Captain Knowlton and his

1 maneuver on the Arco Juneau to get around the ice, and I
2 believe last Friday you said that the maneuver or the course
3 that he chose to get around the ice was a very risky
4 maneuver, is that correct?

5 A Yes, ma'am.

6 Q Referring to Plaintiff's Exhibit Number 122 which
7 has been previously identified as a track line that Mr.
8 Kirkreiner reconstructed of the travel of the Exxon Valdez,
9 also including the red sector and including the approximate
10 place of grounding, assuming that the Exxon Valdez is within
11 the red sector, you would consider that a risky maneuver, is
12 that correct?

13 MR. CHALOS: Objection, your Honor. No
14 foundation.

15 THE COURT: Objection overruled. She can ask this
16 witness that question.

17 BY MS. HENRY: (Resuming)

18 Q If it is just below the line of the red sector,
19 you would consider that risky, wouldn't you?

20 A If he waited that long to make that turn, that's a
21 risky maneuver.

22 Q If you are right here within the red sector,
23 that's very risky, is it not?

24 A Oh, yes.

25 Q And what does the red sector mean?

1 A It means a danger area.

2 Q All right.

3 So if you are anywhere within the red sector, you
4 are in a danger area?

5 A The red sector is to alert you that there is
6 danger in that area.

7 Q And it is pretty risky to be in the red sector, is
8 it not?

9 A You bet.

10 Q Very risky, wouldn't you say?

11 A I would think so, sure.

12 Q Now you said earlier in your opinion Captain
13 Hazelwood gave very clear instructions to Mr. Cousins, is
14 that right?

15 A Yes, ma'am.

16 Q And you said that in your opinion, the orders or
17 the instructions were very easy to execute, is that correct?

18 A Yes, ma'am.

19 Q How many rudder angle indicators did you say one
20 can see while standing on the bridge?

21 A Approximately two of them, and if you stand in a
22 certain spot, you can see three.

23 Q All right.

24 Now the one that is on the overhead, can you
25 basically see that from almost any position on the bridge?

1 A Yes, ma'am, uh-huh.

2 Q Then there's one --

3 A On the forward bulkhead.

4 Q Forward bulk. And you can see that from most
5 positions on the bridge?

6 A Yes, ma'am.

7 Q And where is the third one?

8 A The third one would be on the steering stand.

9 Q All right.

10 So you would have to be rather close to that to
11 see that one, is that right?

12 A Yes, ma'am.

13 Q And then there's two, one on each wing?

14 A Yes, ma'am.

15 Q Now, isn't it true that what you are saying is
16 that if Greg Cousins had followed Captain Hazelwood's easy
17 instructions, clear instructions, and if he had watched or
18 checked one of the rudder angle indicators to make sure that
19 his rudder order was being obeyed, the Exxon Valdez would
20 not have gotten into that risky area, would it?

21 A Yes, ma'am.

22 Q And if Mr. Cousins had followed Captain
23 Hazelwood's instructions and had checked one of the rudder
24 angle indicators to make sure his rudder order was being
25 obeyed, the Exxon Valdez would not have hit Bligh Reef,

1 would it?

2 A No, un-un.

3 Q So what you are saying is that because Mr. Cousins
4 did not follow the instructions, or did not make sure that
5 his orders were being obeyed, the grounding was Cousins'
6 fault?

7 A Yes, ma'am.

8 Q And based upon your testimony from last week, in
9 your opinion Captain Hazelwood is not at fault at all?

10 A No, ma'am.

11 Q All right.

12 (Pause.)

13 Okay, sir, showing you what has been marked as
14 Plaintiff's Exhibit Number 26, this again is a portion of a
15 navigational chart for Prince -- or a navigational chart for
16 a portion of Prince William Sound, is that right?

17 A That's right, uh-huh.

18 Q And if I were to tell you that when Mr. Cousins
19 testified in this case, he drew this green line to indicate
20 the edge -- edges, at least, of the ice as he saw it. This
21 little green line just indicates from the edge of the ice to
22 the reef. But the rest of the green indicates the edge of
23 the ice, okay?

24 Now -- excuse me. Let's assume for a moment that
25 you are the captain of the Exxon Valdez, and it is late

1 evening, March 23rd, 1989. It's dark, but the visibility is
2 still a couple of miles. And you are told by one of your
3 mates on watch that there does appear from the radar to be
4 ice in both of the traffic lanes, northbound and southbound.
5 And you decide that you're going to maneuver through the ice
6 for some reason.

7 A Through the ice at night?

8 Q Assume for this hypothetical that you're going to
9 maneuver through the ice, okay?

10 A All right.

11 Q If you are going to maneuver through the ice,
12 you're going to slow down, aren't you?

13 A Yes, ma'am.

14 Q All right.

15 And let's assume that you get right to the leading
16 edge of the ice. You would be on the bridge at that point,
17 would you not?

18 A Yes, ma'am.

19 Q And let's assume that you're in the middle of it,
20 dodging icebergs, you'd be on the bridge, would you not?

21 A Yes, ma'am.

22 Q And let's assume that you get close to the end but
23 you're not completely through it, you'd be on the bridge,
24 wouldn't you?

25 A Yes, ma'am.

1 Q All right.

2 Let's assume the same facts. First, you're the
3 captain of the Exxon Valdez. Second, it's late evening,
4 March 23rd. Third, it's dark but visibility is a couple of
5 miles. And fourth, you're advised of the ice.

6 Let's add to those facts that you instead of
7 decide to go through it, decide to maneuver around the ice.
8 Let's also assume that you are going 11.75 knots, but you
9 have started the load program up which eventually will get
10 you to sea speed in about 40 minutes, is that right?

11 A Yes, ma'am.

12 Q Okay.

13 And you put it in load program up because, I think
14 as you said Friday, you're not being paid to lollygag
15 around, is that right?

16 A Right, uh-huh.

17 Q Okay.

18 Assume also that you are on a course heading of
19 180 degrees. Assume that you are on autopilot at the time
20 you make this decision. Assume that --

21 A Can I -- where am I when I make this decision?

22 Q Why don't you wait. I've got a bunch of facts to
23 give you, okay?

24 A All right.

25 Q Assume that the look out is on the bridge wing

1 rather than on the bow because it is so dark. Assume your
2 draft is 56 feet. Assume you are carrying 1.2 million
3 barrels of crude oil. And assume you are navigating a
4 vessel worth \$150 million. Okay, those are the assumed
5 facts. Do you understand all the assumed facts. i can go
6 over them again.

7 A Yeah, let's go over them one more time.

8 Q You're the captain of the Exxon Valdez. It's
9 evening, late evening March 23rd, dark but visibility is
10 some miles. Ice in both lanes. You've decided to maneuver
11 around the ice. You're going 11.75 knots. But load program
12 up has started. You are on a course heading of 180 degrees.
13 You are on autopilot. The lookout is on the bridge wing
14 rather than the bow because it is so dark. Your draft is 56
15 feet. You are carrying 1.2 million barrels of crude oil.
16 And you are navigating a vessel worth \$150 million. Okay,
17 do you understand those facts?

18 A Right.

19 Q Any question about those assumed facts?

20 A No.

21 Q Is there anything else that you feel that you need
22 to know? Any other facts that you need to assume?

23 A At this point, no.

24 Q Now --

25 (Pause.)

1 All right, assume one more fact, and that is that
2 you are about two-tenths of a mile north of where you're
3 going to be one mile abeam of Busby. So you're up a little
4 bit farther north. All right, assume you're in that
5 position. In that position, given all the facts that I have
6 given you, you would be on the bridge, wouldn't you?

7 A Yes, ma'am.

8 Q And assuming you are now abeam, about to make a
9 turn, you would be on the bridge, would you not?

10 A If I hadn't instructed the mate, I would be on the
11 bridge.

12 Q You would be on the bridge, is that correct --

13 A Yes, ma'am.

14 Q -- during this maneuver?

15 A Yes, ma'am.

16 Q But assume for some reason, the turn was not
17 executed and you are in the red sector, you would be on the
18 bridge, wouldn't you?

19 A Yes, ma'am.

20 Q And assume that you're even further into the red
21 sector, but now a turn is finally being made. You would be
22 on the bridge, wouldn't you?

23 A Yes, ma'am.

24 Q And just before it hit Bligh Reef, you would be on
25 the bridge, wouldn't you?

1 A Yes, ma'am.

2 Q All right.

3 Now, another thing that you testified about on
4 Friday was your opinion with respect to what Captain
5 Hazelwood was doing after he restarted the engines, is that
6 correct?

7 A What's that?

8 Q You gave some opinions as to what Captain
9 Hazelwood did after the grounding, is that correct?

10 A Yes, ma'am. Uh-huh.

11 Q All right.

12 Once the Exxon Valdez was in fact grounded and
13 after Captain Hazelwood returned to the bridge and after he
14 shut down the engines, he eventually decided to restart the
15 engines, is that correct?

16 A Yes, ma'am.

17 Q And in your opinion, after restarting the engines,
18 in your opinion he has trying to stay on the reef, is that
19 correct?

20 A Yes, ma'am.

21 Q And that opinion, that he was trying to stay on
22 the reef, is based upon the fact that he was using the
23 engine moving forward?

24 A Uh-huh.

25 Q And the fact that the tide was rising, is that

1 correct?

2 A Yes, ma'am.

3 Q And you really don't know what his purpose was in
4 turning the rudder back and forth, do you?

5 A Well, I have since found out, but at the time I
6 testified, I didn't know its purpose.

7 Q And in fact when you talked to me about it, you
8 said you couldn't figure out why he was doing that.

9 A Right. I wasn't there, so I don't --

10 Q Yeah.

11 A Uh-huh.

12 Q So that wasn't a factor in your decision that he
13 was getting on the reef?

14 A No.

15 Q It was going ahead and the tide coming in?

16 A Right.

17 Q Now, let's assume that Captain Hazelwood had all
18 the informa -- at the time he decided to restart the
19 engines, Captain Hazelwood had all the information that you
20 know he had, including information from Mr. Kunkel. Let's
21 also assume that he did not know that he could not get off
22 the reef. And let's assume that he decided that he wanted
23 to try to get off the reef anyway. And he decided that he
24 would try to get off the reef by going forward rather than
25 astern. In your opinion, that would have been the wrong

1 thing to do, is that right?

2 A Yes, ma'am.

3 Q in fact, Captain Hazelwood could have caused more
4 damage to his vessel by doing that, couldn't he?

5 A Yes, ma'am.

6 Q And assuming that he had been able to get off the
7 reef, and assuming that it did not cap -- the vessel did not
8 capsize, you would not have wanted to be floating around in
9 that vessel in the condition it was in, would you?

10 A I have no problem with that.

11 Q You have no problem with it floating in that
12 condition?

13 A I would best be on there when it's intact, but I
14 have no problem with that thing floating around the way it
15 was.

16 Q All right.

17 So you recall telling me that you wouldn't want to
18 be -- you personally would not want to be floating around
19 Prince William Sound in a vessel in that condition, is that
20 correct?

21 A Nobody would want to do that.

22 Q All right.

23 THE COURT: Miss Henry, we've been going about an
24 hour and a half, and you're not -- doesn't sound like you're
25 just about done, so why don't we take our break now.

1 MS. HENRY: That's fine; thank you.

2 THE COURT: Don't discuss the matter, ladies and
3 gentlemen, among yourselves, or with any other person. Do
4 not form or express any opinions. We'll call you back after
5 our break.

6 THE CLERK: Please rise. The Court stands in
7 recess subject to call.

8 (Whereupon, the Court stood in recess from 10:05
9 o'clock a.m. until 10:20 o'clock a.m.)

10 THE COURT: You may resume.

11 BY MS. HENRY: (Resuming)

12 Q Sir, do you know that most of the Federal
13 regulations including these Coast Guard regulations are in
14 books that are called the CFR?

15 A Yes, ma'am.

16 Q Sir, showing you what has been and marked as
17 Plaintiff's Exhibit 56 and admitted, which one of the
18 earlier witnesses testified shows some books that were on a
19 bookshelf on the Exxon Valdez, do you see any of the CFR's
20 on that bookshelf?

21 A Yes, ma'am.

22 Q I believe on direct you stated that you are
23 charging \$500 a day for your services, is that right?

24 A Yes, ma'am.

25 Q That includes the time you spent in San Diego?

1 A Yes, ma'am.

2 Q And the time you spent reviewing documents and
3 transcripts?

4 A Yes, ma'am.

5 Q And also the time that you've been up here in
6 Anchorage?

7 A Yes, ma'am.

8 Q Have you actually billed Mr. Chalos yet?

9 A No, I haven't.

10 Q Do you know how much your total expenses are going
11 to -- your charges and expenses are going to be?

12 A Including today, be about \$6,500.

13 Q And does that include expenses or is that just
14 your --

15 A No, the expenses were paid up -- they were already
16 paid out.

17 Q All right.

18 So the \$6,500 is just your fee?

19 A That's profit, yes, ma'am.

20 Q And then he is also paying your expenses, is that
21 correct?

22 A Yes, ma'am.

23 Q On top of the \$6,500?

24 A I don't even see the expenses.

25 Q Now -- I'm trying to find where I stopped at the

1 break here.

2 All right, we were talking before the break about
3 your opinion that Captain Hazelwood was trying to stay on
4 the reef instead of getting off the reef. If, in your
5 opinion, Captain Hazelwood had really wanted to try to get
6 off the reef, I believe you stated that he would have
7 ordered the engine full astern, backwards, right?

8 A Yes, ma'am.

9 Q And I think that's because -- I think you
10 testified on Friday that's because he would have known he
11 had come from deep water to shallow water by going forward,
12 is that correct?

13 A Yes, ma'am.

14 Q That's assuming that that's how the Exxon Valdez
15 actually grounded, going from deep water forward to shallow
16 water, is that correct?

17 A Yes, ma'am.

18 Q Sort of like a nose into the grounding?

19 A Yes, ma'am.

20 Q Now, assuming however, that the grounding in this
21 case occurred with -- while not going exactly straight
22 forward, but starting a turn when it grounded, okay?

23 A Yes, ma'am.

24 Q And assume that it wasn't in fact grounded on the
25 bow, but rather midships and more towards the starboard

1 side, okay?

2 A Yes, ma'am.

3 Q Additionally, assume that the charts -- one he got
4 a fix of his position after grounding, the charts showed --
5 the charts that he had available, showed that there was only
6 5 fathoms behind him, okay. And finally assume that Captain
7 Hazelwood thought he was hung up on the stern. In that
8 situation it would not make much sense to go astern, would
9 it?

10 A Not -- I don't know what you're driving at, ma'am.

11 Q Assuming that he is hung up astern.

12 A Uh-huh.

13 Q And that he knows that he has only got 5 fathoms
14 behind him.

15 A Uh-huh.

16 Q It wouldn't make much sense to go backwards, would
17 it?

18 A No.

19 Q Because he would do more damage, wouldn't he?

20 A Probably.

21 Q Create more risk, wouldn't he?

22 A Yes, ma'am.

23 Q Now, assuming that you were on the bridge, not
24 Captain Hazelwood, and you wanted to stay on the reef, isn't
25 it true that you would have either, one, done nothing -- is

1 that one of the alternatives?

2 A That's one of the options.

3 Q Or with the tide coming in you might have gone
4 ahead a little and maybe done a slight rudder turn, is that
5 correct?

6 A I don't know about the rudder, but I would have
7 come ahead on the _____.

8 Q All right.

9 So you would have gone -- with the tide coming in,
10 you would -- you might have gone ahead a bit?

11 A Yes, ma'am.

12 Q And if you did go ahead a bit, you would have gone
13 slow or half ahead, is that correct?

14 A I would have gone ahead, I don't know what I would
15 have done. Probably slow or half.

16 Q You would not have gone full ahead, would you?

17 A I could have. I don't see any reason why I
18 wouldn't, but I don't think I would have.

19 Q You don't think you would have?

20 A No, un-un.

21 Q You think you probably would have gone slow or
22 half ahead, is that right?

23 A Yes, uh-huh.

24 Q All right.

25 I would like to go back to your opinion just for a

1 moment that Captain Hazelwood was trying to stay on the
2 reef. Your opinion ignores what he told other people that
3 night, doesn't it?

4 A No.

5 Q It ignores what he told Commander McCall that
6 night, doesn't it?

7 A No.

8 Q Sir, showing you what has been marked as Court's
9 Exhibit Number 2, which has been identified as a transcript
10 of radio traffic between the Exxon Valdez and the Coast
11 Guard, going specifically to a conversation between Captain
12 Hazelwood and the Captain of the Port, Commander McCall, I
13 would like you to read the conversations, including what
14 Captain Hazelwood said and what Commander McCall said in
15 response, starting with Captain McCall identifying himself.
16 Why don't you go ahead.

17 A All right.

18 This is the Captain of the Port, Commander McCall.
19 Good evening. Do you have any more of an estimate as to
20 what your situation at this time? Over.

21 Not at the moment, Steve. Joe Hazelwood here --
22 or a little problem here with the third mate, but we're
23 working our way off the reef. We've -- uh, the vessel's
24 been holed and, uh, we are ascertaining -- right now we are
25 trying to just get her off the reef and, uh, we'll get back

1 to you as soon as we can. Over.

2 Q All right, before you continue on, and we'll let
3 you continue -- in that conversation Captain Hazelwood says,
4 we are working our way off the reef, is that correct?

5 A That's correct.

6 Q And he is also saying, right now we are trying to
7 just get her off the reef, is that correct?

8 A That's correct.

9 Q Now, that doesn't mean get her on the reef, does
10 it?

11 A That's correct.

12 Q And it doesn't mean we are working our way to get
13 her on the reef, does it?

14 A That's correct.

15 Q All right.

16 Why don't you continue with Captain McCall, or
17 Commander McCall's response?

18 A Roger on that. Yeah, I've got -- we've got all
19 our plan mechanisms in way to give you what assistance we
20 can. You know, take it slow and easy, and you know I'm
21 telling you the obvious, but take it slow and easy, and
22 we're getting help out as fast as we can. And I'd
23 appreciate when you get around, if you can give me a fairly
24 good -- if you can give me an update whenever -- whenever as
25 to the general location where you suspect it might be and of

1 the stability info. Over.

2 Okay. We're, uh, pretty good shape right now,
3 stability-wise. We are just trying to extract her off the
4 shoal here and you can probably see me on your radar and
5 once we get underway, I'll let you know. Do another damage
6 control assessment. Over.

7 Q All right.

8 And again, I'll let you continue, but before you
9 do, Captain Hazelwood tells Commander McCall, we're just
10 trying to extract her off the shoal here, is that correct?

11 A That's correct.

12 Q It doesn't say, we're trying to put her on the
13 shoal here, does it?

14 A That's correct.

15 Q Why don't you continue with Commander McCall's
16 response?

17 A Roger, yeah. And let me know again before you
18 make any drastic attempt to get underway, you make sure you
19 don't start doing any ripping. You got a rising tide. You
20 got about another -- about an hour and a half worth of tide
21 in your favor. Once you hit that max, I wouldn't recommend
22 doing much wiggling. Over.

23 Okay, yeah. I think it's major damage has kind of
24 been done. We kind of rock and rolled over it, and we're
25 just kind of hung up in the stern here. We're just -- uh,

1 we'll drift over it. I'll get back to you. We'll be
2 standing by 1316. That's on Valdez clear.

3 Q All right.

4 And Captain Hazelwood in that last conversation
5 says, we're just -- we'll drift over it. He's referring to
6 the reef, is that correct?

7 A That's correct.

8 Q And he's not saying we're going to drift on it,
9 does he?

10 A No, he doesn't.

11 Q Your opinion that Captain Hazelwood was trying to
12 stay on the reef also ignores what he told Trooper Fox, is
13 that correct?

14 A I don't know what he told Trooper Fox.

15 Q Okay.

16 I assume then that Mr. Chalos did not give you a
17 transcript of the Defendant's -- of Captain Hazelwood's
18 interview with Mr. DeLozier and Trooper Fox, is that right?

19 A That's correct.

20 Q He did not give you a copy of that?

21 A No, un-un.

22 Q Showing you what's been marked as Court's Exhibit
23 Number 4, referring to specifically I believe page 5 -- if I
24 can get my notes.

25 A I have seen this paper before.

1 Q Oh, you have?

2 A Yes, ma'am.

3 Q So --

4 A I didn't know who it was, but I had seen this.

5 Q Oh, I'm sorry; okay.

6 So you have read that transcript?

7 A Yes, uh-huh. This page, just the page.

8 Q Oh, just that one page?

9 A Right.

10 Q Okay.

11 If you look at the front of it, does it indicate
12 at the front that MD is Mark DeLozier and MF is Trooper Mike
13 Fox, and JH is Joseph Hazelwood?

14 A Yes, ma'am.

15 Q Okay.

16 So does it appear that it's an interview with Mr.
17 DeLozier, Trooper Fox, and Captain Hazelwood?

18 A Yes. And somebody else, too. I don't --

19 Q And unidentified male? Okay.

20 Going now to page 5 of that interview, why don't
21 you start with Mr. DeLozier's question as to what he did
22 when he arrived on the bridge, and then read Captain
23 Hazelwood's response?

24 A Okay.

25 All right. All right, when you arrived on the

1 bridge, did you do anything else at that time?

2 Oh, I was -- I tried the rudder and the engines
3 for a few minutes to see if we could extract it from the
4 situation. But then I got my faculties about me. I was a
5 little upset, of course, but then I thought about it and
6 driving her off might not be the best way to go because it
7 just exacerbate the damage, so I just stopped the engines.

8 Q All right.

9 So he tells Mr. DeLozier and Trooper Fox that
10 initially he tried the rudder and engines for a few minutes
11 to, quote, see if we could extract it from the situation, is
12 that correct?

13 A That's correct.

14 Q And he does not say, see if we could put it on the
15 reef, does he?

16 A No, he doesn't.

17 Q And then he says later on he decides that driving
18 her off is not going to be a good idea, is that correct?

19 A That's correct.

20 (State's Exhibit Number 175 is
21 marked for identification.)

22 Q Sir, I will show you what has been marked as
23 State's Exhibit for Identification 175. I assume you are
24 not familiar with that document, are you?

25 A No, I am not familiar.

1 Q All right.

2 At the top of that document does it refer to an
3 investigative report?

4 A Yes, ma'am.

5 Q By whom?

6 A Jim Stogsdill.

7 Q Okay.

8 And in the first paragraph, if you want to just
9 read that to yourself, maybe that will help you recognize
10 what this document --

11 MR. CHALOS: Objection, your Honor, it's hearsay.

12 MS. HENRY: I'm asking him to read it to himself.

13 THE COURT: Did you understand the question before
14 you --

15 MR. CHALOS: No, I didn't. I didn't realize he
16 was supposed to read it to himself.

17 THE COURT: So you withdraw your objection?

18 MR. CHALOS: I withdraw the objection.

19 THE WITNESS: Okay.

20 BY MS. HENRY: (Resuming)

21 Q Does that help you figure out what this document
22 pertains to?

23 A I take it this was on a speaker phone?

24 Q I believe he says so, yes. Well, he doesn't, but
25 yes, assume it was.

1 A And all these people right here were on one side
2 and Mr. Paul Meyers was on the other side?

3 Q Yes, you can assume that.

4 A Okay.

5 Q Does that appear to be a summary of a telephonic
6 interview with Mr. Paul Meyers?

7 MR. CHALOS: Your Honor, I object. If the witness
8 doesn't recognize the document, he shouldn't speculate.

9 THE COURT: Do you recognize the document?

10 THE WITNESS: No, sir, I have never seen it
11 before.

12 THE COURT: I don't understand the point of
13 inquiry.

14 MS. HENRY: I'll ask another question. Maybe
15 that'll help, your Honor.

16 THE COURT: Okay. We'll take one more question
17 and see if we can --

18 BY MS. HENRY: (Resuming)

19 Q All right.

20 Now, your opinion that Captain Hazelwood was
21 trying to stay on the reef ignores what Captain Hazelwood
22 told Paul Meyers, is that correct?

23 A I don't know. I don't -- all I have is this first
24 paragraph. I don't know what -- who even -- who Paul Meyers
25 is.

1 Q Let's assume that Captain Hazelwood told Mr. Paul
2 Meyers and that Mr. Paul Meyers testified in this Court,
3 quote, Hazelwood indicated to me that he thought that he
4 could get the ship off the reef.

5 A When did he indicate that? When did that
6 conversation take place?

7 Q The testimony would be that the conversation took
8 place between 1:30 and 2:00 a.m., all right?

9 A Okay, uh-huh.

10 Q Now, assuming that Mr. Meyers told the truth when
11 he testified that -- in this Court -- Hazelwood indicated to
12 me that he thought he could get the ship off the reef, your
13 opinion that Captain Hazelwood was trying to get it on the
14 reef does not take into account that comment, does it, to
15 Mr. Meyers?

16 A Well, I didn't know of it at the time.

17 Q Well, now you do.

18 A Yes, ma'am.

19 Q Your opinion is still the same, he was trying to
20 get it on the reef, is that correct?

21 A Yes, ma'am.

22 Q So your opinion ignores the comment he made to Mr.
23 Meyers that he thought he could get it off the reef?

24 MR. CHALOS: Your Honor, I object. I think that
25 this is a mischaracterization of Mr. Meyer's testimony. He

1 gave a long explanation of what he thought Captain Hazelwood
2 was saying to him. It wasn't just, I'm trying to get off
3 the reef. He talked about tug boats and salvage, things
4 like that, if I recall the testimony correctly. So if Miss
5 Henry is going to read a portion of this testimony, then I
6 ask that that portion be read in its entirety.

7 THE COURT: I don't believe that's required, Mr.
8 Chalos, for this type of questioning. Overruled.

9 BY MS. HENRY: (Resuming)

10 Q Now that you know what Captain Hazelwood said to
11 Mr. Meyers, you still have the opinion that Captain
12 Hazelwood was trying to stay on the reef, is that correct?

13 A Let me set the scene straight. Now, I assume that
14 Captain Hazelwood is making a telephone conversation to this
15 Mr. Meyers at 1:30 in the morning on the date of the
16 accident?

17 Q You can assume that the conversation occurred. I
18 believe Mr. Meyers actually called. But at any rate, it was
19 a conversation over the COMSAT --

20 A Over the satellite communication?

21 Q Yes.

22 A Okay.

23 Q Between Captain Hazelwood and Mr. Meyers.

24 A Uh-huh.

25 Q Okay.

1 A At about 1:30 in the morning?

2 Q And assume that Captain Hazelwood said that he
3 thought he could get the ship off the reef.

4 A Uh-huh.

5 Q Now, that still doesn't change your opinion that
6 he was trying to keep it on the reef, does it?

7 A No, ma'am, un-un.

8 Q Assume that the conversation took place a little
9 bit later in the morning, say after he had stopped the
10 engines, say about 10 minutes after he had stopped the
11 engines, does that change your opinion?

12 A No, it doesn't.

13 Q Now, of course, all of this discussion about
14 whether Captain Hazelwood was trying to get on the reef or
15 trying to get off the reef would be moot if Captain
16 Hazelwood's vessel never struck the reef, is that correct?

17 A That's correct.

18 Q Because isn't it true that if Captain Hazelwood
19 had been on the bridge when he was supposed to be, on March
20 23rd and March 24th, the Exxon Valdez would never have hit
21 Bligh Reef, would it?

22 MR. CHALOS: Objection, your Honor. Speculation.

23 THE COURT: Objection overruled.

24 BY MS. HENRY: (Resuming)

25 Q It never would have hit Bligh Reef, would it?

1 A Ma'am, I disagree with that supposed to be part,
2 but if Captain -- if Captain Hazelwood was on the bridge
3 during those maneuvers, this accident wouldn't have
4 happened.

5 MS. HENRY: That's all the questions I have, your
6 Honor.

7 REDIRECT EXAMINATION

8 BY MR. CHALOS:

9 Q Good morning. Good morning, Captain Walker.

10 A Good morning.

11 Q Captain, do the captains of ships such as the
12 Exxon Valdez stand a regular watch?

13 A No, they don't.

14 Q They come and go to the bridge as deemed by the
15 circumstances and in their own discretion, isn't that
16 correct?

17 A That's correct.

18 Q I'd like to talk for a minute about the 14 hours
19 that you were off the bridge that time.

20 MR. CHALOS: Your Honor, may I approach the
21 Witness?

22 BY MR. CHALOS: (Resuming)

23 Q Your testimony is that when you left the bridge,
24 you left instructions with the third mate, as best as you
25 can recall, to stay in this particular box?

1 A Yes, ma'am. Yes, sir.

2 Q And at that time you said the wind was blowing
3 pretty hard?

4 A Very hard.

5 Q Okay.

6 And you said you drew the box on the chart for him
7 and told him to stay within this particular area.

8 A Uh-huh.

9 Q Now, you left for what turned out to be 14 hours,
10 right?

11 A Right.

12 Q There had been three watch changes in that 14
13 hours, were there not?

14 A Probably four. I think he was into -- about more
15 than halfway into his watch, the first.

16 Q Okay.

17 So you don't know what that mate told the other
18 mate that came up on watch as to what your instructions
19 were?

20 A That's what scares me.

21 Q Right.

22 And then you didn't know what that particular mate
23 said to the third mate, meaning the third person that came
24 up on watch?

25 A Uh-huh.

1 Q So your orders were passed down at least three,
2 possibly four times?

3 A Well, there were only three fellows.

4 Q Okay.

5 At least three times?

6 A Right.

7 Q Okay.

8 Now, if for instance, the vessel is coming in this
9 direction with the wind blowing, you were down below
10 sleeping, if the mate doesn't make a turn when he is
11 supposed to, you're going to wind up on Hinchinbrook Island?

12 A That's correct.

13 Q If the mate going this way doesn't make the turn
14 as he is supposed to, you're going to wind up here at
15 Knowle's Head?

16 A That's correct.

17 Q If the mate doesn't turn when he comes in here,
18 you could wind up over here at Elinor Island?

19 A That's correct.

20 Q The fact of the matter is, anything could have
21 happened while you were off the bridge?

22 A That's correct.

23 Q And but for the grace of God, you might be sitting
24 here, right?

25 A You bet.

1 Q In the Defendant's chair.

2 A Uh-huh.

3 Q You were loaded at the time, were you not? The
4 vessel was loaded?

5 A Fully loaded.

6 Q Now, when you gave the mate the orders that you
7 gave him and left the bridge, you believed that he was going
8 to carry them out, did you not?

9 A I did.

10 Q And if you were below and the mate said to you,
11 Captain, I just come to the corner of the box, I'm starting
12 my turn to the north or to the south depending on which way
13 he was turning, you would believe that he did that, would
14 you not?

15 A Yes.

16 MS. HENRY: Objection. Calls for facts not in
17 evidence. He did not receive any calls.

18 THE COURT: Okay, just hypothetical questions.
19 I'll let you on.

20 BY MR. CHALOS: (Resuming)

21 Q Now, when you told the third mate to make at least
22 four turns in this box, right --

23 A Well, my intention was for him to just go back and
24 forth. Just turn the vessel 180 and come back.

25 Q So he had to make at least two course changes?

1 A Well, depends on how long it took him to get
2 across the box. She was stopped. The wind was just pushing
3 her.

4 Q Okay.

5 You fully expected that he would carry those
6 orders out, did you not?

7 A Yes, uh-huh.

8 Q And you fully expected the third mate to be
9 capable of turning the vessel around 180 degrees, did you
10 not?

11 A Yes.

12 Q Third mates are qualified to do that by the
13 license that they are issued, are they not?

14 A Surely.

15 Q And the training that they might have?

16 A Sure.

17 Q Now, Mr. -- I'm sorry, Miss Henry said to you that
18 when the Captain left the bridge, he was steering course
19 1-8-0 that would bring him towards Bligh Reef?

20 A Okay.

21 Q You remember that?

22 A Uh-huh.

23 Q Okay.

24 When you are coming out of the port of Valdez, you
25 are steering a course of about 2-7-0?

1 A Uh-huh.

2 Q If you don't make a course change at some point,
3 you're going to wind up on the other end, right?

4 A That's correct.

5 Q You're going to wind up on the rocks?

6 A Right.

7 Q Okay.

8 Similarly, when you are steering down the Valdez
9 Arm at course 2-1-9, that's the recommended course?

10 A Right.

11 Q If you don't change course at some point, you're
12 going to wind up over here at Naked Island, are you not?

13 A That's correct.

14 Q You're going to wind up on the rocks?

15 A Right.

16 Q The point is that every course is going to take
17 you to land at some point or another?

18 A That's correct.

19 MS. HENRY: Objection, leading.

20 BY MR. CHALOS: (Resuming)

21 Q Unless there is a course change.

22 THE COURT: Objection sustained, Mr. Chalos.

23 MR. CHALOS: Oh, I beg your pardon.

24 THE COURT: No more leading questions.

25 MR. CHALOS: Okay.

1 BY MR. CHALOS: (Resuming)

2 Q Now, Captain Walker, you mentioned that under
3 certain circumstances that you stay on the bridge in Prince
4 William Sound, is that correct?

5 A That's correct.

6 Q Is it your preference to stay on the bridge? Is
7 that a personal preference of your's?

8 A You mean at what point in time in the transit?

9 Q At any -- well, do you stay on the bridge the
10 entire transit when you were sailing up there?

11 A You mean from the dock all the way to
12 Hinchinbrook?

13 Q Yes.

14 A No, un-un.

15 Q Have you left the bridge in Prince William Sound?

16 A Yes, I have.

17 Q Is that a practice that was common up there,
18 captain's leaving the bridge?

19 MS. HENRY: Objection, beyond the scope -- or
20 foundation.

21 THE COURT: You can lay a foundation if you want
22 to ask this question. Objection sustained.

23 MR. CHALOS: I'll try.

24 BY MR. CHALOS: (Resuming)

25 Q Do you --

1 MR. CHALOS: Well, I'll withdraw the question,
2 your Honor.

3 BY MR. CHALOS: (Resuming)

4 Q But you yourself have left the bridge in Prince
5 William Sound?

6 A While the pilot was on board, yeah. Uh-huh.

7 Q have you left the bridge at other times?

8 A Only that one time, for the 14 hours.

9 Q Now, would you -- would you have any hesitation in
10 leaving the bridge if you felt it necessary in Prince
11 William Sound?

12 A No.

13 Q What would -- what would be the criterion that you
14 would use before you would leave the bridge?

15 A There would be a million things that could come up
16 that would require my attention somewhere else, and seeing
17 as how it's in wide open waters, I wouldn't hesitate to
18 leave the mate on watch and, hey, call me if you need me,
19 and go down and take care of the matter.

20 Q Would your knowledge of a particular play into --
21 or any mate play any role in whether you left the bridge or
22 not?

23 A Oh, yeah.

24 Q And if you felt comfortable with the mate, would
25 you leave the bridge?

1 A Sure.

2 Q If you needed to?

3 A Sure.

4 Q Now, we spoke a little bit about Mr. Cousins.

5 You've had an opportunity to review his testimony?

6 A Yes, I have.

7 Q And you had the opportunity to review other
8 people's testimony that spoke about Mr. Cousins?

9 A Yes, uh-huh.

10 Q Do you have an opinion as to his qualifications
11 and abilities?

12 A Well, the Coast Guard says he is competent.

13 Q As a second mate?

14 A As a second mate.

15 The -- Mr. Kunkel had called -- he used some
16 superlative word, I forget the exact word that he used, but
17 he had high praise for him. And of course, I haven't
18 reviewed any testimony from what Captain Hazelwood thought
19 personally.

20 Q Mr. Cousins also had experience steering, did he
21 not?

22 A Yes, he did.

23 Q Based on what you read?

24 A Yes, uh-huh.

25 Q Do you remember how long he was an AB?

1 A I think somewhere in the neighborhood of about 10
2 years.

3 Q Now, sir, I would like to speak a little bit about
4 your resume that was referred to.

5 A Uh-huh.

6 Q Did anyone ask you to write anything in particular
7 in that resume?

8 A No, un-un.

9 Q Were you instructed to write the last paragraph
10 that Miss Henry referred to?

11 A Not at all.

12 Q You mentioned Exxon in the last paragraph. Why
13 did you mention Exxon?

14 A Well, because I had received several commendations
15 from them and I thought that was important, qualifying me as
16 a capable master mariner.

17 Q Now, you didn't work for Exxon as an employee, did
18 you?

19 A No.

20 Q What was your relationship with them?

21 A I worked on a ship that was chartered to Exxon,
22 and by being either a master or chief engineer, they
23 required the company to get pre-approval on who they put on
24 those ships as master and chief engineer. In other words,
25 they wanted a say in the matter. They just didn't want any

1 person to be master or chief engineer.

2 Q When was the last time your vessel was chartered
3 to Exxon when you were on as Captain?

4 A Right when I -- right as soon as I got off, we
5 were still chartered --

6 Q In 1985?

7 A Right, uh-huh.

8 Q And how long had you been on charter to Exxon with
9 you as master?

10 A Okay.

11 On the Exxon -- I mean on the Bay Ridge, we were
12 chartered from '82 to -- we had a three year charter on that
13 one. And then on the New York previous to that, I had also
14 been on an Exxon charter once before. So I think that is
15 where they knew me from when they got around to the Bay
16 Ridge, they just pre-approved me.

17 Q Okay.

18 Now, you spoke about how different ships react
19 differently depending on the load, the type of engine, the
20 speed, the rudder applied, is that correct?

21 A The same ship will act differently in different
22 trims, you might say.

23 Q Now, as far as the actions of a captain in a
24 particular situation, is there much of a difference with
25 respect to a ship that's, let's say, 222,000 tons or 250,000

1 tons, and one that's 209,000 tons?

2 A No, they are very similar in size. Probably the
3 automation, maybe how much equipment on the bridge. He had
4 far more equipment than we had on our bridge.

5 Q So when you were asked to critique Captain
6 Hazelwood's actions, you are speaking as a master who's been
7 in the area, has been on ships the size of the Exxon Valdez
8 and larger, and you're speaking about what a captain would
9 do, not what his ship might do?

10 A Yes. I've walked several thousand miles in
11 Captain Hazelwood's shoes.

12 Q Just jumping around a little bit, Miss Henry asked
13 you about the sailing board, and she asked you if the
14 captain was off, if he wanted to know the sailing time, all
15 he had to do was call. In your experience, is there any
16 particular reason to call once you know what the sailing
17 time is when you leave the ship?

18 A No. What we do is we post two different kinds of
19 boards. It was my custom to do it and the union required
20 it, that first you posted an estimated sailing board, and
21 that was your best guess when you first got there, if we
22 take this amount of time with the ballast and this amount of
23 time with cargo, this is about what time we're going to
24 sail. Then 8 hours before you sail, you post a permanent
25 board, and that one is -- you can sail one hour before that,

1 but you never change the board. You leave it at that. But
2 the union says they have to be on board one hour -- the crew
3 has to be on board one hour before sailing. And that gives
4 the mate, in case things don't really go the way he wants to
5 -- in fact, they go better -- that he has that latitude to
6 sail up to one hour before the sailing board and not have to
7 pay for the crew being stranded if they don't make it back.

8 Q Well, in this particular case, the evidence says
9 when Captain Hazelwood left the ship, the sailing board was
10 at 2200, or 10:00 p.m. Did you read anything that would
11 lead you to believe that Captain Hazelwood should have
12 checked to make sure that it wasn't moved up or that he had
13 some indication that the sailing board would be moved up?

14 A No, no indication.

15 MS. HENRY: Objection, your Honor. States facts
16 not in evidence. The sailing board was 9:00 p.m., not 10:00
17 p.m.

18 THE COURT: Mr. Chalos?

19 MR. CHALOS: Your Honor, I think the testimony was
20 that it was set at 9:00 o'clock. When Captain Hazelwood got
21 to the agent's office, it had been changed to 10:00 o'clock,
22 and he was told that. I think that is what the testimony
23 has been.

24 THE COURT: I don't recall specifically. I'm
25 going to overrule the objection and the witness can answer

1 if he can.

2 MR. CHALOS: I think he has already answered.

3 THE COURT: I didn't hear the answer.

4 THE WITNESS: I don't remember the question.

5 BY MR. CHALOS: (Resuming)

6 Q The question was, did you read anything that would
7 lead you to believe that Captain Hazelwood knew that the
8 sailing board was moved up to 9:00 o'clock from 10:00
9 o'clock?

10 A No.

11 Q I would like to speak to you a little bit about
12 the maneuvers that the Arco Juneau made, Captain Knowlton,
13 and you stated that you believe that his maneuver was risky.
14 Would you tell us why that was your opinion?

15 A Because he -- I really hate to, you know, pass
16 judgment on some other master's -- you know, what he did.

17 Q Why is that? I mean, why do you hate to pass --

18 A Well, I don't like to be a Monday morning
19 quarterback. But I --

20 Q Well, using hindsight, why do you believe that
21 Captain Knowlton's maneuver was risky?

22 A Well, he should have approached that reef at a
23 better angle.

24 Q In what way?

25 A Well, he was headed directly for that reef, and he

1 got really too close for comfort, for me anyway, before he
2 started his turn. If he had done like Captain Hazelwood and
3 started further back to line himself up, he would have
4 approached at a much shallower angle, and been a whole lot
5 better position.

6 Q Well, how much of a course change did Captain
7 Knowlton have to make in order to maneuver...

8 (Start Tape C-3669)

9 Q Well, how much of a course change did Captain
10 Knowlton have to make in order to maneuver around Bligh
11 Reef?

12 A Well, if he was on 175 and he wanted to say to
13 come to 225, or I don't know what course change he made,
14 that would be a 50 degree course change at the very minimum
15 that I see there.

16 Q And what kind of course change did Captain
17 Hazelwood want to make?

18 A Well, I think Captain Hazelwood probably had about
19 --

20 MS. HENRY: Objection; calls for speculation.

21 THE COURT: He can give his opinion, just his
22 opinion. It is not based on what he has heard from anybody
23 else.

24 BY MR. CHALOS: (Resuming)

25 Q In your opinion, how much of a course change would

1 Captain Hazelwood's ship have to make to do what Captain
2 Hazelwood want?

3 A Well, if he's --

4 MS. HENRY: Objection again as to the to do what
5 Captain Hazelwood would want. That's speculation.

6 THE COURT: You're going to have to rephrase your
7 question. Objection sustained.

8 MR. CHALOS: I'll withdraw the last question.
9 I'll rephrase it.

10 BY MR. CHALOS: (Resuming)

11 Q In your opinion, what type of course change would
12 the Exxon Valdez have to make in order -- at Busby, yes,
13 abeam of Busby, in order to get back into the shipping lanes
14 -- into the TSS lanes?

15 A What type of course change or a quantitative -- do
16 you want a quantitative number?

17 Q Yes.

18 A Well, he was heading at 1-8-0, and just by eye,
19 maybe 220 -- I'll put him on the same course, 225. He only
20 had to make a 45 degree course change.

21 Q And what would have been the difference between
22 the two?

23 A Well, the difference is Captain Hazelwood would
24 have passed further away from -- what do you call it --
25 Bligh Reef.

1 Q Now, do you have any opinion as to the speed that
2 Captain Knowlton was doing at the time he made his maneuver?

3 A He was doing 16 knots.

4 Q When you say it was a risky maneuver, what
5 precisely do you mean?

6 A Well, he got right up close. I mean, he is
7 staring it in the face before he made that course change.
8 It was -- he didn't leave any sea room, there was no margin
9 -- I wouldn't say no margin for error, but the margin for
10 error was -- it was very tight there.

11 Q How do you compare that maneuver with what Captain
12 Hazelwood intended to do?

13 A Well, again as I said Friday --
14 MS. HENRY: Objection as to the form of the
15 question, what Captain Hazelwood intended to do. It's
16 speculation.

17 MR. CHALOS: Your Honor, I think we have plenty of
18 evidence as to what Captain Hazelwood's intent was.

19 THE COURT: No, sir. The objection is sustained.
20 You'll have to rephrase your question.

21 MR. CHALOS: All right.

22 BY MR. CHALOS: (Resuming)

23 Q How do you compare that maneuver with the maneuver
24 testified to by the -- by Third Mate Cousins as to what he
25 had been instructed to do?

1 A Well, the third mate was instructed to turn at
2 Busby Island, when he got abeam of Busby Island, and come
3 back into the Traffic Separation Scheme. And there was --
4 Captain Hazelwood left him with ample maneuvering room, I
5 think about two and a half miles versus the Captain
6 Knowlton's half a mile. I mean, it is obvious who had more
7 sea room, who had more margin for error. Captain Hazelwood
8 had ample room for error. In fact -- well --

9 Q Now, there's been some testimony that the vessel
10 was one mile off Busby Island light at 2354, headed on
11 course 1-8-0. Do you have an opinion as to the amount of
12 room between the vessel and Busby Island light?

13 A One mile.

14 Q Do you have any opinion as to whether that is
15 sufficient, insufficient?

16 A Oh, that's plenty of room.

17 Q Now, you made a distinction or you attempted --
18 you started to make a distinction, but you were cut off
19 between the one --

20 MS. HENRY: Objection as to the characterization,
21 your Honor, I am only asking the witness to follow the
22 rules.

23 MR. CHALOS: I'll rephrase it, your Honor.

24 THE COURT: Thank you.

25 BY MR. CHALOS: (Resuming)

1 Q You were distinguishing the difference between
2 Captain Knowlton's maneuver around Bligh Reef and the
3 situation as it exists in the Narrows where there is only a
4 quarter of a mile. In your mind, what is that distinction?

5 A I don't -- I don't understand what you're --

6 Q You said that the situation in the Narrows was not
7 as risky or is not -- doesn't contain the risk that Captain
8 Knowlton faced when he was maneuvering a half mile from
9 Bligh Reef. Can you explain that?

10 A Yeah. Well, when you're going through the
11 Narrows, you're running parallel to the shoreline. That's a
12 big difference than heading perpendicular to the shoreline.
13 There's a big -- I mean, if you're a half a mile off and
14 you're heading for it versus a half a mile off and heading
15 along side it, that is a vast difference.

16 Q What about the difference in speed?

17 A Versus -- 6 knots versus 16 knots. That -- if you
18 add that to that situation, it even -- it exacerbates the
19 whole thing.

20 Q Also in the Narrows you are followed by a tug as
21 well, are you not?

22 A That's --

23 MS. HENRY: Objection; leading.

24 THE COURT: Mr. Chalos, sustained.

25 MR. CHALOS: All right, I'll rephrase it.

1 BY MR. CHALOS: (Resuming)

2 Q What other protection does a vessel going through
3 the Narrows have?

4 A You have an escort tug.

5 Q Now, in your opinion, having read the testimony in
6 this particular case and listened to the hypotheticals that
7 were given to you, do you have an opinion as to whether
8 Captain Hazelwood's being off the bridge in the Narrows in
9 any way contributed to the grounding of this vessel?

10 A None at all.

11 Q Now you mentioned you yourself leave the bridge
12 when a pilot is on board, is that right?

13 A Occasionally, yes, uh-huh.

14 Q And you did in the area of the Narrows?

15 A Certainly in the time that I ran there I left the
16 bridge probably many times.

17 Q I would like to speak a little bit about the
18 Vessel Traffic Control Center. You said that you wouldn't
19 use them as a second set of eyes to help you navigate, is
20 that correct?

21 A Right. I wouldn't depend on them, no.

22 Q Would you depend on them to advise you if your
23 vessel was standing into danger?

24 A I would hope. That was their sole function out
25 there. Again, I can't repeat that more. I mean, they spent

1 70 million bucks to build that place up there, and to keep
2 an eye on these ships, and boy, they sure messed up here.

3 Q Let me ask you this. Did you, when you were
4 sailing up there in 1985, did you have any reason to believe
5 that their radar couldn't reach down as far as Bligh Reef to
6 monitor you?

7 A No, un-un.

8 Q Did they ever tell you, I've lost you on the
9 radar, Captain, north of Bligh Reef?

10 A No.

11 Q Miss Henry asked you to assume that the autopilot
12 on this vessel was on until one minute after midnight.
13 Based on what you've read in the testimony and the exhibits
14 that you reviewed, do you have any reason to believe that
15 this autopilot was on beyond 2353, 11:53 p.m.?

16 A No, I don't.

17 Q Do you have any reason to believe that it was on
18 at a minute and a half after midnight?

19 A No, I think she was just talking hypothetically.

20 Q Now, do you have an opinion as to whether a 10
21 degree right rudder applied at one and a half minutes after
22 midnight would have cleared Bligh Reef?

23 A It would have cleared Bligh Reef.

24 Q And you agree with the testimony that we have so
25 far that it would have cleared by at least a half a mile?

1 A Yes, sir.

2 Q Miss Henry asked you -- gave you some
3 hypotheticals about the ship going at half speed or going at
4 6 knots instead of 11.5 knots. Do you have an opinion as to
5 whether -- let me rephrase that.

6 In your opinion, would there be any reason why the
7 vessel should have been traveling at 6 and a half knots
8 under the circumstances of this particular night?

9 A None at all.

10 Q When you deviated for ice, what speed were you
11 traveling?

12 A At that point probably -- well, as soon as the
13 pilot got off I put her on sea speed, and my ship picked up
14 speed a lot faster than Captain Hazelwood's did. It didn't
15 take 40 minutes for them to come up to sea speed.

16 Q And I believe you testified on Friday that your
17 maneuver was very similar to the one that the Exxon Valdez
18 was going to make?

19 A That's correct.

20 Q And was making in terms of 180, course 180?

21 A Close enough -- close enough for this thing. It's
22 the safe way to go. You make the -- you make your -- when
23 you're coming out and you drop the pilot off, you make your
24 -- am I going to go through the ice or am I going to go
25 around the ice. You make that decision right there.

1 Q Captain Walker, in your opinion, is the area
2 between Rocky Point and Bligh Reef, the whole area,
3 hazardous?

4 A There's plenty of deep water, as long as you don't
5 run it aground it's not hazardous.

6 Q Do you consider the maneuver that Captain
7 Hazelwood wanted to make to be a hazardous maneuver?

8 A No, not at all.

9 Q I would like to speak a little bit about your
10 experience with ice. You said that you went through the ice
11 once.

12 A Yes.

13 Q What time of day was that? In other words, was it
14 daylight or night?

15 A Oh, yeah, it was probably about 2:00 in the
16 afternoon.

17 Q You had daylight?

18 A Oh, yeah.

19 Q And the two times that you went around ice, when
20 did that take place?

21 A At night.

22 Q Would you ever go through ice at night?

23 A No. Not if I could avoid it. If I had to, I had
24 to. But I never had to.

25 Q In other words, if you were given a choice at

1 night of going through the ice or going around it, which
2 would you chose?

3 A Always around the ice.

4 Q Now, Miss Henry handed you a copy of -- strike
5 that. Let me rephrase it.

6 You were asked about the transmissions Captain
7 Hazelwood made with the VTC regarding his intentions to
8 leave the traffic lanes?

9 A Yes, uh-huh.

10 Q And you said you had no problem with those
11 transmissions?

12 A No. If he forgot, it is just as very minor thing.

13 Q I would like to show you what has been marked as
14 Court Exhibit 2. I would like you to start from here.
15 Would you read the transmission?

16 MS. HENRY: Your Honor, can I have a page and
17 paragraph cite?

18 MR. CHALOS: Yeah, it's the first page of 2 and
19 the second page, this one right here.

20 THE WITNESS: All the way down to there?

21 MR. CHALOS: Yeah, from here down. Read the
22 transmission.

23 MS. HENRY: Your Honor, I would object. This is
24 hearsay unless there is impeachment or refreshing
25 recollection. And if it is refreshing, he reads it to

1 himself.

2 MR. CHALOS: Your Honor, the tape is in evidence.
3 This is a transcription of the tape.

4 MS. HENRY: I believe the witness just said that
5 he forgot something, so I believe the purpose of this would
6 be to refresh his recollection rather than reading it out
7 loud.

8 THE COURT: What are you trying to do with this?

9 MR. CHALOS: I want him to read that, then I am
10 going to ask him if his opinion is that the transmissions
11 were proper.

12 THE COURT: As I understand it, this has been
13 played in the form of a tape recording to the jury while
14 they had a chance to read that document?

15 MS. HENRY: That's correct, your Honor.

16 THE COURT: Objection overruled.

17 BY MR. CHALOS: (Resuming)

18 Q Sir, you can read it.

19 A Okay.

20 I was just about to tell you that judging by our
21 radar, I will probably divert from the TSS and end up in the
22 inbound lane if there is no conflicting traffic. Over.

23 No reported traffic. I've got the Chevron
24 California one hour out, and the Arco Alaska is right behind
25 them. But they are an hour out from Cape Hinchinbrook. How

1 on that? Over.

2 That'd be fine, yeah. We may end up over in the
3 inbound lane outbound transit. We'll notify you when we
4 leave the TSS and cross over the separation zone. Over.

5 Roger that. Be waiting your call. Traffic out.

6 Okay, Exxon Valdez over. Standing by 13 and 16.

7 Valdez Traffic, Exxon Valdez, WHCB. Over.

8 Valdez Traffic. Over.

9 Yeah, at the present time I am going to alter my
10 course to 2-0-0, and reduce speed to about 12 knots to wind
11 my way through the ice, and Naked Island ETA might be a
12 little out of whack, but once we're clear of the ice out of
13 Colombia Bay, we'll give you another shout. Over.

14 Roger that, sir. Be awaiting your call. Traffic
15 standing by.

16 Q Okay.

17 Now, do you have an opinion as to what Captain
18 Hazelwood is telling the VTS as to winding his way through
19 the ice?

20 MS. HENRY: Objection. Calls for speculation as
21 to what he may have intended. What he said speaks for
22 itself in the transcript?

23 MR. CHALOS: Let me withdraw the question.

24 BY MR. CHALOS: (Resuming)

25 Q Captain Walker, in your opinion did Captain

1 Hazelwood substantially comply with the requirements of
2 notifying VTC of his intentions?

3 A Substantially, yes.

4 Q And reading that, do you have an opinion as to
5 whether he was telling them that he would be crossing over
6 into the northbound lane and possibly weaving his way out of
7 that northbound lane?

8 MS. HENRY: Again, objection, calls for
9 speculation if he is talking about what Captain Hazelwood
10 was thinking. If he is talking about what he said, this
11 speaks for itself.

12 THE COURT: Mr. Chalos?

13 MR. CHALOS: Your Honor, I am asking his opinion
14 reading that, how he would interpret that.

15 THE COURT: Ask your question again.

16 BY MR. CHALOS: (Resuming)

17 Q Captain Walker, do you believe that Captain
18 Hazelwood gave the -- based on that transmission, gave VTC
19 sufficient information as to what his -- as to his intention
20 to leave the lanes?

21 MS. HENRY: Same objection, your Honor.

22 THE COURT: Objection overruled.

23 THE WITNESS: Yes.

24 BY MR. CHALOS: (Resuming)

25 Q Do you have any -- in your opinion, do you have

1 any problem with the transmission that he made to the VTC?

2 A No. He forgot to tell them when he left, but
3 that's no big deal.

4 Q Now, Miss Henry asked you about those periods of
5 time when you dropped the pilot off at Busby in the early
6 days before you had the pilotage?

7 A Yes, uh-huh.

8 Q And you said that you were in violation of the
9 Coast Guard regulations at that time?

10 A I am thinking about that now, and I think I might
11 have misspoke.

12 Q Why do you say that?

13 A Well, without having the VTS manual in front of
14 me, I believe there's a section in the VTS manual that
15 allows the master to use his own discretion in any situation
16 that he deems -- where he has to go out -- violate the
17 rules.

18 Q Why did you drop the pilot off at Busby in those
19 early days?

20 A Well, I took him out the first time at Cape
21 Hinchinbrook and I almost killed him. The seas were bad.
22 They had this pilot -- pilot boat, it was an excursion boat
23 out there called the Blue -- Blue Moon or the Blue Goose or
24 something like that, and she was definitely not to be out in
25 that weather and in that time. She had huge picture windows

1 on it, that one little wave would have broken and filled her
2 up with water. And in my opinion, that boast was a hazard
3 out there, was dangerous. So I never -- after that I said
4 forget it, human life is not worth this little easy passage
5 here. I can make this almost with my eyes closed. So I
6 never took him back out there again.

7 And one time when I was getting my license, I had
8 to -- I had to ride the -- not the Arco -- the Gulf Spirit,
9 sister ship to the one I was on, a 265,000 Gulf tanker, and
10 I think it was with Captain Cunningham. We went all the way
11 out to Hinchinbrook and I got on that thing, and I was
12 afraid for my life. Very afraid for my life.

13 Q Now, you said that you considered the passage from
14 Busby down to Hinchinbrook to be an easy passage?

15 A Busby to Hinchinbrook? Sure.

16 Q I would like to speak to you a little bit about
17 Exhibit B, which is the letter from Alaska Maritime. I'll
18 hand that to you, sir.

19 You testified that having read that letter, you
20 believe that it was intended for everyone, not just
21 nonpilotage vessels?

22 A That's correct. I don't see where they would --

23 Q Well, let me ask you.

24 What is the basis of that opinion?

25 A Well, I don't think that they would hold a vessel

1 with pilotage to a higher standard than somebody without
2 pilotage.

3 Q Well, what do you mean by that?

4 A Well, if I am the Captain of the ship, I have
5 pilotage, what they are telling me or what you're trying to
6 say is that as long as I have pilotage, I have to stay on
7 the bridge. Why would they require that of me and not of
8 the guy that doesn't have pilotage. If he doesn't have
9 pilotage, the master doesn't have to be on the bridge. But
10 if I have pilotage, I have to be on the bridge. And that's
11 -- this is -- the Coast Guard has got it so screwed up, it's
12 unbelievable.

13 Q Well, let me ask you this. If you're a
14 nonpilotage vessel, according to that letter, you're
15 required to have a two man watch team from where to where?

16 A From Montague to --

17 MS. HENRY: Objection, your Honor, this is all
18 leading.

19 THE COURT: From where to where? I don't think
20 that's leading.

21 THE WITNESS: It says in here, from Montague to
22 Hinchinbrook.

23 BY MR. CHALOS: (Resuming)

24 Q Where is Montague in relation to Cape
25 Hinchinbrook? Could you point it out?

1 A Montague is right in here. From about abeam of
2 Montague to right here.

3 Q So for this area down here, which is well south of
4 Bligh Reef, two men are required to be on the bridge, is
5 that what the letter says?

6 A That's what they're saying.

7 Q Okay.

8 Now that letter speaks of the pilot station, does
9 it not?

10 A That's true.

11 Q Where is the pilot station in Prince William
12 Sound?

13 A Rocky Point.

14 Q Which is up here?

15 A Yes, sir.

16 Q Okay.

17 So how do you interpret that letter in terms of
18 how far someone without pilotage could go with just one man
19 on the bridge?

20 A All the way from Rocky Point to abeam of Montague.

21 Q So someone without pilotage, according to that
22 letter, could go from Rocky Point down to Montague, with one
23 man on the bridge?

24 A Yes.

25 Q Without pilotage?

1 A Without pilotage.

2 Q And that man doesn't have to be the captain?

3 A No.

4 Q Okay.

5 Now, what you're -- with respect to the pilotage
6 vessels, what was -- what did you say? That that --

7 A Well, they're holding me to a higher standard. I
8 have to stay up there the whole time is what they're doing.
9 That's what they're saying.

10 Q In other words, if you read the letter as
11 suggested by Miss Henry, someone without pilotage could go
12 to Rocky Point or from Rocky Point down to Montague with one
13 person on the bridge, but if the person is holding the
14 pilotage endorsement, he would have to stay on the bridge
15 the whole time?

16 A Well, that's the way they're interpreting it.

17 Q Did you find that to be illogical?

18 A Yes, absolutely.

19 Q Why?

20 A It just doesn't make any sense. What they have
21 done is -- to me, they have waived the whole thing. And I
22 think this pilotage and not pilotage is all a bunch of
23 hogwash. If I got this letter, I would say well, that's the
24 end of it, boys. We operate on nonpilotage.

25 Q Now, were you aware that in 1985 the Coast Guard

1 proposed doing away with pilotage as a matter of statute?

2 A Well, they were talking --

3 MS. HENRY: Objection. Hearsay.

4 THE COURT: Sustained.

5 BY MR. CHALOS: (Resuming)

6 Q What was your understanding of the pilotage
7 situation in 1985?

8 A Well, previous to 1985, and when I first got it --

9
10 MS. HENRY: Objection, relevance.

11 MR. CHALOS: Your Honor, I think it is very
12 relevant in light of this --

13 THE COURT: We have already discussed this.
14 Objection sustained. What the Coast Guard may or may not --
15 what they did not do is not relevant.

16 BY MR. CHALOS: (Resuming)

17 Q Captain Walker, Miss Henry asked you about Mr.
18 Kagan, and she indicated to you that there's some
19 information that he had problem steering. In your mind, is
20 there a difference between steering and following a rudder
21 command?

22 A Oh, yes, surely.

23 Q Could you explain what you mean by that?

24 A Oh, a rudder command is right 10, left 10, hard
25 right, whatever. The quartermaster just goes the proper

1 direction, and the proper degrees, that all he has to do is
2 know right from left and the numbers 1 through 35.

3 Q How difficult is a 10 degree right rudder command
4 to follow?

5 A Not difficult at all.

6 Q Would you expect any quartermaster, anyone who's
7 holding an AB's endorsement to be able to carry that out?

8 A Probably anybody above the age of five could carry
9 that out.

10 Q Did Mr. Cousins have any alternatives available to
11 him if he felt that Mr. Kagan was not capable of doing the
12 job?

13 A Sure.

14 Q What alternatives did he have?

15 A Well, he had Miss Maureen Jones was standing about
16 50 feet away. He could have replaced him anytime.

17 Q You read the testimony about Miss Jones?

18 A I believe so.

19 Q Do you recall whether she held a license?

20 A She had a third mate's license, and had sailed as
21 a third mate.

22 Q Now, Miss Henry asked you about the situation
23 where Captain Hazelwood pointed to the radar and told the
24 mate what he wanted done, as opposed to going to a chart.
25 Is there any difference between the two in your mind?

1 A No. The way he had the radar set up -- now don't
2 forget, he's on cardinal points, and that's almost exactly
3 like looking at the chart.

4 Q Can you explain what you mean by cardinal points
5 again?

6 A All right. His vessel was situated in such a way
7 that what they were looking at would be almost identical to
8 what he would have seen had they gone to the chart. The
9 presentation was almost identical. The radar was in a north
10 up mode, he was on a north-south heading, and he was looking
11 just like that, only a radar picture.

12 Q You consider discussing course changes at the
13 radar as opposed to the chart to be significant?

14 A No.

15 Q Do you believe that that in any way contributed to
16 this grounding, the fact that they spoke at the radar as
17 opposed to the chart room?

18 A Not at all.

19 Q Do you consider the instruction to be given -- do
20 you have an opinion as to the instructions that were given
21 by Captain Hazelwood to the mate? Were they difficult, were
22 they easy to follow?

23 A They were very easy to follow.

24 Q And I think your testimony has been had they been
25 followed, they would have missed the reef by a substantial

1 amount, is that correct?

2 A That's correct, uh-huh.

3 Q Sir, if you tell your mate to call you and advise
4 you when he has commenced carrying out your orders, and that
5 mate calls you and tells you that he has, would you rely on
6 what he just told you?

7 A Yes, I would. My -- in fact, every captain tries
8 to pound into his junior officer's sometimes thick skulls,
9 to call him when they're in doubt. That is the first thing
10 you learn, is call me when you're in doubt. Call me soon,
11 call me earlier before rather than later. I am going to
12 holler at you for not calling me, I'm not going to holler at
13 you for calling me. Don't ever be afraid to call me in any
14 circumstance.

15 Q Now, there's been some questions as to whether
16 there was a course -- rather a gyro repeater or a rudder
17 angle indicator in the captain's cabin, and of course the
18 answer is no.

19 A Right.

20 Q But there was a telephone, was there not?

21 A Oh, absolutely. Three of them.

22 Q Is that the instrument that you as a captain would
23 expect to be used by the mate if he had any questions?

24 A That's the key instrument. Call me if you need
25 me.

1 Q In your opinion, was Third Mate Cousins qualified
2 to carry out the orders that he had gotten from Captain
3 Hazelwood?

4 A Fully qualified.

5 Q Do you have any doubt as to his ability to be able
6 to do that?

7 MS. HENRY: Objection, asked and answered.

8 MR. CHALOS: I'll withdraw it.

9 THE COURT: We've gone over that a few times, I
10 think.

11 BY MR. CHALOS: (Resuming)

12 Q Now, Miss Henry asked you about the information
13 that Mr. Cousins conveyed to Captain Hazelwood when he made
14 that call to him about the ice, and you read into the record
15 what Mr. Cousins said to Captain Hazelwood.

16 A I don't think I read that into the record.

17 Q You read it to yourself?

18 A I don't think I read it. I don't recall reading
19 it into the record.

20 Q I'm referring to my page 1113 of the transcript.
21 There was a short conversation -- well, why don't you read
22 the answer?

23 A There was a short conversation. I told him it
24 looked like -- it looked like we may get into the bottom
25 edge of the ice. And he responded by saying, is it going to

1 be -- does it look like it's going to be a real problem. I
2 said no, I think that it will. But my intent was just to
3 ease it around the corner. The conversation went to whether
4 the second mate had arrived on the bridge yet.

5 Q Okay.

6 Now, do you consider Captain Hazelwood's
7 questioning of the third mate to be prudent?

8 A Oh, very much so. If he was going into the ice,
9 Captain Hazelwood wanted to be told about it. And I assume
10 that he would have been on the bridge, he would have gone to
11 the bridge had he --

12 Q Okay.

13 What did the third mate tell him, in your opinion,
14 based on what you read --

15 MS. HENRY: Objection, calls for speculation if it
16 is what he intended to tell him. If it is what he actually
17 told hi, we've already heard it.

18 MR. CHALOS: I'll withdraw the question, make it
19 easier.

20 BY MR. CHALOS: (Resuming)

21 Q If you were the captain and you had left
22 instructions with the mate to call you if there was a
23 problem, and the mate called you to tell you about the
24 maneuvering that he was doing and you asked him was there a
25 problem with the ice and he gave you the answer that Mr.

1 Cousins gave --

2 A Uh-huh.

3 Q -- would that cause you any concern?

4 A No, I would assume that everything is going along
5 just fine. He had no -- all he had to do was say, Captain,
6 please come to the bridge. Then this thing would have been
7 avoided.

8 Q If you were down below and the mate told you what
9 he told Captain Hazelwood, would you have rushed up to the
10 bridge?

11 A No, no reason to.

12 Q I would like to speak a little bit now about
13 exhibit 122 that contains the red sector. You mentioned to
14 Miss Henry that you believed if you were inside the red
15 sector, that that was a risky and I think you said possibly
16 very risky area?

17 A Right.

18 Q Based on the evidence that we have so far, had
19 Captain Hazelwood's orders been carried out, would the
20 vessel have found itself in the red sector?

21 A Not at all.

22 Q Even having found itself in the red sector, let's
23 say up here in the edge of the red sector, in your opinion
24 was there still enough room to make the maneuver that was
25 intended?

1 A More than enough room.

2 Q So just the mere fact that you may be inside the
3 red sector by itself doesn't tell you whether it is a risky
4 area or not?

5 A No.

6 Q Depends on what you're doing in that particular
7 area?

8 A Right. I mean, you could be stopped and drifting.
9 It's not risky then.

10 Q Now, Miss Henry asked you about the report that
11 Captain Hazelwood made to the Coast Guard to tell them that
12 he was aground and leaking oil?

13 A Uh-huh.

14 Q And she said, well, he waited fifteen minutes to
15 make that call. Under the circumstances do you believe that
16 fifteen minutes is an unreasonable period of time?

17 MS. HENRY: Objection; leading.

18 MR. CHALOS: I'll withdraw, your Honor.

19 BY MR. CHALOS: (Resuming)

20 Q Under the circumstances, do you have an opinion as
21 to the reasonableness or unreasonableness of the fifteen
22 minute passing before the call was made?

23 A No, I don't see any -- he could have waited an
24 hour, two hours, three hours. There's nothing the Coast
25 Guard could have done about it anyway.

1 Q Do you consider fifteen minutes to be quick?

2 A Yes. Very reasonable time, uh-huh.

3 Q Now, when you sailed, were you aware of the
4 immunity provisions for reporting oil spills?

5 A Yes, I was.

6 Q Did you believe that if you reported an oil spill,
7 that you would have immunity?

8 A Yes.

9 MS. HENRY: Objection. Irrelevant.

10 THE COURT: Counsel approach the Bench, please.

11 (An off the record Bench conference was had.)

12 THE COURT: Objection sustained. Disregard the
13 last answer and the question of counsel. Remember,
14 questions of counsel are not evidence.

15 BY MR. CHALOS: (Resuming)

16 Q Captain Walker, I would like to turn now to the
17 pilotage in Prince William Sound. In response to Miss
18 Henry's question, you said that you regarded the pilotage in
19 Prince William Sound as a joke?

20 A Yes.

21 Q What did -- what do you mean by a joke?

22 A Well, I think it was overkill. Maybe joke was a
23 little harsh, but it's overkill. They have --

24 Q In what way?

25 A Okay.

1 Number one, the area, just the geographical area
2 is wide open. There's no real imminent danger in any of
3 this run. In fact, had I been a 90,000 gross ton freighter,
4 wouldn't have had to take pilotage. I don't know what the
5 difference is, but they want tankers to take pilots, they
6 don't want freighters to. I don't know why they would make
7 the distinction. But --

8 Q Are the hazards for freighters the same as tankers
9 in terms of running aground, risking people's lives?

10 A And spilling oil, too.

11 Q Okay, go ahead.

12 A Not as much oil. They carry their fuel oil in the
13 bottom, bunker seeds. If they go aground, they are going to
14 spill bunker fuel.

15 Q All right. Go ahead.

16 A But the area, the geographical area is a very
17 easy, good radar, good -- relatively good aids to
18 navigation. And then on top of this very easy passage, they
19 slop this Traffic Separation Scheme on there which is fine,
20 I wonder why they did it the way they did it with doglegs in
21 the middle of nowhere. I mean, if you're going to have it,
22 why not a direct course to Cape Hinchinbrook. But obviously
23 the Coast Guard has its reasons -- which I could never
24 fathom. But then they slap a separation scheme on it, and
25 then they come back with a VTS system on top of that, and

1 then lastly pilotage. So they had four different overlays
2 on here, and for one ship a day. I mean, it was so far
3 overkill it wasn't even funny.

4 Q Okay.

5 Let me show you again Plaintiff's Exhibit 26,
6 which is the exhibit on which Mr. Cousins drew the area of
7 the ice.

8 A Uh-huh.

9 Q Now, in your experience, was the ice coming out of
10 Columbia Glacier a sheet?

11 A No, un-un.

12 Q What would one see in terms of ice that would come
13 out of Columbia Glacier?

14 A Oh, just little clumps here and there. Trying to
15 describe it like a black table where you spill some salt
16 would be a good description of it.

17 Q And depending on how much ice there was, you could
18 maneuver through it if you had to?

19 A If you had to, sure.

20 Q Without striking it, if you had to?

21 A Again, depends on the concentration.

22 Q In other words, what I am driving at here is that
23 if Mr. Cousins said he had to skirt the bottom edge of this
24 thing, when he got up to it is it your opinion that he could
25 have maneuvered around the ice if he had to?

1 A Oh, sure, sure.

2 Q And in your opinion he had plenty of room to do
3 that once he got closer?

4 A I disagree with the accuracy of what he's put on
5 there because he has got the ice extending to within a mile
6 of Busby. So what he's telling me is that at Busby Island,
7 he was in ice already.

8 Q But the testimony is to the contrary.

9 A Testimony is to the contrary. I think he's got
10 that extended a little too far to the east. In my opinion.

11 Q Okay.

12 But in any event, once he gets down to the leading
13 edge, in your opinion if he had to maneuver, he could have
14 maneuvered without problems?

15 A Sure. If he thought he was going aground, he'd
16 just turn into the ice. It was the least of the hazards
17 there.

18 Q Or call the captain to the bridge?

19 A Automatically. That without question there.

20 Q Now, I think you mentioned -- I just want to make
21 sure we have it -- did you say that there are no regulations
22 that require the captain to be on the bridge at any time?

23 A No, there is a place that you have to be on the
24 bridge.

25 Q Where is that?

1 A The Panama Canal. It's mandatory.

2 Q Is that by regulation?

3 A That's mandatory, yes.

4 Q Is there any regulation that requires the captain
5 to be on the bridge at any time in Prince William Sound?

6 A No.

7 Q Sir, in your opinion, based on the testimony that
8 you read and the evidence that you reviewed, were the
9 maneuvers that Captain Hazelwood was making and the orders
10 he gave, in your opinion prudent under the circumstances?

11 A Yes, they were.

12 Q Now, does the fact that you sitting here today
13 with the benefit of hindsight might have done something
14 different if you found yourself in the same circumstances,
15 does that make Captain Hazelwood's action imprudent?

16 A No.

17 MS. HENRY: Objection; leading.

18 THE COURT: Rephrase your question.

19 BY MR. CHALOS: (Resuming)

20 Q Sir, do you have an opinion as to whether you
21 might have done something different if you were on the ship
22 that particular night?

23 A I probably would have done something different,
24 yeah.

25 Q What would you have done different?

1 A Well, I don't know -- I didn't know Mr. Cousins,
2 so without knowing Mr. Cousins, I would have probably been
3 on the bridge.

4 Q And if you knew Mr. Cousins and if you trusted
5 him and felt that he was a capable mate, would you have any
6 hesitation in leaving the bridge?

7 MS. HENRY: Objection; leading.

8 THE COURT: Objection overruled.

9 BY MR. CHALOS: (Resuming)

10 Q You can answer.

11 A If I had real good confidence in Mr. Cousins, left
12 him with the instructions that Captain Hazelwood had given
13 him, I would have -- I wouldn't have -- I would have let him
14 have the conn.

15 Q I'm sorry, could you say that again?

16 A I said, with -- with the instructions that Captain
17 Hazelwood gave to Mr. Cousins and with supreme confidence in
18 Mr. Cousins and the fact that he had a telephone right there
19 and I left him with the check, and I had other things to do
20 that I considered more important at that time, I would have
21 left the bridge.

22 Q The testimony that you are giving here today and
23 the testimony that the other experts gave is based on
24 hindsight, am I correct?

25 A Oh, yes, uh-huh.

1 Q And anyone sitting here, including yourself,
2 saying I think Captain Hazelwood did everything right --
3 other, Captain Beevers saying I think everything Captain
4 Hazelwood was doing wrong --

5 A Uh-huh.

6 MS. HENRY: Objection; mischaracterizes Captain
7 Beevers' testimony.

8 MR. CHALOS: The substance of Captain Beevers'
9 testimony was that --

10 THE COURT: Objection sustained. Start over
11 again.

12 MR. CHALOS: All right, let me start again.

13 BY MR. CHALOS: (Resuming)

14 Q The fact that your opinion may differ with Captain
15 Beevers' opinion is based on both of you looking at a
16 situation in hindsight, is it not?

17 A That's correct, uh-huh.

18 Q I'd like to speak a little bit about your opinion
19 with respect to the grounding. You mentioned that in your
20 opinion Captain Hazelwood was trying to keep the vessel on
21 the reef?

22 A From all the data that I got, that is the only
23 thing he could have been doing.

24 Q Well, please tell us what data you saw that led
25 you to believe that he was trying to keep it on the reef?

1 A Well, after -- don't forget now, he had a 200 --
2 probably 250,000 ton tanker, dead weight tons, this is
3 actual weight, coming into that reef at 12 knots, slamming
4 up into that reef, and that reef physically stopped him.
5 There was -- I don't think there was any way that Captain
6 Hazelwood thought that if he kept going he was going to ride
7 over that reef, especially right after they hit the reef,
8 they didn't stop the engines from going ahead at 64 rpm, for
9 about 12 minutes. So if I thought he was going to try to
10 get over that reef, I would assume that he would use at
11 least 64 or more rpm to try to do it.

12 Q What rpm was he using in keeping the vessel on the
13 reef?

14 A 55 rpm.

15 Q He had -- what did he have available if he wanted
16 to power this vessel over the reef?

17 A He had 82 rpm.

18 Q In your opinion, if he was trying to power over
19 the reef, would he have used the full power?

20 A Surely.

21 Q Is there anything else that leads you to conclude
22 that he was trying to stay on the reef?

23 A It was the prudent thing to do, the seaman-like
24 thing to do was to stay there.

25 Q Well, is there anything in Captain Hazelwood's

1 actions that lead you to believe that he was trying to stay
2 on the reef?

3 A Well, his actions speak for themselves. That is
4 what he tried to do. It's obvious. If he had wanted to get
5 off, he would have either gone full ahead, full power
6 astern, or full power ahead. Why piddle around at 55 rpm.
7 If I want to bring that thing off, I'm not fooling around at
8 55, especially after I've been there for 12 minutes at 64.

9 Q Miss Henry asked you about the five fathom reef
10 that was on the chart.

11 A That's a poor chart. Have better?

12 Q Let me get a bigger chart.

13 (Pause.)

14 I want you to assume that the five fathom mark
15 that Miss Henry referred to was at least a quarter mile,
16 possibly a half a mile behind the ship --

17 A Uh-huh.

18 Q -- based on this particular scale -- right. And
19 Captain Hazelwood could see that on his own chart.

20 A Uh-huh.

21 Q Does a quarter mile or a half a mile of room
22 behind him in your opinion leave enough room if he wanted to
23 back up and try and free this vessel?

24 A Yeah, there's enough room there. Whether or not
25 he would want to do it or not.

1 Q If Captain Hazelwood's intention was in fact to
2 try and wiggle the ship off, do you think that he at some
3 point would have in your opinion, at least try to go astern
4 a little bit?

5 A Oh, yeah, sure. He'd back up and if he wanted to
6 go forward, back up a little, get her moving and then hit
7 her again forward. But why he would want to try that, I
8 don't know.

9 Q Does the fact that he didn't use one astern bell
10 in the whole time that he was aground indicate to you --
11 what does that indicate to you?

12 A Well, it indicates to me that he didn't try to get
13 off. He went up to 55 that he stayed for what, 40 minutes
14 or so, and then stopped the ship. I mean, that's not really
15 radical maneuvers trying to get off the ship -- get a ship
16 off a reef.

17 Q You said that if you had wanted to stay on the
18 reef, you would have used half ahead, I think you said.

19 A Yeah, but again, I couldn't really -- not being in
20 that position, I don't know what I would have used.
21 Probably something slower I would assume.

22 Q All right, is there much of a difference between
23 half ahead and 55 rpms under the circumstances?

24 A Just maybe a thousand horsepower, not a whole lot.

25 Q That's it?

1 A Not a whole lot.

2 Q Okay.

3 Now you read what Captain Hazelwood was telling
4 the Coast Guard?

5 A Yes, uh-huh.

6 Q And he was saying a lot of things. One of the --
7 he was saying he was trying to extract the vessel, he was
8 going to get off the reef. He did say that he was also
9 ascertaining, did he not?

10 A Yeah, uh-huh.

11 Q Okay.

12 What leads you to believe, having Captain
13 Hazelwood having said that to the Coast Guard, that he in
14 fact was trying to stay on the reef?

15 A You mean the fact that he was telling the Coast
16 Guard one thing and doing another?

17 Q Yeah, he was telling the Coast Guard, I'm trying
18 to get off. What makes you believe that he wasn't?

19 A Well, I think that Captain Hazelwood was at that
20 time -- I think sub -- before all of this stuff, when he
21 first called the Coast Guard, he told them he was hard
22 aground.

23 Q When was that?

24 A I think 26 minutes after midnight. Called the
25 Coast Guard up when he -- I think when he reported it and

1 said we're hard aground and we're going to be here for a
2 while.

3 Q What does that indicate to you?

4 A He knows that he's not going to move. I think he
5 knew he's not going to move, at that point in time. And
6 then after that he started getting his data in and the tide
7 -- he saw that the tide was still coming in, a rising tide,
8 so I think he thought in his mind the best thing to do to
9 make sure we stay on this thing and not come off is to --

10 MS. HENRY: Objection. The answer calls for
11 speculation. I think he thought in his mind.

12 THE COURT: I will let the witness answer this
13 question. Objection overruled.

14 BY MR. CHALOS: (Resuming)

15 Q Go ahead.

16 A I lost my train of thought now.

17 Q Well, we were talking about -- you were talking
18 about the information Captain Hazelwood had --

19 A Oh, yeah, okay.

20 Q And I was asking you, having said to the Coast
21 Guard what he said, what leads you to believe that he wasn't
22 trying to get off?

23 A Right.

24 Well, he's getting this data in, he's looked at
25 his stability, he's looked at the tides -- there's still a

1 rising tide -- and there is a possibility that maybe this
2 thing is going to slide off the reef. He might have -- you
3 know, like the Volvo commercials, he hit the bulkhead and he
4 is going to bounce back and bounce off. But I don't think
5 that that's -- at that point in time he was trying to stay
6 on the reef. I don't think he was trying to get off the
7 reef.

8 Q Well, how do you square what he said to the Coast
9 Guard with what you say he was doing?

10 A Well, trying to project myself back into this
11 situation here and looking at everything that Captain
12 Hazelwood has done, I see good seamanship, very good
13 seamanship.

14 Q You're talking now about actions?

15 A Actions, right.

16 Q All right.

17 What about his words?

18 A He was falling apart at that time. I think
19 mentally you can see the crack forming, that he was -- the
20 enormity of the situation after 30 or 40 minutes of looking
21 out and seeing what's going on, I think he was cracking at
22 that time.

23 Q What do you mean by that?

24 A He was coming apart. Mentally -- you can see the
25 Coast Guard and the Coast Guard is the -- I want to say the

1 enemy, but it's not really that way. He's -- they've caught
2 him with his hand in the cookie jar, more or less. And he
3 is telling them whatever they -- whatever he thinks at that
4 time that that's what they want to hear. You know, we're
5 going to get her off and, you know, she's going to float
6 free, and -- you know, the sun's going to rise in the
7 morning and things are going to be better. There's a
8 chicken in every pot, two cars in every garage. This type
9 of thing here. He is wishing, wishful thinking, you might
10 say, that this thing is going to float off.

11 Q When you mentioned on Friday that you had small
12 spills in the past, and you described the experience as
13 what? Being punched in the stomach?

14 A I think I described like a punch in the stomach.
15 I think this is -- Captain Hazelwood has taken his brains
16 out and gotten beat on by a two by four. It's a -- the
17 crushing pressures that he was on at that time, I just
18 wouldn't want to be in his shoes at that point in time. I
19 don't really know how I would react with that.

20 Q Do you see -- did you see, in reviewing the
21 evidence, any inconsistent action after he spoke with the
22 Coast Guard, to keeping the vessel on the reef?

23 A No, he continued. Like I say, he brought it up to
24 55 and it was a steady state, and I see no evidence of even
25 an attempt to get off the reef. In fact at one point I

1 think he says something about ballasting her down.

2 Q To the chief mate?

3 A To the chief mate. So I think to the crew he is
4 talking reality, but to the Coast Guard, it's a whole
5 different thing. He's telling them what they want to hear.

6 Q Do you believe at this point in time he is lying
7 to the Coast Guard?

8 A Well, consciously I don't think he's thinking he's
9 lying, but I think subconsciously that's what he's doing.
10 He's telling them what they want to hear.

11 Q Do you have any reason to believe that Captain
12 Hazelwood was trying to get this vessel off the reef by
13 going forward?

14 A Absolutely not. That's rather poor seamanship on
15 his part if he tried it that way.

16 Q Is there anything based on what you read of
17 Captain Hazelwood's actions and orders subsequent to the
18 grounding that would lead you to believe that he was using
19 bad seamanship in this situation?

20 A No, no; un-un.

21 Q Now you said that what Captain Hazelwood was
22 telling the Coast Guard would not change your opinion as to
23 the fact that he wasn't trying to get off the reef. Was
24 that on the basis of what you just testified?

25 A Yes, uh-huh.

1 Q With respect to the questions regarding Mr. Meyers
2 and what Captain Hazelwood told Mr. Meyers, the man from
3 Exxon --

4 A Uh-huh.

5 Q I want you to assume that that call was made after
6 the engines of the vessel were shut down and it was made in
7 connection with getting tugs out there to salvage the
8 vessel. Do you have an opinion as to whether that would
9 have been correct under the circumstances?

10 A Well, if he's calling salvers and talking about
11 that getting off the reef in the context of salvaging, I don't
12 see any problem with that.

13 Q Now, Miss Henry asked you about publications on
14 board the Exxon Valdez, the Code of Federal Regulations.

15 A Uh-huh.

16 Q Did you have similar Code of Federal Regulations
17 on board your ship?

18 A Every ship is required to have those on board.

19 Q How often did you go to the Code of Federal
20 Regulations and study the contents?

21 A Oh, every once in a while, if I had a question,
22 I'd refer to them. That's what they were there for is
23 reference books.

24 Q Yeah, but you didn't go to them and read them from
25 cover to cover and memorize what the regulations were, did

1 you?

2 A No, no.

3 Q And you didn't go to them daily and say, let me
4 check Section 160.095, for the heck of it?

5 A No.

6 Q Okay.

7 Did you have on board Coast Pilots?

8 A Yes, we did, uh-huh.

9 Q Is every ship require to have Coast Pilots?

10 A Yes, they are. Updated Coast Pilots.

11 Q In the Coast Pilots that you are familiar with and
12 are kept on board these ships, where is the pilot station
13 for Prince William Sound?

14 MS. HENRY: Objection; hearsay and beyond the
15 scope of cross examination.

16 THE COURT: I don't know what Coast Pilots is, but
17 if he is referring to a document that is not in evidence, it
18 sounds like it might be hearsay.

19 MR. CHALOS: I'll withdraw the question, your
20 Honor.

21 I have no further questions at this time.

22 THE COURT: We'll take our next break, ladies and
23 gentlemen. Don't discuss the matter among yourselves or
24 with any other person. Don't form or express any opinions.

25 THE CLERK: Please rise. This Court stands in

1 recess subject to call.

2 (A recess was taken from 11:50 o'clock a.m. until
3 12:10 o'clock p.m.)

4 THE COURT: Miss Henry?

5 RE CROSS EXAMINATION

6 BY MS. HENRY:

7 Q Sir, I believe you just told the jury that in your
8 opinion when Captain Hazelwood was talking to the Coast
9 Guard and reporting the spill and then later talking to the
10 Commander McCall, that he was simply telling the Coast Guard
11 what they -- what he thought they wanted to hear, is that
12 right?

13 A Yes, ma'am.

14 Q And isn't it true that you told the jury in your
15 testimony what you think Mr. Chalos wants to hear?

16 A No.

17 Q Turning once again to Court's Exhibit Number 4,
18 that's the interview between Captain Hazelwood and Trooper
19 Fox and mr. DeLozier, is that right?

20 A Yes, ma'am.

21 Q Now, does that interview indicate the date and
22 time it took place?

23 A Right. 1300 on the 24th, which is approximately
24 what, 13 hours after the grounding?

25 Q All right.

1 About 1:00 o'clock in the afternoon?

2 A Yeah.

3 Q Now your testimony with respect to the pilotage,
4 when I think you basically said as far as you were concerned
5 except for visibility, there was no more pilotage any more
6 as a result of the Bob Arts letter, is that correct?

7 A That's correct, ma'am.

8 Q Now, that opinion assumes that Mr. Arts letter was
9 a correct and accurate interpretation of the current Coast
10 Guard regulations, isn't that true?

11 A Well, the current Coast Guard regulations were
12 that pilotage was enforced. That's what was on the Federal
13 Register at that time.

14 Q And you are assuming in your opinion that once Bob
15 Arts letter came out, there was basically no more pilotage,
16 you have to assume that Bob Arts' interpretation was
17 correct, isn't that true?

18 A I would have to look at the letter that the
19 Captain of the Port put out also. I'd have to refresh my
20 memory on that one.

21 Q All right.

22 So your opinion relies on Mr. Arts letter and the
23 Captain of the Port attachment that was sent to you?

24 A The letter from Commander McCall, I believe his
25 name is?

1 Q And you are assuming that both of those are
2 accurate, is that correct?

3 A Yes.

4 Q Now, on redirect you answered one question
5 regarding whether or not you would leave the bridge under
6 certain circumstances by saying that, if I had other things
7 to do that I considered more important, I would have left
8 the bridge, is that what you said?

9 A That's correct.

10 Q What other things would you have to do that would
11 be more important than your concern for the safety of the
12 crew and the ship and the cargo?

13 MR. CHALOS: Objection, your Honor. Foundation.
14 I can elaborate on that, your Honor. It assumes that when
15 he leaves the bridge in whatever circumstances, that his
16 ship is in danger or that the safety of the ship is in
17 danger. Without knowing what circumstances we're talking
18 about, the fact that he may have left the bridge doesn't
19 automatically endanger the safety of the vessel or the crew.

20 THE COURT: The question has an argumentative
21 element to it, Miss Henry. If you can rephrase your
22 question you might be able to make your point.

23 BY MS. HENRY: (Resuming)

24 Q Assuming that you are in the same position as
25 Captain Hazelwood at 11:53, when he decided to go below, and

1 that includes course heading and everything that we have
2 gone through before.

3 A Right, sure.

4 Q What other things would be more important than
5 concern for the safety of the vessel, the people on it, and
6 its cargo at that point?

7 MR. CHALOS: Same objection, your Honor.

8 THE COURT: Objection overruled.

9 THE WITNESS: At that point in time? Safety never
10 overrides anything on a ship.

11 BY MS. HENRY: (Resuming)

12 Q Safety is always the highest concern, is that
13 right?

14 A Right, uh-huh.

15 Q You referred to some of the Coast guard
16 regulations regarding transiting through Prince William
17 Sound which include pilotage and which include the VTC, and
18 which includes the TSS, as overkill, is that right?

19 A Yes, ma'am.

20 Q All right.

21 Now all of these regulations reflect that at least
22 the Coast Guard was concerned about safety, isn't that true?

23 A That's correct.

24 Q And so basically you are considering -- or you
25 have some conflicts with the Coast Guard regulations because

1 -- or you are being critical of the Coast Guard because they
2 are being too safe, is that correct?

3 A Can I elaborate on an answer?

4 Q When you said that you felt the Coast Guard regs
5 were overkill, the ones that you listed --

6 A Right.

7 Q -- we're just talking about the ones that you
8 listed, your critique then is that the Coast Guard is being
9 too safe?

10 A I can't answer that with a yes or no.

11 Q All right.

12 And referring to Prince William Sound on redirect,
13 you said that in your opinion, the area is not a hazardous
14 area, is that right?

15 A That's true.

16 Q And I think you also said on redirect, it's an
17 easy passage through that area, is that correct?

18 A That's correct.

19 Q And in fact, I think you said you could almost do
20 it with your eyes closed.

21 A Yes.

22 Q On Friday you also referred to the Prince William
23 Sound as a millpond?

24 A Yes, ma'am.

25 Q And -- are you serious?

1 A What do you mean?

2 Q You think that Prince William Sound is like a
3 millpond?

4 A When it's flat and calm, it's just like a
5 millpond. That's what I meant.

6 Q You also think that Prince William Sound is just
7 like the middle of the ocean, don't you?

8 A That's correct.

9 Q Now, if you were to hit a charted reef in the
10 middle of the ocean, you'd have to be pretty darn reckless,
11 wouldn't you?

12 A A chartered --

13 MR. CHALOS: Objection, your Honor. No foundation
14 for that.

15 THE COURT: Miss Henry, what are you -- this is
16 not --

17 MS. HENRY: Your Honor, he has compared Prince
18 William Sound, where the Exxon Valdez hit a charted reef, as
19 like the middle of the ocean.

20 THE COURT: Objection sustained.

21 BY MS. HENRY: (Resuming)

22 Q Finally, sir, it is true, is it not, that you
23 really hate to pass judgment on other skippers?

24 A I don't feel comfortable doing it, no.

25 Q On direct you said, I really hate to pass

1 judgment, didn't you?

2 A Sure.

3 MS. HENRY: I have no other questions.

4 MR. CHALOS: No further questions, your Honor.

5 THE COURT: Okay, you're excused.

6 (The witness is excused.)

7 THE COURT: You may call your next witness.

8 MR. MADSON: Yes, your Honor. We'll call Thomas
9 Burr at this time.

10 MR. COLE: Judge, may we approach the Bench?

11 THE COURT: All right.

12 (An off the record Bench conference was had.)

13 Whereupon,

14 THOMAS R. BURR

15 called as a witness by counsel for the Defendant, and having
16 been duly sworn by the Clerk, was examined and testified as
17 follows:

18 THE CLERK: Sir, would you please state your full
19 name and then spell your last name.

20 THE WITNESS: It is Thomas Roger Burr, spelled
21 B-U-R-R.

22 THE CLERK: And you current mailing address, sir?

23 THE WITNESS: 4690 IDS Center, Minneapolis,
24 Minnesota 55402.

25 THE CLERK: And your current occupation?

1 THE WITNESS: I am currently employed as a
2 consultant with Forensic Associates, Incorporated.

3 THE CLERK: Thank you.

4 DIRECT EXAMINATION

5 BY MR. MADSON:

6 Q Mr. Burr, why don't you tell us what Forensic
7 Associates, Incorporated, is?

8 A Yes. Forensic Associates, Incorporated, is a firm
9 in Minneapolis, Minnesota. Our company provides laboratory
10 testing services and consultation to attorneys, private
11 corporations, government agencies. We provide testing of
12 substances for alcohol and drugs. We provide consultation
13 services to attorneys, and we provide management of alcohol
14 and drug testing programs in corporate types of settings.

15 Q And you do this for a fee, correct?

16 A Yes, I do.

17 Q Would you tell the jury what your fee arrangement
18 is with regard to your services on behalf of Captain
19 Hazelwood?

20 A Yes. Forensic Associates fee arrangement is that
21 we bill for my services \$100 per hour for the time that I
22 spend on a particular case, and that includes the time in
23 preparation, consultation, travel, testimony and so on.

24 Q Do you have any idea -- or have you billed
25 anything so far, sir?

1 A I have received a retainer in this case, yes.

2 Q In what amount?

3 A \$1,500.

4 Q Do you have any idea or estimate as to what you
5 believe your total fee will be in this case?

6 A Probably 3,000, at the most.

7 Q Now, Mr. Burr, let's go back and ask you about
8 your educational background. Could you tell the jury please
9 where you went to school and what subject and degrees you
10 may have?

11 A Yes.

12 I attended the University of Minnesota, Duluth. I
13 graduated from the University in 1968. I graduated magna
14 cum laude with a degree in biology and chemistry. I have
15 taken a number of courses in the area of analytical
16 chemistry, instrumentation, toxicology, since that time,
17 although I have no graduate degrees in the area.

18 Q And the have you continued to take courses up 'til
19 the present time?

20 A Yes, I have.

21 Q What about work experience, sir? After you
22 finished school, where did you become employed?

23 A I became employed for the City of St. Paul,
24 Minnesota, in the crime laboratory. Our laboratory was a
25 city-county laboratory. We served the county of Ramsey,

1 which is the capital of Minnesota. It is a county of about
2 700,000. Our laboratory did the work for the law
3 enforcement agencies in the county and the medical examiner
4 in the county also.

5 Q When you say, did the work for the law enforcement
6 agencies, why don't you explain that? What do you mean by
7 that?

8 A Yes. The laboratory was a laboratory that did
9 work in a number of areas, including drug testing, alcohol
10 and drugs in biological samples. Some work in
11 fingerprinting, firearms and tool mark examinations and some
12 other types of work. I specifically worked in the area of
13 toxicology.

14 Q How long did you remain in that field, sir?

15 A I remained with the department for a little over
16 20 years, almost 21.

17 Q Did you retire?

18 A Yes, I did.

19 Q When was that?

20 A I retired in February of 1989.

21 Q And with regard to your particular field, that is,
22 toxicology, what exactly did you do during this 21 years, if
23 you can put it in that term, with regard to testing for
24 alcohol, and what you may or may not have done with regard
25 to its effects on the human body?

1 A Yes, absolutely. First of all, I may say that I
2 worked with alcohol toxicology, drug toxicology, and testing
3 on a regular basis for the entire 21 years, including taking
4 several courses related to alcohol and alcohol toxicology.
5 I studied at the University of Indiana in Bloomington a
6 course on breath testing and alcohol toxicology, and I took
7 courses from the manufacturer of breath testing instrument
8 on the design and theory of that particular instrument,
9 several instrumental courses of analysis, a course on drug
10 testing in biological specimens.

11 As far as what I did, for about the last 12 years
12 I was with the department I was the chief scientist in the
13 laboratory. And by that I meant I had no -- I did not
14 report to anyone except a police officer, so there was no
15 scientific supervision of my position.

16 Q Excuse me for interrupting you. What do you mean
17 by reporting to a police officer?

18 A Yes.

19 I was the senior scientist in the laboratory and
20 that meant that I was responsible for the analytical
21 techniques and methods that were used, and I did not have a
22 technical supervisor. There was not another scientist that
23 I reported to. I basically reported to a police lieutenant
24 who was an administrator.

25 Q What about training of police officers? Did you

1 have any experience in that area, sir?

2 A Absolutely. I trained police officers in breath
3 testing. Specifically from 1968 through 1975, I taught
4 police officers testing of subjects with breath samples with
5 a machine called a breathalyzer. I then again over the
6 entire course of my career with the department, I taught in
7 the recruit academy and in-service training and part of the
8 areas that I trained police officers was in the area of
9 alcohol and alcohol testing and drinking-driving law
10 enforcement. And additionally for about five years I had an
11 appointment as an adjunct professor of criminalistics at
12 Lakewood Community College in suburban Minneapolis where I
13 taught law enforcement candidates. These were people who
14 were getting their degree in law enforcement. I taught a
15 course called forensic science.

16 Q What about, did you do any studies on human beings
17 and alcohol and its affect on the person, that is, by
18 prescribing or giving them certain amounts of alcohol?

19 A Yes, I did. I have done -- over the 20 years I
20 probably tested in laboratory testing settings, several
21 hundred subjects. Many of them were conducted during breath
22 test operator training from 1968 through 1975, and some of
23 them were conducted in 1983, when I was doing testing on a
24 new breath test instrument that was going into use in
25 Minnesota, and then again recently in training people for

1 collecting of urine and breath samples for a corporate
2 contract that we have.

3 Q When you say -- is that the present time, sir?

4 A Yes, that's correct.

5 Q Would you explain that? You said it was a
6 contract?

7 A Yes.

8 We manage a alcohol and drug testing program for
9 Northern States Power Company. Northern States Power is a
10 large public utility of southern Minnesota. They are
11 required by the Nuclear Regulatory Commission, since they
12 have three nuclear reactors, to have a fitness for duty
13 program which includes alcohol and drug testing. Our firm
14 manages that, Dr. Gents and myself, two of us manage that
15 program. We certify their instruments, we train their
16 operators and so on. And again, we have just recently
17 conducted some controlled drinking studies with people as
18 part of training operators. We give people alcohol to drink
19 and take tests of their breath and do other types of testing
20 of these people as part of the training of operators and as
21 part of our own research also.

22 Q Does part of that research and training consider
23 the correlation if any between a set amount of alcohol, in
24 other words, a percentage of alcohol in a person's blood
25 stream, and your analytical observations of the person as to

1 whether or not he can perform certain physical or mental
2 tasks?

3 MR. COLE: Objection; lack of foundation. There
4 has been no showing that he did any blood testing.
5 Everything he has testified to is about breath testing.

6 MR. MADSON: Well, okay.

7 BY MR. MADSON: (Resuming)

8 Q Is there a relationship, sir, between blood and
9 breath testing?

10 A Oh, absolutely. I was intimately involved with
11 both blood and breath testing over my 21 years. I have been
12 dealing -- talking more about the breath testing since that
13 was the -- it was during the breath testing series that I
14 did most of the controlled drinking experiments. I did
15 however take many blood samples and compare them to breath
16 samples. I also did blood alcohol testing on a routine
17 basis for 21 years. And many of those cases I also had a
18 chance to correlate peoples behavior on certain standardized
19 tests with their alcohol concentration.

20 Q Now in Minnesota, if I understand correctly, the
21 people who are suspected of, say, operating a motor vehicle
22 while intoxicated, would be subject to a breath test, is
23 that right?

24 A Yes. Usually a breath test, sometimes a blood
25 test. But more often than not a breath test.

1 Q Well, would part of your duties be to correlate or
2 use that number and translate it into a percentage of
3 alcohol in the blood?

4 A Yes.

5 Q By any standard means or formula?

6 A Yes, that's correct. I did that for many years.

7 Q Is there a correlation, then, sir, between the
8 two?

9 A Yes, there is. With chemical testing and the way
10 that instruments are designed, there is a good correlation
11 between breath and blood samples. And that is if we take
12 both a breath and a blood at the same time, we will get a
13 fairly good correlation between the two.

14 Q Now getting back to my question then, sir, did you
15 have occasion in the course of your experience, to compare
16 blood alcohol or breath alcohol results with persons that
17 had consumed alcohol so you could make an analytical
18 observation of their ability or lack of it to do physical
19 and mental tasks?

20 A Yes.

21 Q And how would this be done, if you could just
22 summarize it?

23 A Yes.

24 In two ways. One was in controlled and human
25 subject testing in which subjects were given alcohol to

1 drink, of measured amounts. Their alcohol levels were
2 measured with breath tests and with blood tests. And they
3 were given certain standardized types of tests to perform.
4 Walking heel to toe, touching their nose, reading, adding up
5 numbers, and various other types of tests of this sort. And
6 their performance was correlated to their alcohol
7 concentration. And then they were tested over an extended
8 period of time to determine how they burned the alcohol off
9 and the dynamics of the alcohol within their body.

10 Additionally, I viewed, in my career, hundreds of
11 videotapes of people who were subjected to standardized
12 sobriety tests, we call them, which I designed and set up to
13 be used by the department. And I knew their alcohol reading
14 from a chemical test of their blood or urine or breath and
15 was able to correlate that with their performance on these
16 tests. So I have seen literally hundreds of people at all
17 levels of alcohol influence.

18 Q What about police reports as such? That is, just
19 the officer's observations of the subject?

20 A I have reviewed many, many of those over the
21 years, probably a thousand or more.

22 Q And you said you designed certain sobriety tests.
23 Would you explain that, please?

24 A Yes.

25 Part of my job was to work with the scientific

1 aspects of the chemical testing program. And what I did was
2 design some -- designed is a poor -- I didn't invent the
3 tests. I used tests that were commonly available and
4 designed a scheme of testing for our police officers and
5 other officers to use in the chemical testing area when they
6 arrested somebody for drinking and driving or sometimes
7 other types of crimes where alcohol was involved, in which
8 they would be given a set of standardized tests and they
9 would be recorded on videotape and they would give -- answer
10 questions and do some other tasks like write their name on
11 the board and tell you what time it was and things like
12 that.

13 Q Lastly sir, have you ever testified as an expert
14 in any Courts?

15 A Yes, I have.

16 Q And where would that be?

17 A I have testified as an expert witness in this
18 particular area of alcohol and alcohol toxicology in testing
19 in Minnesota, North Dakota, South Dakota, Iowa, Wisconsin,
20 Montana, West Virginia, Pennsylvania, Alabama, Florida and
21 Alaska.

22 Q Then sir, as part of your present occupation now,
23 keep up with the literature in this field?

24 A I read the -- I keep up with all the literature, I
25 believe. At least all of it that can be found.

1 Q Would you say you are not the only expert in this
2 field?

3 A No, that's correct. There are many experts in
4 this field.

5 Q What did -- what were you asked to do with regard
6 to your particular participation in this case?

7 A I was asked by you and the other attorneys in this
8 case to review the particular materials and the results of
9 the tests and so on in this case, and give some opinions as
10 to their meaning.

11 Q And what about any testimony? Did you read the
12 testimony of any particular individuals?

13 A Yes, I did. I read the testimony of Mr. Prouty.

14 Q Now, sir, do you recall Mr. Prouty's testimony
15 that experts can differ -- at least it is a subject of
16 debate with regard to whether or not retrograde
17 extrapolation is a useful means to determine a person's
18 blood alcohol content at a previous time --

19 A That's cor --

20 Q -- do you agree or disagree with that?

21 A I agree that that is a subject of controversy,
22 yes.

23 Q You rely on the literature of others and the
24 studies of others in formulating your opinions, and have you
25 done so in this case?

1 A Yes, I do. I consistently rely on the studies of
2 other people and other scientific studies and treatises to
3 form my opinions in this area.

4 Q Are you familiar, for instance, with a person by
5 the name of A. W. Jones?

6 A Yes, I am.

7 Q Do you know from the studies he has done what he
8 believes with regard to retrograde extrapolation and its
9 usefulness?

10 A Yes, I do.

11 Q And what is that, sir?

12 A He feels that Dr. Jones and his writings has said
13 that he feels that it is not a very good thing to do
14 scientifically, that it has shortcomings and it should be
15 discouraged.

16 Q Are you familiar with a Dr. Kurt DuBowski, sir?

17 A Absolutely.

18 Q Who is he, sir?

19 A Well, Dr. DuBowski is a -- he's from Oklahoma and
20 I believe he is a professor of medicine and in charge of the
21 medical and the research facilities there in the medical
22 school in Oklahoma, and he is a prolific researcher and
23 author in the area of alcohol and alcohol testing and so on.
24 He has probably written more than anybody else in the area.

25 Q And have you read his material?

1 A I have read, I believe, everything he has written.

2 Q Do you know his opinion with regard to the
3 validity -- forensic validity of this type of retrograde
4 extrapolation?

5 MR. COLE: Objection. Lack of foundation. This
6 person is not an expert in retrograde extrapolation.

7 MR. MADSON: Who isn't?

8 MR. COLE: This person.

9 THE COURT: The question is do you know this
10 person's opinion on retrograde, and the objection is
11 overruled. That objection is overruled.

12 THE WITNESS: Yes, I do.

13 BY MR. MADSON: (Resuming)

14 Q And what is that, sir?

15 MR. COLE: Objection; hearsay.

16 THE COURT: You want to address that one?

17 MR. MADSON: Your Honor, I think I have
18 established that he is an expert. Experts can rely on
19 hearsay. It's done all the time. That's the purpose of
20 having an expert here, so we don't have to have every single
21 person that writes on the subject. And he has already
22 acknowledged that he has read it, and he relies on it for
23 his opinions that he is going to state here today.

24 THE COURT: Objection sustained. Mr. Madson, you
25 just can't call a witness and ask him to relate the opinions

1 of others. You can ask him his opinion and you can ask him
2 what he bases it on, but not on the hearsay of others.

3 Objection sustained.

4 BY MR. MADSON: (Resuming)

5 Q Do you have an opinion, sir, as to the validity --
6 forensic validity of what's called retrograde extrapolation,
7 and perhaps you can explain what you mean by that term
8 first?

9 A Yes.

10 By retrograde extrapolation what we mean is when
11 we take a test done at one specific period of time, and
12 based on that test, try to determine an alcohol
13 concentration -- to put a number to somebody's alcohol
14 concentration at some time prior to that test, going
15 backwards. We have a test now, we want to go backwards and
16 find out what they may have been at some previous time.
17 That's what referred to as retrograde extrapolation.

18 Q And have you attempted to do this yourself or been
19 called upon to do it yourself?

20 A Yes, I have been called upon to do that, yes.

21 Q Explain briefly how that is done.

22 A Yes.

23 What -- what's done in that area is that if we
24 have a test at one specific time, if we have enough, or if
25 we had enough information, we could go backwards in time if

1 we knew everything that there was to know in this particular
2 case and make an estimate of somebody's alcohol
3 concentration at a prior time. We need a whole bunch of
4 information in order to have any hope of arriving at any
5 sort of result that has any validity whatsoever to it. And
6 it is very dubious when it is based on a single chemical
7 test done at one single point in time.

8 Q Let me again interrupt you. Why would, say, two
9 tests be of more benefit than just one?

10 A Well, two tests would be of more benefit than just
11 one because we could perhaps get an idea if we had two tests
12 that were separated in time, by say an hour, we could at
13 least get some information as to whether this person was
14 going up or down in their alcohol concentration and perhaps
15 have a better chance of being near the alcohol's trend line.
16 By that I mean if you measure alcohol over a period of time,
17 people drink and burn it off, there will be a general trend
18 line. But any test can fall up and down from that line.

19 Q What's the longest period of time you have been
20 called upon to render an opinion as to a person's blood
21 alcohol level or content at a previous time, previous
22 incident?

23 A Probably two or three hours.

24 Q And have you read -- I think you said you read Dr.
25 Prouty's testimony with regard to this case?

1 A Yes. I did

2 Q Do you have an opinion, sir, as to whether or not
3 you agree or disagree with Dr. Prouty and his conclusion
4 that he reached with regard to Captain Hazelwood's estimated
5 blood alcohol content?

6 A I would disagree with it in substance.

7 Q Is your opinion based on the literature that you
8 have studied and the writings of others, such as Dr.
9 DuBowski?

10 A Yes.

11 Q Why? Would you explain that, sir? What reliance
12 did you place on that in your opinion?

13 A Yes. I placed my reliance on the studies of
14 others. In particular that many authors have written that
15 unless we -- since there are so many unknown factors --

16 MR. CCLE: Objection. Calls for hearsay. He's
17 going to state what these other people are saying, it calls
18 for hearsay.

19 (Pause.)

20 MR. MADSON: Your Honor, I would refer to Rule
21 703, and the difference between expert witnesses and lay
22 witnesses opinions are set forth there, that they can rely
23 on hearsay which is technically hearsay, but they are
24 writings that are established in the literature by other
25 recognized experts. And certainly they can form opinions

1 based on their own personal observations...

2 (Start Tape C-3670)

3 ...And certainly they can form opinions based on their own
4 personal observations or the observations and clinical data
5 from others, as well as themselves.

6 MR. COLE: Your Honor, I am not denying that they
7 can rely on it, but they can't read it into the record.
8 That's hearsay.

9 MR. MADSON: I don't believe he had anything he
10 was reading, your Honor.

11 THE COURT: I understand. But was it your
12 intention to get from this witness the opinions that other
13 persons in the field on whom this witness relied upon have?

14 MR. MADSON: Certainly. Based on their reading
15 and his reliance upon that and his own expertise.

16 THE COURT: I want to call counsel's attention to
17 705(c).

18 MR. MADSON: Your Honor, my argument is that
19 certainly it does not come within the exclusion under 705(c)
20 because it is supporting his opinion and I think it
21 certainly doesn't call for opinions that are for an improper
22 purpose, and it doesn't -- it isn't certainly designed to
23 confuse the jury or get away from the main subject here,
24 which is in fact this extrapolation.

25 THE COURT: According to (c) the underlying data

1 would be inadmissible into evidence for any purpose other
2 than to explain or support the expert's opinion here,
3 because it would otherwise be hearsay and the question is
4 whether or not the jury can use it for an improper purpose.
5 I don't want you to parade a witness in here just merely for
6 the fact of him reciting what other experts in the field may
7 feel about the subject. I want the witness to testify to
8 his opinion and you can support his opinion with data that
9 may not be necessarily admissible, but I am not going to let
10 it come in evidence in the form that you are asking it to
11 come in at this time.

12 I am going to sustain the objection at this time.
13 Mr. Madson. If you're asking him for what another author on
14 the subject said about the subject. If that is what you are
15 trying to do it for --

16 MR. MADSON: I am asking him what does he base his
17 opinion on, which may in fact include others in the field
18 and what they believe and why, because they have written on
19 it and studied it, and he has relied upon that to formulate
20 his opinion.

21 THE COURT: Let's hear your next question and
22 we'll see.

23 BY MR. MADSON: (Resuming)

24 Q Well, I think my question was to Mr. Burr, you
25 have -- I think you have already stated you have an opinion

1 with regard to the retrograde extrapolation that was used in
2 this particular case?

3 A Yes, I do.

4 Q And what is that opinion with regard to its
5 forensic validity?

6 A It's my opinion that it is not a valid thing to do
7 forensically to extrapolate, particularly for this period of
8 time in the manner that was done in this case.

9 Q And what do you base that opinion on, sir?

10 A I base that opinion on the work that I have done
11 in over 20 some years. I base that opinion on the research
12 and writings of other notable authorities in the field.

13 Q Let me --

14 MR. MADSON: May I approach the witness, your
15 Honor? I think we have to draw a diagram.

16 (Pause.)

17 MR. MADSON: There might be one we can use, I'm
18 not sure.

19 BY MR. MADSON: (Resuming)

20 Q Now Mr. Burr, without going into a long, detailed
21 explanation of how alcohol affects people -- let's assume
22 that that's been gone into at great length here -- could you
23 just state what tow factors -- and explain, if you would,
24 very briefly, absorption rate and elimination rate?

25 A Yes.

1 Absorption rate has to do with when you take the
2 alcohol into your body, how fast it is absorbed into your
3 system. When the alcohol is taken in it goes into your
4 stomach and the majority of it is absorbed when it passes
5 into the small intestine. This rate is highly variable. It
6 can be absorbed in as short a period of time -- if say he
7 takes two or three ounces of alcohol, it could be absorbed
8 in as short a period of time as 30 minutes. There is
9 evidence that it can take in some instances up to six hours
10 to be totally absorbed into your system. So that is what we
11 mean by absorption rate, the time it takes for that alcohol
12 that you drank to actually get into your system, get into
13 your blood.

14 The elimination rate is the rate at which our body
15 gets rid of the alcohol that has been absorbed into the body
16 from the stomach and the intestines and gotten into the
17 bloodstream and our body gets rid of that alcohol over a
18 period of time. So that is basically the elimination phase
19 of alcohol.

20 Q Now, with regard to -- is there something called
21 the Widmark Factor also? What is that, sir?

22 A Yes.

23 The Widmark Factor is -- is named after a Swedish
24 researcher, Dr. Widmark, who was the first scientist to
25 elucidate the idea that if we know a person's body weight

1 and size and we know their alcohol concentration, that we
2 can then predict how much they would have had to drink to
3 get to that point. Or conversely, if we have a person, we
4 know their size and weight and we give them a certain amount
5 to drink, we can predict what their blood alcohol
6 concentration will be.

7 And Widmark's Factor -- and he basically
8 elucidated the factor of what percentage of the body was
9 available for this alcohol to go into and that was the
10 factor that he came up with and that if we take a person of
11 200 pounds, you know, what percentage of their body is
12 available for that alcohol to be dissolved in. That's
13 what's normally referred to as the Widmark Factor.

14 Q Now, what are the limits, as you understand them
15 to be, in the elimination factors?

16 A Yes.

17 In the elimination factors, the --

18 MR. COLE: Judge, I am going to object. At this
19 point I think it needs to be clarified whether he's basing
20 this on his own research or the research of other people.

21 THE COURT: Objection overruled. You may
22 continue.

23 THE WITNESS: The elimination rates of alcohol.
24 Alcohol can be eliminated from the body with as slow a rate
25 as .008 per hour, grams per hundred milliliters, whatever

1 number unit you want to put on that -- .008. It can -- and
2 it also can be eliminated at as fast as rate as .035. Those
3 are the extremes that have been reported in the literature.

4 BY MR. MADSON: (Resuming)

5 Q What is the more normal or average, if you know,
6 elimination rate?

7 A The average elimination rate is in the area of
8 .018, something approaching that. Somewhere near that.

9 Q Okay.

10 Now I want to ask you a little bit about the
11 elimination rate over time and blood alcohol content. Are
12 you familiar with the standardized or general curve or
13 graph?

14 A Yes.

15 Q I wonder if you could step over to the board and
16 just draw what, you know, if you can refer to a general
17 trend curve?

18 A Sure. Sure.

19 The alcohol trend curve is something that we can
20 draw. We are going to call this time zero, and this side
21 we're going to call alcohol concentration and this axis
22 we're going to call time. Okay. When someone starts to
23 consume alcohol, assuming that they are starting at zero,
24 they will, for a period of time while they are drinking and
25 after they quit drinking -- and that period of time will

1 vary -- they will go up and reach a point, they will
2 basically level off for a while, and then they will start on
3 down until they reach zero. This would be the general trend
4 line of an alcohol dissipation or an alcohol curve from the
5 time you started drinking 'til eventually down here you get
6 rid of all the alcohol. This is a smooth curve. Nobody
7 actually looks like this. I mean the data doesn't look like
8 this. It doesn't all fall on the line very nicely.

9 Q Show for example what a realistic or a normal
10 curve would be for, say, any individual? How it would
11 really look.

12 A Sure. Right.

13 An individual may go like this and you know, they
14 may reach a point, they may come down a little bit, and as
15 they go down they may -- you know, there's periods of time
16 when it may go up and the general trend will be down, but
17 there will be periods of time when this person will actually
18 go up and down a little bit. And so though the general
19 trend line is this way, any specific point may or may not be
20 on that trend line.

21 Q Now, that's assuming that it is one individual,
22 correct?

23 A This is correct, yes.

24 Q What about a different individual, would he
25 necessarily follow that same identical trend?

1 A Oh, absolutely not. A different individual under
2 the same circumstances given the same alcohol to drink and
3 the same -- under the same identical circumstances, may give
4 you a curve that looks like this. And then he would drop
5 off over here. Another individual may give you a curve you
6 may never get as high. It may be extended way out this way
7 and then down. They all eventually come together down here
8 as they drop off. But this has to do with how long it takes
9 it to absorb, the difference in the rate it burns off, and
10 so on.

11 Q Maybe you can draw another curve, a bell shaped
12 curve if you will, on alcohol elimination rates and how the
13 general population fits into the extreme.

14 A Yes.

15 If we just look at alcohol elimination --

16 Q Maybe you can step back just a little bit and make
17 sure the jury can see.

18 A Can you see that?

19 If we look at that, what we have out here is that
20 kind of a number. We have a .008 way out at this end, and
21 out at this end we have maybe an .035. With the midpoint of
22 this being -- or the average burn off rate being something
23 in the neighborhood of .018. Some people use different
24 numbers in that, but they are all very close to that, 15,
25 16, 18, 18. And obviously the further away you get from

1 this number, the less likely you are to have -- to be
2 dealing with a particular individual. If you measure a
3 hundred people, there will only be a very few of them if
4 any, out at these particular ends of the curve.

5 Q Very few would be at the ends or extremes, right?
6 The majority is in the middle?

7 A Very few would be at the ends or extremes. I have
8 never seen anybody this high or this low myself.

9 Q But you said it's been reported --

10 A It's been reported in the literature, yes.

11 Q Then would it be correct, sir, that a person --
12 there is no more reason to believe a person would have a
13 .008 as opposed to a .035, unless he was actually tested
14 himself?

15 A Yes, that's correct. The .008 or the .035 are
16 both a rare individual and they are both very unlikely. The
17 most likely is that someone is in this range, a few points
18 either side of .018. That's what's most likely going to
19 happen with any particular individual.

20 Q Okay, you can resume your seat, sir. That's all
21 we need.

22 A Okay.

23 Q Now, calling your attention to the testimony of
24 Mr. Prouty in this case, do you recall the testimony that he
25 related that at about 12:00 o'clock in his opinion Captain

1 Hazelwood had a blood alcohol content of about .015 or 14?

2 A Yes, I recall that, .14.

3 Q Would you agree with that opinion?

4 A No.

5 Q Why, sir?

6 A For a couple of reasons. Number one, he used a
7 burn off rate of .008, and that is very unlikely. I would
8 find that to be extremely unlikely that anyone would burn
9 off alcohol at that particular rate, number one. Number
10 two, he's going backwards for a long period of time without
11 -- I don't believe that -- there's too many variables in the
12 equation to go back, even to apply any burn off rate over
13 that period of time is beginning to give you numbers that --
14 that don't make any sense. Basically because you know, we
15 have one test at a point in time which may or not be on the
16 trend line, so we may be starting from a false point to
17 start with. We're using a burn off rate that is
18 ridiculously low.

19 Q When you say that -- let me interrupt -- does that
20 mean you don't know if he's actually declining or not?

21 A Absolutely. We don't know from that .06 if that
22 really represents a point at or near the line that he is at
23 or whether he is actually going up at that point in time or
24 whether he is going down at that point in time and that if
25 we take tests all around that they may all be lower or they

1 may all be higher. It may just be a point that is a little
2 bit high or a little bit low. So we don't even know if we
3 are starting at the right point. We don't know if he is
4 going up, we don't know if he's going down. We don't know
5 anything. We don't know if he's absorbed all the alcohol
6 he's had to drink. At the time he may still have alcohol in
7 his stomach at the time we're going back to. So you know,
8 there's just too many unknown variables to do that.

9 Q Do you recall Dr. Prouty's testimony that two
10 tests -- another test in addition to the wouldn't really
11 give him any more information or give him any more data that
12 was useful, do you recall that?

13 A Yes.

14 Q Do you agree with that?

15 A No. I think another test would give you more
16 useful data. It would give you an indication whether or not
17 if it was, say, an hour after the other test would give you
18 a good indication as to whether the person was going up or
19 down.

20 Q And sir, assuming, for the sake of argument, that
21 Captain Hazelwood had a burn off rate that approached the
22 average -- in other words, rather than .008, it was .018 or
23 15, do you have an opinion as to whether this would raise
24 his blood alcohol level at the prior time or keep it the
25 same or what difference it would make if you used

1 that _____?

2 A Based on the kind of calculation that Mr. Prouty
3 did, if he had a .018 alcohol burn off rate, he would be
4 considerably higher at the time if we used that sort of
5 backtracking calculation.

6 Q You recall his testimony that it would be at least
7 a .2-0 or 2-7, something like that?

8 A Yes. We were dealing about 11 hours at an 11 to
9 the 6, so that -- yeah, it's in that -- about a 2-0.

10 Q And if we project it backwards, and assuming again
11 that Captain Hazelwood began consuming alcohol say at 4:00
12 or 4:30 on the afternoon of the 23rd, and had consumed his
13 last drink approximately 7:30 that evening and then an hour
14 later was seen at the ship, okay, and assuming no other
15 drinking occurred from that time -- 7:30 p.m., until the
16 time he was tested some 14 hours later, if you go back to
17 say the 9:00 o'clock time rather than the midnight time,
18 would that increase or decrease his blood alcohol level?

19 A That would increase it if you were doing that kind
20 of a calculation backwards.

21 Q Did you calculate or do you recall Dr. Prouty's --
22 or Mr. Prouty's testimony regarding what that estimate
23 would be?

24 A Yes. It was another three hours, so that puts you
25 in the range of .3-1 or something, right around .3-0.

1 Q Safe to say 3-0 or better?

2 A Yes, right, 3-0 or better.

3 Q From your experience, sir, and your studies, your
4 personal observations you've made over the years, do you
5 feel you can fairly relate a persons blood alcohol level
6 over a certain amount to whether or not they are visibly or
7 noticeably intoxicated?

8 A Absolutely.

9 Q What would that figure be if you have an estimate,
10 sir?

11 A I -- you can -- if you know someone's alcohol
12 concentration, you can make some general observations about
13 their physical abilities. At levels of .3-0, 100% of the
14 people are visibly and noticeably intoxicated. At levels
15 above .2-0, I would say at least 97% of the people are
16 visibly and noticeably intoxicated. At the levels of .1-5,
17 in that area, it's probably 70% of the people are visibly
18 and noticeably intoxicated.

19 Q When you say visibly and noticeably, what factors
20 to you look for to see whether they are or not?

21 A What I am talking about about the visibly and
22 noticeably, I am not talking about a scientist observing
23 somebody and looking for indicia of intoxication that we
24 scientists would look for. I am talking about a observation
25 by a trained or a semi-trained or even an untrained person,

1 which you would look at this individual and you would notice
2 things about him that looked out of the ordinary and you
3 would say this person appears to be under the influence of
4 alcohol. He looks likes he's drunk.

5 MR. MADSON: Excuse me, sir. I want to mark these
6 if I could.

7 (Defendant's Exhibits Numbers BZ,
8 CA, and CB are marked for
9 identification.)

10 BY MR. CHALOS: (Resuming)

11 Q Mr. Burr, let me hand you now what has been marked
12 as Defendant's Exhibit CB, and BZ, I guess that is, and CA,
13 is that right? What does that appear to be, sir, if you can
14 tell?

15 A It appears to be a ladder and some sort of a
16 walkway and another ladder down, and a ladder up and a
17 walkway --

18 Q Just examine all three and see if there's any --

19 A They appear to be shots of the same thing, same
20 area.

21 MR. MADSON: Your Honor, I intend to ask this
22 witness some questions about this ladder, okay? I submit to
23 the Court that I will tie it up later as to when and where
24 it was taken and what it represents other than a ladder, but
25 I think I want to utilize his expertise in testimony with

1 regarding a person who is under the influence and their
2 ability to physically walk on something of this --

3 THE COURT: Any objection, Mr. Cole?

4 MR. COLE: So long as he ties it up, no objection.

5 THE COURT: All right, you may proceed.

6 BY MR. MADSON: (Resuming)

7 Q Particularly I want to hand you BZ and ask you to
8 look at that?

9 A Okay, yes.

10 Q And ask you if a person -- assuming a person had
11 about a .3-0 blood alcohol, do you have an opinion as to
12 whether he would have difficulty or noticeable difficulty in
13 negotiating this ladder or walkway?

14 A Yes, I do.

15 A It's my opinion that a person with that kind of an
16 alcohol concentration would have a real difficult time
17 negotiating this particular ladder and walkway that's in
18 State's Exhibit BZ.

19 Q What about just walking, sir? Just walking say,
20 the deck of a ship, which is relatively level?

21 A A person with a 3-0 alcohol concentration would be
22 noticeably impaired in their ability to walk straight. They
23 would be staggering and they would be swaying and weaving
24 and having a difficult time walking on a straight course
25 across this floor they'd have difficulty doing it.

1 Q Would your opinion be substantially different if a
2 person had, say, a .2-0 rather than a .3-0?

3 A At a .2-0, I would expect to see them having
4 difficulty walking also. The great majority of people would
5 have a lot of difficulty walking at .2-0, although it
6 wouldn't be as noticeable at 3-0. Many people at 3-0
7 wouldn't even be on their feet, let alone walking. But at
8 2-0, the great majority of people are going to be extremely
9 uncoordinated.

10 MR. MADSON: Thank you, sir. I think that is all
11 the questions I have at this time.

12 BY MR. MADSON: (Resuming)

13 Q Except -- let me ask you this, sir. Assuming a
14 person is six feet tall and 170 pounds, how does this relate
15 -- if it does, if you have an opinion -- how this figures
16 into the Widmark formula.

17 A Yes, sir.

18 The weight of an individual has to do with how
19 many drinks they'd have to consume to get to a particular
20 alcohol concentration, so that figures into the Widmark
21 formula. And it is very -- basically it's that the average
22 male, for example, has a certain amount of water in their
23 body which is about .6-7. Some people fall below the
24 average, people are particularly obese, particular people
25 are real lean and athletic tend to fall above the two-thirds

1 or the .6-7 percent water in their body. So it -- that
2 figures in by how much you need to drink to get to a
3 particular alcohol concentration.

4 Q Do you know what Mr. Prouty used, if anything,
5 regarding a Widmark Factor, to come up with his estimate in
6 Captain Hazelwood's case?

7 A Yes.

8 I believe from the transcript that he used the
9 lowest number, about .5 or somewhere in that range for a
10 male.

11 Q What affect if any would this have in his ultimate
12 conclusion?

13 A Well, what that would do is that would raise one's
14 alcohol concentration related to the amount of alcohol that
15 you consumed if you use the low end of the spectrum of males
16 or of people versus the average or the high end, you will
17 get a higher alcohol concentration based on the same number
18 of drinks.

19 Q So if you use the average Widmark Factor, what
20 would that do, increase or decrease the number of drinks
21 necessary to reach that level?

22 A That would increase the number of drinks necessary
23 to reach the level and would decrease your alcohol given the
24 same number of drinks if you used the average Widmark
25 Factor.

1 Q Let me ask you this, sir. Assuming a person is
2 six feet tall and 170 pounds, and registers a blood alcohol
3 of let's say .2-5, some three hours after the last drinking
4 -- his drink is done, okay? Do you have any idea how many -
5 - just an estimate of how many drinks of say 80 proof vodka
6 is necessary to reach that level?

7 A Over a three hour period of time? About 15 -- 14
8 or 15 one ounce shots of 80 proof vodka.

9 Q What about to get to a 3-0? More or less?

10 A More. That's another -- of 80 proof, probably 18,
11 19, something in that amount.

12 MR. MADSON: Thank you, sir, I don't have any
13 other questions.

14 THE COURT: Mr. Cole, Mr. Madson, would you
15 approach the Bench, please?

16 (An off the record Bench conference was had.)

17 THE COURT: We're going to recess a little early
18 today, ladies and gentlemen. We'll see you back at 8:15
19 a.m. tomorrow. I am going to get a little better handle on
20 how we're progressing as far as the overall length of the
21 trial and I'll report back to you tomorrow sometime.

22 Don't discuss this case among yourselves or with
23 any other person and do not form or express any opinions
24 concerning the case. These are becoming increasingly more
25 important instructions to you. Don't let anybody talk to

1 you about the case either. Just avoid them, and remember my
2 instructions regarding media information. Avoid the media
3 sources concerning this case.

4 Be safe, and I'll see you tomorrow morning.

5 (Whereupon, the jury exited the Courtroom.)

6 THE COURT: Can you give me an estimate on the
7 completion of your case?

8 MR. MADSON: Yes, your Honor, we were just
9 discussing that. It looks like we have four to five more
10 witnesses. Four for sure, fifth is undecided.

11 THE COURT: All right. If you have any reports or
12 anything in connection with these witnesses if they are
13 expert witnesses that Criminal Rule 16 covers, turn them on
14 over to the State.

15 MR. MADSON: Your Honor, I have given everything,
16 every piece of paper that I have with regard to Mr. Burr,
17 Mr. Hlstala, or any other witness we have.

18 THE COURT: All right, you may step down, Mr.
19 Burr.

20 (The witness stands aside.)

21 MR. MADSON: The other thing I wanted to bring up,
22 your Honor, recall the inbound tape, and the Court has
23 tentatively admitted that although the State has made a
24 presentation or an offer of proof that they intend to use
25 that to show difference in the tone of voice or quality of

1 voice in Captain Hazelwood on the inbound portion of the
2 transit of Prince William Sound compared with the outbound,
3 to show I believe that he -- intend to show that he would be
4 intoxicated. I stated to the Court that we had a witness
5 who is available to testify about that tape. We would --
6 hopefully we were going use him on Wednesday, and to have a
7 hearing outside the presence of the jury on that issue as to
8 whether that tape was reliable enough, recorded properly,
9 that it could be utilized for that particular purpose. And
10 if it is all right, I guess I am just telling the Court
11 where we're coming from on this, and we have probably three
12 witnesses that could testify on that subject. And they are
13 either en route, and I think one of them is here already.
14 And we would like to do that while they are here to
15 establish what we feel is the invalidity of that tape.

16 THE COURT: We'll have to have a hearing on this
17 it sounds like and we'll just have to make time for it
18 sometime during the course of the Defendant's case. When
19 you get ready and you want to have a hearing on that, you
20 let me know and we'll work out some time.

21 MR. MADSON: Wednesday is what we are tentatively
22 shooting for, because we let the Court know that.

23 MR. COLE: Judge, I want to bring up one matter.
24 I think we should bring it up before Mr. Burr is on cross
25 examination. My research has shown that Mr. Burr was

1 suspended from the crime lab in Saint Paul for two -- for a
2 period of time after he improperly distributed a bulletin.
3 He quite during the time he was suspended. And then he
4 brought a law suite against, my understanding is, the mayor
5 of Bemidji, the police chief for a letter that was written
6 that they slandered him. He lost that lawsuit.

7 I believe that his actions in that case goes
8 towards his bias towards state governments. At the time he
9 was working as a crime lab person, he was also consulting on
10 the side privately for defense attorneys in violation of the
11 regulations in -- in Minnesota. And I would like to go into
12 that with him on cross.

13 MR. MADSON: Well, you Honor, for a person who is
14 really unprepared for cross examination, that's all news to
15 me. I have no idea what he is talking about and I would
16 have to get that information from Mr. Burr before I could
17 even respond.

18 MR. COLE: I can be here at 8:15 in the morning.
19 We can take it up then.

20 THE COURT: Why don't we do that at 8:15 tomorrow
21 morning. And be ready to cite some points and authorities,
22 Mr. Cole. And I agree with Mr. Madson, it seems like you're
23 pretty well prepared after asserting that you didn't have
24 anything concerning this witness.

25 Anything we can do now before we recess? We'll

1 stand in recess.

2 THE CLERK: Please rise. This Court stands in
3 recess subject to call.

4 (Thereupon, at 1:12 o'clock p.m., the trial was
5 recessed.)

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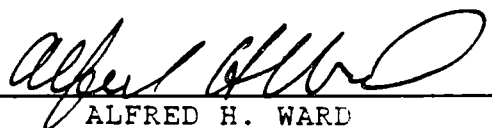
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SUPERIOR COURT)	
)	Case No. 3ANS89-7217
STATE OF ALASKA)	Case No. 3ANS89-7218

I do hereby certify that the foregoing transcript was typed by me and that said transcript is a true record of the recorded proceedings to the best of my ability.



 ALFRED H. WARD

VOLUME 28

STATE OF ALASKA

IN THE SUPERIOR COURT AT ANCHORAGE

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In the Matter of:	:	
STATE OF ALASKA	:	Case No. 3ANS89-7217
versus	:	Case No. 3ANS89-7218
JOSEPH J. HAZELWOOD	:	
-----	:	

Anchorage, Alaska

March 13, 1990

The above-entitled matter came on for trial by jury before the Honorable Karl S. Johnstone, commencing at 8:37 a.m. on March 13, 1990. This transcript was prepared from tapes recorded by the Court.

APPEARANCES:

On behalf of the State:

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MARY ANN HENRY, Esq.

On behalf of the Defendant:

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Thomas J. Burr

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Michael P. Hlastala

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E X H I B I T SDEFENDANT'SIDENTIFICATION IN EVIDENCE

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P R O C E E D I N G S

(Tape C-3670)

MR. MADSON: -- materials which relates to Mr. Burr, the witness that's about to be cross examined today, and I think it illustrates the depth to which the State of Alaska has gone to acquire information about Mr. Burr for cross examination prior to today. As Mr. Cole has made an application to get into a certain area and just briefly inform the Court, I wanted to make sure the Court had a chance to fully evaluate the nature of the cross examination area Mr. Cole wanted to go into.

From what he said yesterday -- I looked at this and that's all this material relates to -- we have to have a little background here. And this goes back to 1984, in Minnesota, involving Mr. Burr and how it relates to him. So it's six years old, six to five years old, and it begins when the State of Minnesota was changing over from breathalyzers to intoxilyzers. There was a lot of controversy among the experts there as to whether one test or two tests were necessary and there was controversy as to the relationship or correlation between two breath tests taken separately on the same subject.

Mr. Burr was an advocate of two tests and he also, during the time he was working for the City of St. Paul, testified on occasion for defendants. And this, of course,

1 did not endear him to the hearts and minds of state
2 prosecutors. So in 1985 in a case in Bemidji, he
3 testified-- the defendant was acquitted -- and the police
4 chief and the city attorney there wrote his boss and
5 complained about Mr. Burr testifying, they had lost their
6 case, and they didn't like his testimony saying that it had
7 to be within 90 percent of this correlation, which was the
8 gist of his testimony.

9 Mr. Burr wrote a memo -- this is before there was
10 any policy or anything on it -- to intoxilyzer operators,
11 saying that, in his opinion, the tests, to be valid, must
12 be within 90 percent of each other. And by the way, he was
13 proven correct in the two tests. They did require two
14 tests.

15 But, anyway, because of this memo which then
16 became an issue of whether it was really policy or just Mr.
17 Burr's opinion, there was enough pressure put on his boss,
18 the chief of police in St. Paul, that he suspended Mr. Burr
19 for a short period of time. That's the whole gist of this.

20 The other part of this material has to do with an
21 article Mr. Burr wrote on the effect of a breath tester,
22 breath freshener I guess you'd call it, which contains
23 ethyl alcohol and its effect on a breath test, and there
24 was a controversy about what type of alcohol it was.

25 What it comes down to, Your Honor, is six years

1 old material, or five years old, a difference of opinion
2 between experts and the fact that some state prosecutors
3 didn't like Mr. Burr testifying for defendants. It's
4 totally off the track here.

5 The main issue here has nothing to do with breath
6 testing. This was a blood test, as the Court knows. It
7 has nothing to do with breath fresheners. It has nothing
8 to do with correlations between tests and the breathalyzer
9 machine or an intoxilyzer. It has to do with retrograde
10 extrapolation, that's the whole issue.

11 So under 401, it's totally irrelevant, first of
12 all. Secondly, under 403, if it is relevant, it becomes a
13 waste of time and confuses the issues because it has
14 absolutely nothing to do with the issue here at hand.

15 JUDGE JOHNSTONE: Okay, Mr. Cole, this would be an
16 application you would have to make under 404B and I'm not
17 sure exactly what it is you intend on cross examining the
18 witness with. I heard something about a prior discharge
19 that sounds to me to be under 404B specifically. And what
20 else was it? Maybe you can elaborate on that, too.

21 MR. COLE: Your Honor, what Mr. Madson failed to
22 tell you in the first question which has to do with this,
23 Mr. Burr testifying for defense attorneys and the letter
24 that was written, is that after this letter was written by
25 the city attorney, the mayor and the chief of police, Mr.

1 Burr then sued the City of Bemidji, the police captain, the
2 city attorney and the mayor for defamation of character.
3 Now that suit lasted four years and it actually went to
4 trial in 1988.

5 JUDGE JOHNSTONE: Start at the beginning, Mr.
6 Cole. What is it you want to offer in evidence with this
7 witness?

8 MR. COLE: I want to offer in evidence that he
9 sued the City of Bemidji for defamation of character, based
10 -- and lost.

11 JUDGE JOHNSTONE: What are you trying to prove
12 with that? What exception do --

13 MR. COLE: What I'm trying to prove is bias.

14 JUDGE JOHNSTONE: Bias against the State of
15 Alaska?

16 MR. COLE: The state entities, governmental and
17 law enforcement agencies.

18 JUDGE JOHNSTONE: Okay, what else do you want to
19 offer, besides his law suit for defamation and his loss?

20 MR. COLE: The other thing that Mr. Madson brought
21 up is that Mr. Burr has done some work in the field of
22 what's called breath fresheners, Binaca, specifically. On
23 one occasion, he testified that Binaca contains a 50/50
24 mixture of ethyl alcohol and water, equivalent to whiskey.
25 In addition to that testimony that he gave under oath, he

1 also wrote an article about that where he said, again, on
2 October 27th, Binaca contains SD alcohol, 50 percent
3 ethanol, water, glycerine and saccharin. That's wrong.

4 The literature demonstrates that it does not
5 contain and is not the equivalent of a mixture of 50/50
6 ethyl alcohol and water. It's actually -- he misread the
7 ingredients. And if had read those -- and the ingredients
8 are found in what is known as the Cosmetic Ingredients
9 Dictionary and in the CFRs, Title 27; 62 -- it's 27 CFR
10 21.65 -- he would have found that's incorrect. And I'm
11 offering that to show that he has misled people in the past
12 and specifically fact finders, a judge.

13 JUDGE JOHNSTONE: All right --

14 MR. COLE: And the other thing is that he was
15 suspended, Your Honor, when he was originally suspended
16 because he improperly used the state crime lab for his
17 personal consulting work in aiding defense attorneys and
18 that's one of the reasons that he was suspended.

19 JUDGE JOHNSTONE: Okay, Mr. Cole, I'm not going to
20 let you introduce his suspension or his law suit. I find
21 that its probative value, if there is probative value, is
22 far outweighed by its potential for undue prejudice,
23 confusion of the issues and introduction of a collateral
24 issue here which would take a needless consumption of
25 time. It wouldn't come under 404B. I find it doesn't come

1 under any of the evidence rule 600 series. You're trying
2 to impeach with character here. That's not permitted. And
3 any potential to show bias against the State of Alaska is
4 de minimis and it's outweighed by its undue prejudice and
5 potential to create confusion in the minds of the jury.

6 As far as the 50/50 Binaca, I'm at a lost to find
7 out what that proves. Are you trying to show his
8 qualifications are not very good? I'm trying to figure out
9 what it is you're trying to prove.

10 MR. COLE: That he, under oath, has been deceptive
11 in what he has related the ingredients of Binaca was. That
12 was used in order -- in a case to show that Binaca
13 contained ethyl alcohol and that it could affect breath
14 tests.

15 JUDGE JOHNSTONE: You're trying to show that he
16 was deceptive, that he lied under oath.

17 MR. COLE: That's right.

18 JUDGE JOHNSTONE: Okay, the only way you can show
19 that is to show he's been convicted of a crime involving
20 veracity and our rules don't provide for showing that type
21 of character evidence. That's denied, as well.

22 Are we ready with the jury now?

23 MR. MADSON: Yes, Your Honor, we are.

24 JUDGE JOHNSTONE: Okay, we'll take about five
25 minutes to get the jury in and then we'll go.

1 THE CLERK: Please rise. This Court stands at
2 recess.

3 (Whereupon, at 8:45 a.m., a recess is taken.)

4 (Whereupon, the jury enters the courtroom.)

5 THE CLERK: -- Judicial District, the Honorable
6 Karl S. Johnstone presiding, is now in session.

7 JUDGE JOHNSTONE: You may be seated, thank you.
8 Sir, you're still under oath.

9 THE WITNESS: Thank you.

10 JUDGE JOHNSTONE: You're welcome.

11 Whereupon,

12 THOMAS J. BURR

13 having been called as a witness by Counsel for Defendant,
14 and having previously been duly sworn by the Clerk, was
15 examined and testified as follows:

16 CROSS EXAMINATION

17 BY MR. COLE:

18 Q Good morning, Mr. Burr, how are you today?

19 A Good morning. Fine.

20 Q Now you worked for the St. Paul Crime Lab. for
21 about 20 years, is that right?

22 A That's correct, close to 21 years, 20-3/4.

23 Q Do you consider that during that time -- did you
24 consider yourself a toxicologist?

25 A I was a forensic scientist. My job title was

1 criminalist. A large portion, a great majority of the work
2 and study I did over 20 years was in the field of
3 toxicology.

4 Q But you were not called a toxicology.

5 A I was not called a toxicology, no.

6 Q You wouldn't consider yourself a toxicologist.

7 A I'm not -- I guess I don't consider myself a
8 toxicologist, call myself a toxicologist, no.

9 Q Now during your time at the St. Paul Crime Lab., I
10 presume that you were provided, on several occasions, blood
11 samples, correct, to test?

12 A Yes, I tested thousands.

13 Q Thousands of blood samples, okay. You were
14 personally involved in testing those blood samples, I
15 assume.

16 A I did many of the tests personally, yes.

17 Q And I also assume that the time you were at the
18 St. Paul Crime Lab., that you did testing for drugs during
19 that time.

20 A I did drug testing in biological samples and I did
21 some drug analysis of solid dose drugs, too.

22 Q And you were trained in the use of an instrument
23 called the gas chromatograph, correct?

24 A That's correct, I used gas chromatograph on a
25 routine basis. I studied gas chromatography, took a course

1 on it, and I developed a method of gas chromatography for
2 blood alcohol analysis of my own, so I'm very familiar with
3 gas chromatography.

4 Q Most of my questions today are going to require
5 yes or no answers, so if you could limit yourself to that,
6 I'm sure Mr. Madson will give you a chance to explain, if
7 you want to do that, okay?

8 A Sure.

9 Q In fact, I see from your resumé here that you were
10 trained in 1974 on gas chromatography, right?

11 A I believe that's right, yes.

12 Q Did you use the gas chromatograph when you were
13 working in the St. Paul Crime Lab.?

14 A Daily.

15 Q And without going into the detail of how that
16 instrument works, it has the ability to identify substances
17 that are contained in the blood, correct?

18 A That's correct, it can do that.

19 Q And it also has the capability of determining the
20 amount of that particular substance in the blood, correct?

21 A That's correct.

22 Q Now alcohol is one of these substances that the
23 gas chromatograph identifies in blood samples, right?

24 A That's correct.

25 Q And it can also identify the amount of alcohol in

1 a blood sample.

2 A Certainly.

3 Q And I assume that since you were asked to analyze
4 numerous blood samples many times during your career with
5 the St. Paul Crime Lab., you identified the presence of
6 alcohol in blood samples, using the gas chromatograph.

7 A I certainly did.

8 Q And I assume that when you identified alcohol, you
9 also identified the amount of alcohol in these blood
10 samples, correct?

11 A Most cases, yes.

12 Q And there was a standard procedure that you took
13 before you used the gas chromatograph, correct, to make
14 sure that the integrity of the result, there was a certain
15 validity to the test, correct?

16 A Correct, the standard procedure of analysis was
17 used.

18 Q And after doing these type of tests, you needed a
19 way to record your results, right, and you did record the
20 results that you would do on a certain tests?

21 A Results of tests were recorded, yes.

22 Q And that's so you could document the results.

23 A Results were documented, yes.

24 Q And so that you could remember it later on, right?

25 A That's one of the reasons why you write things

1 down.

2 Q And you wrote reports for a lot of those cases,
3 correct? That wasn't uncommon.

4 A I wrote many reports.

5 Q And after doing these tests and writing the
6 results, on numerous occasions, you were called upon to
7 testify as to the results that you reached, correct?

8 A That's correct.

9 Q And you would explain, when you testified, the
10 procedure that you used to make sure and show that the test
11 that you had given or that you had taken, the results that
12 you received were accurate, correct?

13 A That's correct.

14 Q And I assume that, in the past, you testified both
15 as to the presence of alcohol and the amount of alcohol in
16 a given blood sample on numerous occasions.

17 A That's correct.

18 Q And during the course of your testimony, you would
19 tell whoever you were testifying in front of what the
20 results were in terms of grams per milliliter and things
21 like that, however they wanted to know the figure.

22 A That's correct.

23 Q And I'm sure that, at the same time, you
24 testified, under oath, about the accuracy of your results,
25 how accurate they actually were.

1 A I testified under oath as to the accuracy of the
2 tests I conducted, correct.

3 Q Would it be fair to say that a gas chromatograph
4 has an accuracy of plus or minus five percent for alcohol,
5 the amount of alcohol?

6 A The instrument, itself, yes, I would agree with
7 that.

8 Q Now you also, from what I read in your resumé,
9 have a very extensive background in breath testing.

10 A I have an extensive background in breath testing,
11 yes.

12 Q And breath testing is simply an instrument that
13 measures the amount of alcohol, the presence of alcohol and
14 the amount of alcohol in a breath sample, correct?

15 A Breath testing is a procedure for measuring
16 alcohol on the breath and it can use any number of
17 measuring devices.

18 Q And the attempt is to correlate that figure with
19 the amount of blood alcohol in the system, in the blood,
20 the alcohol in the blood, correct?

21 A That's the basic desire in a breath test, is to
22 get an answer which is comparable to the blood alcohol.
23 That's the theory and basis behind breath testing, yes.

24 Q You would agree with me, would you not, that a
25 blood sample test done by a gas chromatograph for the

1 presence and the amount of alcohol in the human body is
2 more accurate than a breath sample test done for the same
3 purpose, would you not?

4 A In terms of determining blood alcohol
5 concentration, yes, absolutely.

6 Q And you're sure about that.

7 A I'm sure that a blood test is better for
8 determining blood alcohol than a breath test for
9 determining blood alcohol, yes.

10 Q Now you're aware in this case that a blood sample
11 was drawn from Captain Hazelwood at between 10:30 and 10:50
12 a.m. on March 23d, 1989, correct -- March 24th, 1989,
13 correct?

14 A I'm aware of that, yes.

15 Q And you're aware that this sample was transported
16 to a lab in Sacramento for testing, correct?

17 A That's correct.

18 Q And that this test revealed that Captain
19 Hazelwood's blood alcohol content at between 10:30 and
20 10:50 a.m. on March 24th, 1989, was .061, correct?

21 A That's correct.

22 Q And in addition to this test, another test was
23 done on the urine sample provided by Captain Hazelwood at
24 or near the same time the blood sample was drawn, correct?

25 A Correct.

1 Q And this was also sent to Sacramento for testing.

2 A Yes.

3 Q And the result there was about .094.

4 A That's what I recall, yes.

5 Q Now as I understand your testimony, you indicated
6 one of the things that you were asked to do is to interpret
7 the tests and explain their implications, is that correct?

8 A That's correct.

9 Q And you reviewed the verification documents for
10 the CompuChem Lab. to determine whether or not that test
11 was accurate?

12 A I don't believe I reviewed the actual documents
13 from the laboratory.

14 Q So you have no reason to believe that this is not
15 an accurate test.

16 A I have no reason to believe it's not an accurate
17 test, no.

18 Q So we can start with the premise that, at 10:30,
19 10:50 a.m. on March 23d, 1989, Captain Hazelwood had a .061
20 blood alcohol content, plus or minus five percent, correct?

21 A Yes, I would say that that's a fair assumption.

22 Q So you would agree the doctor who actually tested
23 this and Mr. Prouty's assessment that that's correct.

24 A I have no reason to believe that there's anything
25 inaccurate about the results of the tests.

1 Q But if you had found anything inaccurate, you
2 surely would have brought that to Mr. Madson's or Mr.
3 Chalos' attention, correct?

4 A That's correct.

5 Q That was part of your job.

6 A Correct.

7 Q And you didn't do that.

8 A That's correct.

9 Q And you didn't testify about it, either.

10 A That's correct.

11 Q Now you said yesterday that in your work at the
12 St. Paul Crime Lab., you had the opportunity to view
13 hundreds of videos of individuals who had been drinking
14 while intoxicated, is that correct?

15 A I've reviewed hundreds of videos of people under
16 the influence of alcohol, yes.

17 Q I'm not sure what the law is in Minnesota. Is it
18 drinking while intoxicated or drinking while under the
19 influence?

20 A You mean driving?

21 Q Driving.

22 A Well, in Minnesota, the law says driving under the
23 influence and there's also two presumptive statutes, a 10
24 and 10 within two hours.

25 Q Well, let's talk -- I'll talk about it in terms of

1 driving while under the influence.

2 A Okay.

3 Q Now you would agree with me that there is a
4 difference between a person whose mental and physical
5 abilities to operate a motor vehicle are impaired due to
6 alcohol and a person who is drunk and driving, would you
7 not?

8 A Yes, I would make a distinction between drunk and
9 impaired, yes. I think that's a fair distinction to make.

10 Q Because, yesterday, you talked about -- when a
11 person is drunk, you talked about -- you used the words
12 "visibly and noticeably impaired," right?

13 A Yes, I was talking drunk in terms of when I was
14 talking about visible and noticeable impairment and that,
15 things you can see physically.

16 Q People falling down, stumbling, things like that.

17 A Things of that sort, yes.

18 Q You don't have to be drunk to have your mental and
19 physical abilities -- to have your mental and physical
20 abilities be impaired due to alcohol use, do you?

21 A No, absolutely not.

22 Q Now in reviewing your testimony, you also said
23 that you had reviewed thousands of police reports over the
24 years that you'd been there.

25 A I have, over my career, read many, many police

1 reports. "Thousands" was just a figure, but it probably is
2 a thousand or more, I'm sure. Lots.

3 Q When you were watching these videotapes, were any
4 of these situations where a person had been arrested for
5 drunk driving and then come into the police station and
6 then were videotaped?

7 A Most of them were, yes.

8 Q Okay. And they were videotaped to preserve the
9 way the person looked at that time, correct?

10 A That was part of the reason for doing it, sure.

11 Q Now when -- in addition, during those times,
12 oftentimes people were asked, "Well, how many drinks did
13 you have tonight," correct?

14 A Correct.

15 Q And they would give an answer sometimes, they
16 would say, "Well, I had . . .," such and such a number of
17 drinks, correct?

18 A They would sometimes answer. Most of the time,
19 they'd answer, actually.

20 Q Now did you ever hear -- when you were working,
21 doing -- watching these videos -- the persons who say, "I
22 just had a couple of drinks," did you ever hear them say
23 that?

24 A That was common.

25 Q That's a common thing for people to say I just had

1 a couple of drinks.

2 A Correct. Sure, absolutely.

3 Q And then you would get the results and you would
4 see that the amount of alcohol that's indicated in their,
5 in the breath test just didn't correlate with the number of
6 drinks that they said they had been drinking, right?

7 A That's correct.

8 Q In fact, a lot of times, I'm sure you saw that the
9 person would say, "I only had a couple of beers," and
10 they'd turn around and blow a 16 or 17, right?

11 A I've seen that situation, absolutely.

12 Q And it's impossible for a person to get to a 15 or
13 16 on just two beers, isn't it?

14 A That's correct.

15 Q But it happened on a fairly regular occasion, I
16 assume.

17 A Correct.

18 Q And it's a fact, isn't it, that people rarely give
19 accurate accounting of the number of drinks they've
20 consumed when compared with their breath test results?

21 A I would say it's not common that the reported
22 drinking matches the results of the chemical test. It
23 happens on a regular basis, but it's more common that they
24 don't match.

25 Q And most of the time they don't match, it's when

1 the individual has understated the number of drinks he's
2 had.

3 A That's correct.

4 Q How many times, while you were watching, do you
5 think, all these thousands of DWI videotapes, did a person
6 say that they had more drinks than would actually have --
7 than the results would show?

8 A Not very often. I don't -- that may have
9 happened.

10 Q Did you ever see it happen?

11 A I don't have any specific recall of it, no. It
12 may have.

13 Q Well, would it be fair to say that almost every
14 time a person is asked, "How much did you have to drink,"
15 if he isn't accurate, he understates it?

16 A I would say that that's a fair statement.

17 Q Now I also assume that -- and you talked about
18 this a little bit yesterday, about your experiences of
19 watching people -- in conducting field sobriety tests that
20 you had a chance to watch people perform certain acts after
21 they had obviously been drinking, correct?

22 A That's correct.

23 Q And you made observations about how they acted,
24 correct?

25 A That's correct.

1 Q And some people -- you made observations about how
2 people's personalities, for instance, would be affected by
3 alcohol.

4 A I did, yes.

5 Q And would it be fair to say that some people
6 become very quiet after they've been drinking?

7 A They do.

8 Q And some people become very loud after they've
9 been drinking.

10 A Yes, they sure do.

11 Q And some people become, when they've been drinking
12 a lot, become very, very quiet. Would that be fair to say?

13 A That's correct, yes.

14 Q And if some people have been drinking a lot, they
15 become very, very loud.

16 A That's correct.

17 Q So it kind of varies, depending on the particular
18 person.

19 A Oh, absolutely. The symptoms of alcohol
20 intoxication vary, depending on who's drinking and
21 depending on the time. You know, they vary from one time
22 to another with the same person.

23 Q Now while you were watching these videos, did you
24 ever have the situation where you watched a guy come in and
25 you watched him go through the field sobriety test on the

1 -- I assume you did field sobriety tests on the video,
2 correct?

3 A Correct.

4 Q And you'd watch them do field sobriety tests and
5 that person would just do them perfectly and then turn
6 around and blow a 17 or 18. Did you ever have that
7 situation?

8 A Not -- no, I have to admit that I never saw
9 anybody do it perfectly and then blow a 17 or a 18. I saw
10 them do fairly well for a 17 or a 18. There's a
11 distinction between those two.

12 Q Fairly well, but so well that you could hardly
13 notice the difference.

14 A They did well enough that you wouldn't expect them
15 to blow that kind of result, based on their performance on
16 the test, yes.

17 Q So it would be fair to say that how someone --
18 their physical manifestations don't always accurately
19 reflect their blood alcohol content at that time. That's a
20 fair statement?

21 A Well, not really.

22 Q Oh, you would disagree with that, then.

23 A The way you made the statement, I would disagree
24 with it, yes.

25 Q So you think that at all times, the physical

1 manifestations of a person are an accurate reflection of
2 what their blood alcohol content is at that time.

3 A That statement doesn't have any -- I guess in the
4 scientific context we're talking about, I don't think that
5 statement really has any -- the way you pose the question,
6 I guess I can't answer it that way.

7 Q Why not?

8 A Because it's not -- because it doesn't make any
9 sense, scientifically.

10 Q Well, let me ask it again.

11 A Sure.

12 Q Are clinical observations of intoxication a better
13 indicator of a person's level of intoxication than blood
14 alcohol contents?

15 A I would say that a chemical test, an accurate
16 test, is a better indication of a person's alcohol
17 influence at the time the test was taken than are the
18 clinical symptoms. I mean in terms of judging which is the
19 better indication of alcohol influence, a chemical test
20 would be preferred to the clinical observations, correct.

21 Q You'd agree that alcohol does more than just cause
22 you to slur your speech and stumble and fail to do
23 dexterity tests. It affects other areas of the body,
24 correct?

25 A Oh, absolutely. It affects things that you can't

1 see from casual observation of an individual. Those things
2 that are affected and cannot be seen on casual observation
3 can be measured scientifically and determined in other
4 ways, that's correct.

5 Q And the things that you're just talking about are
6 things like perception, correct, how a person perceives
7 things while he's under the influence. That's difficult to
8 tell, based on clinical observation.

9 A Exactly. It's difficult to tell, based on any
10 kind of observations.

11 Q And decision making, that's something that can be
12 difficult, correct?

13 A That's correct, absolutely.

14 Q And judgment, correct?

15 A Correct.

16 Q Those are all things that are oftentimes difficult
17 to observe. The clinical manifestations are not always
18 readily apparent with those things, correct?

19 A That's correct.

20 Q And it's true, isn't it, that alcohol affects that
21 part of your brain that deals with things like perception
22 and judgment, decision making, to a greater degree than it
23 affects your muscular coordination area?

24 A It affects at a lower level than it affects your
25 muscular coordination, that's correct.

1 Q So sooner, at a lower level, alcohol can affect --
2 a lower blood alcohol content could affect your decision
3 making before it affects your coordination.

4 A Yes, I would say that's a fair statement.

5 Q And you're also familiar with the term masking of
6 -- the masking effect. Are you familiar with that term?

7 A Yes, globally, I'm familiar with what you're
8 talking about.

9 Q Would you explain to the jury what that means?

10 A What it means is that people, some individuals,
11 when they become tolerant to alcohol by consuming it on a
12 regular basis, can, at the same level of influence, at the
13 same alcohol concentrations, perform better than an
14 ordinary individual could at that alcohol concentration or
15 better than they could have before they became tolerant of
16 the alcohol. It's not a matter of -- it's a matter of
17 building tolerance. It's a matter of manifesting the
18 symptoms of that alcohol influence. It's not a matter of
19 being under the influence or not under the influence. It's
20 a matter of the degree to which you show your influence at
21 a particular alcohol concentration, whether you manifest
22 the symptoms very apparently or whether you manifest the
23 symptoms of alcohol intoxication not so grossly.

24 Q Subtly.

25

1 A More subtly, that's correct.

2 Q Let me give you -- tell me if this is an example.
3 Some people, when they have been drinking and they go to
4 reach for a drink, they'll go a lot slower to pick up that
5 bottle to make sure they don't knock it over because
6 knocking it over is a physical manifestation of somebody
7 that's been intoxicated. Would you agree with me on that?

8 A Oh, yes, that's one of the ways in which people
9 who are accustomed to drinking large amounts of alcohol
10 will adjust their behavior, is by moving a lot slower.
11 That's one of the symptoms of alcohol intoxication is
12 people's movements begin to slow down. That's just as much
13 a symptom as knocking over the bottle.

14 Q And I suppose another one might be a person not
15 wanting to just stand in one place, but rather say, for
16 instance, lean against something so it wouldn't be as
17 noticeable that he's been drinking because of the sway.
18 Would that be a fair statement?

19 A Well, if one's been drinking a lot, he might lean
20 against something because it's easier to lean against it
21 than to stand up straight, sure.

22 Q And if you were standing up straight, people might
23 notice that you were intoxicated because you'd be swaying
24 back and forth.

25 A That could happen, sure.

1 Q And that's kind of a learned or acquired trait in
2 this.

3 A That's correct.

4 Q So you would agree, then, that the best indicator
5 of the level of intoxication of a person is an accurate
6 blood alcohol sample.

7 A That's correct.

8 Q Now would you tell me when you were first
9 contacted to act in this case?

10 A I do not recall specifically the date that I was
11 first contacted. Our office was first contacted by Mr.
12 Madson some time, I believe, in January.

13 Q This year?

14 A I believe so. I don't have specific recall of the
15 specific date that I was contacted.

16 Q You said yesterday that you reviewed data and
17 tests results and explained meaning. Would you tell me
18 what did you review?

19 A In this particular case? I reviewed some
20 documents that were prepared by a Dr. Propst I believe it
21 was, some notes and documents. I had conversations with
22 some of the attorneys related to some of the fact
23 situations of the case and when the tests were taken and
24 what the time frames were and all that and those were
25 included in the notes. And I reviewed transcripts of Dr.

1 Prouty's testimony and had various discussions with counsel
2 in this case.

3 Q Did you review the personal interviews of any of
4 the people that were involved in this case?

5 A Of any of the people that -- no, I did not review
6 any interviews of any people.

7 Q So it appears to me that the stuff that you saw,
8 personally saw, was Dr. Prouty's work and Dr. Prouty's
9 testimony, correct?

10 A I saw some of that, yes, and then some other
11 documents on some notes that were taken or made by Dr.
12 Propst or whatever it was. And I believe those were -- I
13 reviewed some other documents, too.

14 Q Well, what were those other documents?

15 A I'm trying to remember what else I reviewed and I
16 don't really recall. I didn't receive any -- I looked at a
17 lot of documents since I've been here, in Alaska, but I
18 don't specifically recall. Those are the ones that -- Dr.
19 Prouty's transcript and conversations with the attorneys
20 and the notes. I had the facts on when the tests were
21 taken and what the times were involved in the case.

22 Q Those facts were given to you by Mr. Madson and
23 Mr. Chalos?

24 A Yes.

25 Q Did you check those out?

1 A Well, basically I did. I also looked at the notes
2 of the expert that was going to be used by you and the
3 testimony of Dr. Prouty relating to the times of -- the
4 times that were involved and the results of the tests, so I
5 assume that he was telling the truth under oath, so I
6 assume that they were correct.

7 Q Well, when did you get here, to Anchorage?

8 A Sunday, Saturday night. Wait, I'm trying to
9 remember. I got here Sunday, I believe.

10 Q Sunday. So you started reviewing this stuff on
11 Sunday?

12 A I reviewed Dr. Prouty's testimony on Sunday.

13 Q Now let's see, you can't really remember
14 everything you read in this case, is that right?

15 A Actually, I may have read other documents, I can't
16 specifically recall. What I formed my opinion on were
17 based on Dr. Prouty's testimony and the facts that I was
18 given in terms of what tests were taken at what time.

19 Q Now you didn't do a report in this case.

20 A I did not write a report, that's correct.

21 Q And one of the reasons for doing reports is so
22 that you don't forget things, correct, tests that you've
23 read?

24 A One of the reasons for doing reports is so that
25 when you do something, so that you can recall it later,

1 that's correct.

2 Q Well, you've done reports in other cases as a
3 consultant, haven't you?

4 A In some cases, I've done reports, yes.

5 Q Now you testified yesterday that you have been
6 qualified as an expert in Alaska. How many times was that?

7 A Once.

8 Q As a matter of fact, that was last Friday --

9 A That's correct.

10 Q -- down in Ketchikan.

11 A That's correct.

12 Q Now you did a report in that case, correct?

13 A Yes, I believe I did a report in that case.

14 Q Well, I don't want to trick you.

15 A I did do a report.

16 MR. MADSON: Your Honor, I object. I don't know
17 what the relevance is. There's nothing that requires a
18 report. A report in a Ketchikan case, I don't know what
19 relevance that has in this case.

20 JUDGE JOHNSTONE: Objection overruled.

21 BY MR. COLE: (Resuming)

22 Q I want to show you the report and see if this
23 refreshes your recollection.

24 A Yes, I remember this report specifically.

25 Q That's your name at the end.

1 A That's correct, this is the report I wrote for the
2 Public Defender's Office in Ketchikan, Alaska, at their
3 request.

4 Q And that report was done January 13th, 1990,
5 correct?

6 A That's correct.

7 Q And it's three pages, correct?

8 A I believe so, yes.

9 Q And it sets out exactly what documents you
10 reviewed prior to the conclusions that you reached,
11 correct?

12 A That's correct.

13 Q And it sets out in detail what you are prepared to
14 testify to.

15 A It does.

16 Q And you didn't do that in this case.

17 A That's correct.

18 Q Now I was looking at your resumé here today. You
19 don't have a Ph.D., do you, Mr. Burr?

20 A No, I do not, sir.

21 Q You don't have a master's degree.

22 A No, I do not.

23 Q You just have a bachelor of sciences degree.

24 A That's correct.

25 Q And while you were getting your bachelor of

1 sciences degree, would you tell the jury how many credits
2 you earned in courses dealing with toxicology?

3 A I did not take any toxicology courses in my
4 undergraduate work.

5 Q And would you tell the jury since then how many
6 college credits you've earned in toxicology classes?

7 A I've taken courses, no college credits in
8 toxicology.

9 Q So you've not earned any.

10 A College credits? No, not college courses for
11 credit, no, sir.

12 Q I notice that the people that you work with, Mr.
13 Jensen, Mr. Hemple and is that Mr. Waiking --

14 A That's correct, Mr. Waiking.

15 Q -- they all have Ph.D.s.

16 A Yes, they do.

17 Q And you only have a B.S.

18 A That's correct.

19 Q Now you worked for the St. Paul Police Department
20 for about 20 years, is that correct?

21 A That's correct.

22 Q And you worked in the crime lab there?

23 A That's correct.

24 Q And your job was a criminalist.

25 A I was a criminalist, yes.

1 Q Not a toxicologist.

2 A That's correct, my job title was criminalist.

3 Q And after you analyzed a number of substances, you
4 would be called upon to testify about the presence of
5 alcohol or something to that effect, drugs, correct?

6 A I testified to the results of the tests I did on
7 biological samples for alcohol and drugs, correct.

8 Q But you never testified as to what the tests meant
9 in those proceedings, did you? You just testified --

10 MR. MADSON: Excuse me, I'm going to interrupt.
11 That's two questions. I think he should have a chance to
12 answer the first one before the second.

13 MR. COLE: I'll withdraw it.

14 BY MR. COLE: (Resuming)

15 Q You only testified to analytical findings that you
16 made while you were a criminalist, correct?

17 A Incorrect.

18 Q You testified as to what the tests meant?

19 A Yes, I certainly did.

20 Q You didn't have forensic toxicologists come in and
21 testify about what the tests meant?

22 A I many, many times testified as to what the
23 results of the tests meant, in terms of the results that I
24 found.

25 Q I think you indicated that you had done some

1 training, breath training, of officers in 1960 through
2 1973, correct?

3 A Those are the wrong years. I did train breath
4 test operators from 1968 through 19 -- about '75. I
5 trained police officers as breath test operators in those
6 years, that's correct.

7 Q How many students did you train in 1971?

8 A I do not have specific recall of how many students
9 I trained in any particular year.

10 Q Nine sound about right?

11 A I have no idea.

12 Q High or low, nine?

13 MR. MADSON: Your Honor, I think he answered the
14 question. He said he doesn't know.

15 THE WITNESS: Well, I may have trained none in
16 1971, I don't know. During those seven years, I conducted
17 probably ten training sessions for blood test operators.
18 Maybe none of them were in 1971, I don't know.

19 BY MR. COLE: (Resuming)

20 Q So you might have trained nobody in 1971?

21 A That's correct, I may not have trained anybody in
22 1971.

23 Q I was looking at your professional training on
24 your resumé. Let me show it to you here. Would you tell
25 the jury which one of these courses dealt with toxicology?

1 A Sure, the course on the intoxilyzer dealt with
2 toxicology in February 1984. The course at the University
3 of Indiana, in Bloomington, Indiana, that dealt almost
4 exclusively with alcohol toxicology. That was 80 hours of
5 training and work in the area of blood testing, blood
6 testing, alcohol toxicology extensively. Those areas dealt
7 specifically with toxicology, alcohol.

8 Q In the '72 case, the seminar that you went to,
9 that was a pretty good seminar, wasn't it?

10 A Which one is that?

11 Q The one that you talked about in Bloomington,
12 Indiana, the instructor's course.

13 A Yes, correct, that was a course that was involved
14 with setting up chemical testing programs in law
15 enforcement settings and dealing with all the issues
16 involved in it. And it had extensive work in laboratory
17 and classroom instruction in toxicology.

18 Q There were big names of people in the field of
19 toxicology that taught at that, weren't there?

20 A There were several -- yes, Drs. Morganstein and
21 Debowski were instructors at that.

22 Q Dr. Debowski?

23 A Dr. Debowski was on the faculty of that. He
24 lectured at that course, that's correct.

25 Q And, also, Mr. Prouty was on that faculty, wasn't

1 he?

2 A He was. I don't specifically remember if he
3 lectured at the one I was at. I think he may have. I know
4 he did lecture on occasion at the University of Indiana,
5 yes, correct.

6 Q So you may have been one of his students back in
7 1972.

8 A I may have been, yes.

9 Q A good chance of that.

10 A Yes, I don't specifically recall if he taught
11 there or not. He may have, at that time.

12 Q So, essentially, one of his students has come back
13 to critique one of his teachers.

14 A I suppose that's happened before.

15 Q Oh, I noticed in your resumé that you listed as a
16 professional and learned society the American Academy of
17 Forensic Sciences.

18 A That's correct.

19 Q Now correct me if I'm wrong, but these are --
20 these have multiple sections in these particular types of
21 groups. In other words, they have serology, toxicology,
22 criminalist groups in the American Academy of Forensic
23 Sciences.

24 A They have multiple groups. Those that you
25 mentioned are not all the groups in it, but there are

1 multiple groups in the American Academy, that's correct.

2 Q Which one are you in?

3 A I'm in the criminalist section.

4 Q You aren't in the forensic --

5 A I am not a member of the toxicology section,
6 that's correct.

7 Q And in the Midwestern Association of Forensic
8 Sciences?

9 A That's correct.

10 Q What group are you in there?

11 A That organization is not divided into groups.

12 Q Not at all?

13 A No, sir.

14 Q Now, let's see. As I understand your testimony,
15 you disagreed with Mr. Prouty on the following things. One
16 of them was the fact that he used retrograde extrapolation
17 at all in this case, correct?

18 A Correct.

19 Q The second was the .14 value that Dr. Prouty
20 testified to for Captain Hazelwood's BAC at 12:00 o'clock
21 that evening, correct?

22 A I disagreed with that, yes.

23 Q And you also disagreed with the two tests --
24 saying that two tests would be better than just one test.

25 A That's correct, I said two tests are always better

1 than one test.

2 Q And you also said that Mr. Prouty's use of a .51
3 Widmark factor was a problem, correct?

4 A I said that I would not use that Widmark factor
5 for person of Mr. Hazelwood's appearance, no.

6 Q Was there anything else that you have that you
7 criticized?

8 A I don't remember all of my direct testimony. I
9 know that those were the areas that I dealt with. I may
10 have said something else.

11 Q Sounds about right, though.

12 A That sounds correct.

13 Q Now, yesterday, you testified that if a person had
14 enough information, he could go backwards in time and
15 estimate a person's blood alcohol content, correct?

16 A Under some circumstances for some periods of time,
17 yes, that's correct.

18 Q You qualified it by saying a person needs a whole
19 bunch of information before he or she can arrive at that
20 result, a valid result.

21 A That's correct.

22 Q You also testified that you have, in fact, on
23 occasion, been asked to perform a retrograde extrapolation
24 in the past.

25 A I certainly have, yes.

1 Q And you've also testified about that in the past,
2 haven't you?

3 A I have, yes.

4 Q And in fact you testified that the longest period
5 that you ever went back was for two to three hours,
6 correct?

7 A That sounds correct, yes.

8 Q Well, could it have been longer?

9 A Probably not.

10 Q It would have been between the time -- within two
11 or three hours.

12 A That's correct.

13 Q When you testified, what information did you have
14 to know before you did that calculation?

15 A Okay, first of all, when I did back calculations,
16 I did not normally give a number on a back calculation
17 because numbers are spurious numbers. Okay, the
18 information you really need to know is you need to know
19 that the test that you've taken is in fact at or near the
20 trend line, so multiple tests are real desirable. You have
21 to know that the person is post-absorbative. You have to
22 know specifically what their burn-off rate is or you have
23 to use the range. You have to know all kinds of
24 information. You have to know if they're
25 post-absorbative. If they're not clearly post-absorbative

--

1 Q You already mentioned that. What else do you have
2 to know?

3 A You have to know -- a single test may or may not
4 be near the trend line, so you may be starting from a false
5 point.

6 Q You already mentioned that.

7 A Okay. And you have to know the person's burn-off
8 rate.

9 Q You already mentioned that.

10 A And if you know those things, then you can predict
11 whether or not a person -- you expect them to be higher or
12 lower at some previous time, within a short period of time.

13 Q When you did this in the past, you had three
14 things, one, whether they're on the trend line.

15 A Yes.

16 Q Two, whether they're in the post-absorbative
17 phase.

18 A Correct.

19 Q And, three, their burn-off rate.

20 A Correct.

21 Q Anything more?

22 A Those things, you have to know those things in
23 order to have any validity at all to your retrograde
24 extrapolation.

25 Q Anything more that you needed when you gave yours?

1 (Tape changed to C-3671)

2 THE WITNESS: When I look backwards, probably
3 not. That was sufficient to make some comment about the
4 previous time.

5 BY MR. COLE: (Resuming)

6 Q Now -- and as I understand it, you cited several
7 reasons why back calculating, retrograde extrapolation,
8 whatever you want to call it, should not have been used in
9 this case, correct?

10 A That's correct.

11 Q And one of them was that it was too long a period
12 to calculate back, correct?

13 A That's correct.

14 Q I assume that you meant that this 11-hour period
15 was too long to do.

16 A Correct.

17 Q So it's okay for you to do it for two to three
18 hours back, but not for Dr. Prouty to do it for 11.

19 A That's really not true, no.

20 Q Well, isn't it true, Mr. Burr, that the longer the
21 time period between when a person stops drinking and the
22 time he is tested, the more accurate that calculation is?

23 A Not necessarily.

24 Q Okay. Yesterday, you drew what I think is called
25 the standard BAC curve against time. How about that, is

1 that -- and then we have -- I'll let you draw it.

2 A Draw what?

3 Q I want you to draw a standard -- both absorptive
4 phase peak and elimination phase on this.

5 (The witness marks on the board.)

6 THE WITNESS: A stylized curve one would expect to
7 look something like this and then going on down, like so.
8 That's a stylized curve of alcohol.

9 BY MR. COLE: (Resuming)

10 Q You can take your seat. I just wanted to make
11 sure that that got drawn correctly.

12 (Witness resumes his seat.)

13 BY MR. COLE: (Resuming)

14 Q Now isn't it correct that one of the reasons
15 there's a controversy about retrograde extrapolation is
16 because of the concerns with what is called the absorption
17 phase, correct?

18 A That is one of the reasons why retrograde
19 extrapolation is not a valid thing to do, scientifically,
20 because we can never be sure that a person is close to
21 absorptive, except under very unusual circumstances. And
22 given the fact that we can never be sure that someone is
23 post-absorptive, if they're not post-absorptive, then
24 there's clearly no validity to any back calculation because
25 people are still going up at the time we calculated back

1 to. If you still have alcohol in your stomach at the time
2 you back extrapolate to, the whole thing is nonsense.

3 Q Are you saying that when you testified on
4 retrograde extrapolation, it was nonsense?

5 A If a person is not post-absorptive, then any
6 estimation of alcohol at a prior time is nonsense.

7 Q Okay, so one of the theories now is that by back
8 calculating, you'll get a higher blood alcohol
9 concentration than the person really has, correct?

10 A You could easily get a higher concentration than
11 they have, correct.

12 Q And that's demonstrated by this, right?
13 Sometimes, a person is tested right about here.

14 A That's correct.

15 Q And let's say he's tested -- he starts drinking
16 here. He stopped right here. And he's tested right there.

17 A Correct.

18 Q And if you back calculate, you might get a figure
19 up here, right?

20 A That's correct.

21 Q And the person's actual BAC might be right there,
22 right?

23 A That's correct.

24 Q And that wouldn't be right, right?

25 A That's correct.

1 Q So that's one of the reasons why it's very
2 important to make sure that the peak has happened, right?

3 A That's absolutely correct. It's essential to know
4 that a person is clearly post-absorbative.

5 Q Now what happens when you go from here? And I'm
6 not talking about the steeping effect. We're going to get
7 into that in a little bit. But I'm talking about when you
8 go from Number 3 to Number 2. Does that do away with your
9 theory on post-absorption?

10 A That takes post-absorption -- if a person is
11 clearly post-absorbative, then they were clearly higher at
12 the time, at a previous time.

13 Q So you'd agree that absorption of alcohol plays a
14 key role in determining when the peak occurs, right?

15 A Well, absolutely. The peak occurs when absorption
16 -- when elimination -- basically when the elimination rate
17 is higher than the rate that you absorbed it. It does not
18 even mean that you've completely absorbed all the alcohol
19 you've had to drink. You can be on the down side of that
20 curve and still have more alcohol in your stomach. Plus,
21 you can have --

22 Q But it's not going up, right?

23 A Not the trend line, no.

24 Q And it also is important when a person stops
25 drinking as to when the absorption rate, when the

1 absorption period ends, right?

2 A Well, you stop drinking -- obviously, if you keep
3 on drinking, more alcohol would be absorbed, so it
4 continues it on down the road.

5 Q Now you said, yesterday, that the absorption of
6 alcohol in the human body can take anywhere from a half an
7 hour to six hours, correct?

8 A At least six hours, yes.

9 Q And is that based on your own experiments or the
10 literature you've read?

11 A That's based on the literature.

12 Q And I'm sure that someone like Dr. Debowski, who
13 you think is such a great expert in this field, his writing
14 would support that conclusion.

15 A I don't specifically recall anything in Dr.
16 Debowski's writings that mentions six hours. I'm sure Dr.
17 Debowski is very clear about absorption of alcohol being
18 crucial. The six hours is not from Dr. Debowski's paper,
19 no.

20 Q You said you've read everything that Dr. Debowski
21 -- correct?

22 A I believe I've read everything he's written.

23 Q Did you read where he said the absorption phase
24 takes anywhere from a half an hour to three and a half
25 hours?

1 MR. MADSON: Your Honor, I'm going to object,
2 unless he can show what study he's referring to and have
3 the witness have a chance to examine it to see if, in fact,
4 he did read it.

5 MR. COLE: Well, he said he's read every one of
6 his articles.

7 MR. MADSON: Then I would object for the same
8 reason Mr. Cole objected yesterday when I asked about
9 Debowski, because it's hearsay and this witness wasn't
10 allowed to testify. If we want to open that door, that's
11 fine, but I think he should at least show him the article.

12 JUDGE JOHNSTONE: Mr. Cole.

13 MR. COLE: Well, I don't have the article, but I
14 -- the next witness is going to testify on that, Michael
15 Hlastala.

16 JUDGE JOHNSTONE: Ask the question again.

17 BY MR. COLE: (Resuming)

18 Q Isn't it true that Dr. Debowski has said that the
19 absorption phase takes between a half an hour and three and
20 a half hours?

21 JUDGE JOHNSTONE: Don't answer the question.
22 Counsel approach the bench, please.

23 (The following was said at the bench.)

24 JUDGE JOHNSTONE: In examining the witness like
25 this, you're going to have use a treatise (inaudible).

1 Without it, it's improper.

2 (The following was said in open Court.)

3 BY MR. COLE: (Resuming)

4 Q Mr. Burr, would you tell me the literature that
5 you've read, the name of the article and the author, that
6 said that the post -- that the absorption phase takes
7 longer than six hours?

8 A Takes longer than six hours?

9 Q Up to six hours.

10 A Yes. As a matter of fact, it's -- I have the book
11 in my briefcase. It's Alcohol Tests and Biological
12 Specimens for Medical/Legal Purposes I believe is the title
13 of the book. It's a chapter written by Randall Beseault,
14 et al., and it --

15 Q I need you to slow down.

16 A Randall Beseault and others are the authors of
17 that chapter in that particular publication. That's one of
18 the things specifically I have with me in which he says up
19 to six hours.

20 Q And is that in all people?

21 A I don't understand that question.

22 Q Do all people absorb at a six-hour -- does it take
23 six hours for alcohol to get to the blood in all people?

24 A Well, of course not. Of course not.

25 Q What percentage of the population would it take to

1 get alcohol in your blood from the stomach six hours?

2 A I don't think there's sufficient data to answer
3 that kind of question.

4 Q A very small amount.

5 A The scientific data suggests and shows that people
6 can take up to six hours to be fully absorbed, to absorb
7 all the alcohol, to reach their peak alcohol concentration,
8 depending on their physiological states and, you know,
9 whether they eat after they drink and certain other factors
10 that are involved in it. And the research has clearly
11 shown that it can take up to six hours.

12 Q Your research showed that?

13 A No, other people's research.

14 Q What was the longest your research showed?

15 A Probably three hours to four hours, in that range.

16 Q So Dr. Prouty has said that it's three and a half
17 to four hours, at max. You would disagree with that.

18 A I would disagree with that. I would say that the
19 literature is clear that that's not true.

20 Q Now in this case, the evidence that the Defendant
21 stopped drinking between 7:30 and 8:00 o'clock, p.m., on
22 the night of the 23d. Would it be safe to say that he had
23 peaked before giving his blood sample at 10:30 the next
24 morning?

25 A Assuming no more alcohol consumption?

1 Q If the man had stopped drinking at between 7:30
2 and 8:00 o'clock on March 23d, 1989, is it fair to say
3 that, at 10:30, he was not -- he had already peaked?

4 A He probably would have, yes.

5 Q 8:00 o'clock to 10:30. I calculate that as 14-1/2
6 hours.

7 A That's correct.

8 Q And you're saying that he's still absorbing
9 liquor?

10 A No, he's still not absorbing the alcohol that he
11 had, no, absolutely not. He's not -- if your question is
12 did he peak before the test was taken, quite probably, yes,
13 sure, some time before.

14 Q Some time before. And the facts that you've seen
15 or the literature that you've read said that some people,
16 it takes six hours, depending on what they've had to eat,
17 correct?

18 A That's correct.

19 Q And if he stopped at 8:00 o'clock, even under your
20 liberal definition of absorption rates, he would have
21 stopped absorbing at about 2:00 o'clock that morning.

22 A Yes.

23 Q So he would have stopped, even under your liberal
24 interpretation, absorbing at 2:00 o'clock, if other
25 concerns are met, you could back calculate up to that

1 point.

2 A When he's post-absorbative, if you know that he's
3 post-absorbative, yes, using various burn-off rates, you
4 could go back up to that point, sure.

5 Q And if other people testified that the absorption
6 rate is generally not more than four hours, you could go
7 back to midnight, couldn't you?

8 A If he had absorbed all that you could give a
9 possible range that he's on the down side, past his peak,
10 and there's only a certain possibility for burn-off rates,
11 sure.

12 Q Now -- by the way, did you happen to do any tests
13 with Captain Hazelwood to determine what his burn-off rate
14 was?

15 A Did I test Captain Hazelwood to determine his --
16 when?

17 Q Elimination rate. Any time.

18 A Any time? No, I have done no tests of his
19 elimination rate.

20 Q You could have. There are ways to do that.

21 A You can test somebody's elimination rate on a
22 particular occasion, sure.

23 Q So let me get to back to what I asked you at the
24 beginning when we started this. Isn't it true that the
25 longer the time period between the time a person stops

1 drinking and the time he is tested, the more accurate the
2 back calculating is?

3 A No.

4 Q Even though you said that it's okay to do it
5 after, in your terms, six hours.

6 A No, I said after six hours, he would, under most
7 circumstances, have reached his peak alcohol concentration
8 and be on his way down, that's correct. But I still don't
9 believe it's a good practice to do, based on other
10 complicating factors.

11 Q Okay, let's talk about the second complicating
12 factor you mentioned. I believe that you talked about the
13 fact that someone -- sometimes these tests on the downward
14 phase go up and down, correct?

15 A Tests on all phases of the alcohol curve go up and
16 down.

17 Q So your testimony is -- is that based on your
18 personal experiences or on the literature?

19 A Both.

20 Q And the experiences that you used were breath
21 tests, right?

22 A Most of them.

23 Q Well, how many times were you drawing blood from
24 an individual at various occasions while they were going
25 up?

1 A I've probably tested 20, 25 subjects over a period
2 of time with drug tests and blood tests taken.

3 Q No, I mean blood tests, just blood tests.

4 A Just blood tests? I've never tested people with
5 just blood tests.

6 Q By the way, have you written anything on the
7 results that you've reached in any of your stuff?

8 A I have no published any of my work, no.

9 Q You've not published anything.

10 A No.

11 Q And you're saying that the up and down effect
12 occurs in the absorption phase, is that correct?

13 A It occurs in both phases.

14 Q But it does occur in the elimination phase,
15 correct?

16 A Short-term fluctuations in the curve occur over
17 the length of the whole curve.

18 Q And I assume that what you're referring to is Dr.
19 Debowski's -- what he terms steeping effect.

20 A He's one of the investigators that have shown that
21 to be something that happens, correct.

22 Q Now you say you're aware of all the literature,
23 correct, that you've read as much as you could, I think you
24 indicated yesterday, in the field?

25 A I've read much in the field, yes.

1 Q And you've read everything that Mr. Debowski has
2 written. That's what you said yesterday.

3 A That's correct.

4 Q And I'm sure you've read articles that critiqued
5 his work, correct?

6 A I've read articles that have critiqued Dr.
7 Debowski, sure.

8 Q Since you read all of those articles, you know
9 that his controlled drinking experience used breath tests,
10 rather than blood tests, correct?

11 A I'm not sure that all of Dr. Debowski -- Dr.
12 Debowski's work, some of it that has been done has been
13 done with blood tests, some of it's been done with breath
14 tests, blood alcohol tests.

15 Q You're sure about that?

16 A I believe he's done work with -- I know he's done
17 work with blood tests. I don't know any specific work.
18 I'd have to look at it and see what he did. But I know
19 he's done blood tests and published things about blood
20 tests.

21 Q I'm talking about in relation to his theory on the
22 steeping effect.

23 A Oh, in relation to the extrapolation theory and
24 back calculations and the problems associated with that, in
25 many of the papers he wrote, he used a lot of data, but a

1 lot of the data was breath tests and some of the data was
2 blood tests.

3 Q You're sure about that.

4 A He used blood testing in some of his work, yes.

5 What specific --

6 Q I'm not talking about some of his work. I want to
7 know if the articles that he wrote on this steeping
8 effect, did he use breath testing or blood testing?

9 A Breath testing, I believe.

10 Q Thank you.

11 A In one article in particular I believe you're
12 referring to where he really elucidates the issues involved
13 in retrograde extrapolation, he used breath tests.

14 Q And isn't it true that the general consensus among
15 experts in this field is that these differences that he's
16 noted by use of the term steeping effect or the zig-zag is
17 due to his analytical techniques, i.e., that he used breath
18 tests and not blood tests to determine variations in
19 elimination rates?

20 A Absolutely not.

21 Q Okay. Now are you aware of whether Mr. A.W. --
22 you know who Mr. A.W. Jones is, correct?

23 A That's correct.

24 Q And you hold him in very high esteem, I assume.

25 A I believe that A.W. Jones is a very knowledgeable

1 expert in the field of alcohol toxicology and he's a
2 prolific researcher and writer and he's an expert.

3 Q Do you know whether A.W. Jones has attempted to
4 confirm Dr. Debowski's results on elimination rates?

5 A I don't specifically, no. I haven't seen anything
6 that he's published where he was critiquing Dr. Debowski's
7 work. He's published a lot of material on alcohol curves
8 and concentrations and elimination rates and blood/breath
9 ratios and all kinds of things, but --

10 Q Go ahead.

11 A But I don't specifically remember any critique of
12 Dr. Debowski's work on the steeping effect. He may have.

13 Q Well, are you aware that he's done it with blood
14 testing to confirm whether or not a person -- this steeple
15 effect occurred?

16 A He's done work with blood testing. I don't know
17 what the purpose of the studies he's done is. You'll have
18 to refer to a specific study, I guess, if I can answer
19 those questions.

20 Q I'm showing you a similar blood alcohol profile.
21 As you can see, this is written by Dr. A.W. Jones.

22 A Okay, let me --

23 Q Well, I just want to show you this profile.

24 A Well, let me look at the thing, please. Thank
25 you.

1 MR. MADSON: Your Honor, maybe this would be a
2 good time for a break if the witness needs time to review
3 this. It's up to him, I guess.

4 THE WITNESS: Okay.

5 BY MR. COLE: (Resuming)

6 Q You see there is a graph there where he took
7 various blood samples from an individual, right?

8 A That's correct, this is an alcohol concentration
9 curve of one individual that he studied.

10 Q Do you see any of that steeping effect in there?

11 A A little bit.

12 Q Oh, that one little mark right there, is that what
13 you're point at?

14 A There's a plateauing and -- this is one particular
15 individual and there's a small example of a steeping
16 effect right in that --

17 Q Do you see an up and down in that, all the way
18 down?

19 A No, there's not a spiking.

20 Q That's almost a pretty straight line, isn't it?

21 A Well, the general trend line is down, but there's
22 an example point, at two and a half hours is above the
23 trend line.

24 Q Above the trend line?

25 A Absolutely. This is a decreasing alcohol

1 concentration at two and a a half hours right in here, this
2 point, point one, two, three, four. This test here is a
3 point -- the trend line is this way and this is the point
4 that's gone above the trend line slightly.

5 Q One point in six hours, is that correct?

6 A That's correct. So if we backtrack from that
7 point, then, we're going to get a bad extrapolation
8 backwards. We're going to calculate an alcohol
9 concentration that's way too high. That's the point of the
10 problem with being off the trend line.

11 Q So -- but, generally, people are very close to the
12 trend line, aren't they?

13 A If you were to take ten tests, you would expect
14 most of them to be close to the trend line and some of them
15 to be away from the trend line. That's the way data falls
16 when you do it.

17 Q Well, what's the percentage that people fall away
18 from it? What studies have you done to show that?

19 A You can't do that kind -- I mean there's no --
20 that's nonsense. I mean it --

21 Q Yet, you were able to do retrograde extrapolation
22 in cases that you testified to.

23 A I was able to estimate alcohols at a previous
24 time, based on certain facts and data that I had, sure.

25 Q Now the elimination phase, you'd agree, decreases

1 in a linear progression, essentially?

2 A Not always, there's some controversy on that, too.

3 Q But you've done no experiments yourself to prove
4 or disprove that.

5 A I have not, myself, done any experiments to prove
6 whether it's a first or second order reaction at low
7 concentrations, no.

8 Q You also disagreed with Mr. Prouty on the fact
9 that two tests would have been more helpful in this case,
10 correct? You said two tests would be more helpful.

11 A I said two tests are always better than one test
12 because you've got more information.

13 Q In this case, you said that two tests needed to be
14 done, correct?

15 A I'm not sure if I said that. I said two tests
16 would be better than one test. It would be good to have
17 two tests. Whether they're needed or not, I guess that's
18 not a scientific opinion.

19 Q Well, your opinion is based on your concern of
20 whether or not the sample was taken in the elimination
21 phase or not.

22 A That's part of the reason. Yes, that's one of the
23 reason for -- if you take more than one test, you have more
24 data.

25 Q And a major reason is to assure you that you're in

1 the elimination phase, correct? That's the major --

2 A Well --

3 Q That's what you said yesterday.

4 A That's one of the major reasons, sure.

5 Q Is there any doubt in your mind, at 10:30 to
6 10:50, this was not in the elimination phase?

7 A If he were drinking at 8:00 o'clock and it was the
8 last consumption, he would have probably absorbed
9 everything he had to drink, sure, except given some really
10 strange circumstances. Yes, he would be in the elimination
11 phase if he quit drinking at 8:00 and this test was taken
12 at 10:00 o'clock the next morning or 10:30, whenever.

13 Q Most people, most people would have been in the
14 elimination phase at about midnight that night, wouldn't
15 they?

16 A The majority of the people would have been totally
17 absorbed by midnight, that's correct, I would expect that.

18 Q 95 percent of the people, correct?

19 A I don't think one can put a percentage on that.

20 Q Yet, you can put percentage on the way people
21 would appear under different levels of intoxication.

22 A Yes, that was based on the studies -- there was
23 some very clear --

24 Q That was based on your own personal observation.

25 A That was based on my observation and it was based

1 on the literature in which about a dozen of the classic
2 studies were looked at in terms of evaluation of alcohol
3 concentrations and what percentage of the people were under
4 the influence, so some of that data is real clear in the
5 literature, you know, at certain levels, percentages of
6 people who have been known to be under the influence, you
7 know, observed to be under the influence by various
8 researchers.

9 Q Now the urine test that was done in this case, do
10 you recall that?

11 A I recall it, yes.

12 Q A result of .094, correct?

13 A That's correct.

14 Q That confirms that Captain Hazelwood had not had a
15 lot to drink prior to that test being administered,
16 correct?

17 A What? I guess I missed that.

18 Q That confirms that Captain Hazelwood had not had a
19 lot to drink right prior to the blood sample being drawn,
20 correct?

21 A I don't know what you mean by right prior. I
22 guess you'll have to --

23 Q Within the hour.

24 A Oh, he could have drunk within the hour and still
25 had those blood and urine levels, sure.

1 Q The urine sample would have gotten to that level
2 within an hour?

3 A Could have.

4 Q Could have.

5 A Could have. If he had drunk within a hour of the
6 time the test was taken, we could get these results, yes.

7 Q What do you base that on?

8 A The fact that he -- example -- had he taken the
9 alcohol in and absorbed everything he had to drink -- if
10 you drink enough alcohol to get to 06, absorbed it all
11 within 20 minutes to a half an hour, within another
12 half-hour, your body's eliminating it. It's in the urine.
13 It's incorporated within the hour in your body and you've
14 got an equilibrium situation. That can happen in that
15 short a period of time.

16 Q And you proved that in your tests?

17 A It can happen in that period of time. I've never
18 done that kind of a test specifically to determine that.

19 Q You're just saying that's a possibility.

20 A It's possible to have your distribution complete
21 within an hour of the time. If you were to take three
22 ounces of whiskey right now, at 10:00 o'clock, and drink
23 it, if I were to do that right now, it could be completely
24 distributed through my system with these kind of
25 consistency in samples within an hour. It probably would

1 take longer than that, but it could be within an hour.

2 Q Now as I understand it, the next problem you had
3 was Mr. Prouty's use of the .008 elimination rate, correct?

4 A I said .008 is on the -- near the bottom part of
5 the spectrum of alcohol elimination and there's not -- you
6 can use it because it's been measured in people, so I
7 suppose you can use it, if you want to, but it's not a very
8 likely elimination rate for anybody.

9 Q But he did give the elimination rates of the other
10 three possible groups, right?

11 A Well, there's a whole range of possibilities,
12 right.

13 Q .10, .18. 030, right?

14 A It could be any place, anything between those, and
15 even much higher than that, up to 35, you know, even
16 higher, some people say.

17 Q Have you ever seen higher?

18 A Than 03? No.

19 Q He gave a range of numbers at 12:00 o'clock under
20 those three factors.

21 A I believe he did, yes.

22 Q And you say you wouldn't use a .008, correct?

23 A I said a .008 is a very unlikely scenario. The
24 number derived from a .008 elimination rate is a very
25 unlikely thing to have happen. And an elimination rate

1 based on a .18 or a 20 or a 25 is much more likely.

2 Q What does A.W. Jones have to say about this? What
3 rate does he use?

4 A I don't know what he uses as the average.

5 Q Do you know what he's suggested to be used?

6 A In one paper that I read by A.W. Jones, which I
7 happen to have with me, A.W. Jones says that 008 is the
8 bottom, he figures that that's the bottom number that's
9 been measured. So if you want to give the benefit of the
10 doubt to somebody as to the lowest they could have been,
11 then you should use 008 if you're going to do it at all,
12 which he says you shouldn't do.

13 Q But he says that in certain circumstances, it can
14 happen, right?

15 A He said, in certain circumstances, a person could
16 be .008, yes. He says if you use .008, then you are giving
17 the lowest possible number a person could have been at a
18 previous time if you're going to be doing that.

19 Q Next, you criticize Mr. Prouty for one of his
20 scenarios where he used the .051 Widmark factor, correct?

21 A When he was calculating alcohol based on the
22 number of drinks and he used the .51 Widmark factor, I
23 criticized that, yes, absolutely.

24 Q Did you understand why he gave that figure?

25 A Well, he gave that figure because that gives you

1 the highest possible alcohol concentration, based on five
2 and a half drinks or five drinks at an ounce and a half.
3 Using the .5 Widmark factor gives you the highest possible
4 alcohol concentration.

5 Q Isn't it true, Mr. Burr, that the reason that he
6 gave that is that there had been an inference drawn that
7 based on the number of drinks that Captain Hazelwood had
8 had during the day, as has been testified to in this trial,
9 the inference was that no person, under any scenario, could
10 be at an 061 at 10:30 the next morning, correct?

11 A I don't know if that was the inference or not.

12 Q And all he did is point out that there is a
13 scenario.

14 A Yes, exactly. He took a Widmark factor which is
15 completely unrealistic. That's something you can -- the
16 Widmark factor is something you can do without
17 measurement. You can take a look at somebody and tell that
18 their Widmark factor is not .5.

19 Q He pointed out, didn't he, Mr. Burr, that he did
20 not agree with the use of that Widmark factor. All he was
21 pointing out was that, under the scenario, there was a way
22 that a person with a number of drinks that Captain
23 Hazelwood had that day could be at an 061 at 10:30 the next
24 day, right?

25 A I guess my reading of the transcript was that he

1 was saying that that was a possibility and I don't believe
2 that's a possibility at all because I don't believe Mr.
3 Hazelwood could possibly have a .51 Widmark factor.

4 Q Well, so in other words, that scenario was fairly
5 unlikely, is that what you're saying?

6 A Yes.

7 Q About as unlikely as people giving an accurate
8 assessment of the number of drinks they had in an
9 afternoon, right?

10 A I don't know how unlikely that is.

11 Q Well, you've already testified that people rarely
12 accurately assess the amount of alcohol they had when
13 they've been drinking, correct?

14 A Oh, I was talking about people who were arrested
15 for DWI and being interrogated by the police. I guess
16 there's -- I don't know if you would ask -- under the
17 circumstances, I have no basis to say whether someone in
18 this circumstance would give an accurate answer or not.

19 Q Now, finally, if a person -- you testified,
20 yesterday, that for a person to get to about a 24 or 25, it
21 would take 13 to 14 shots of 80 proof vodka, correct?

22 A That sounds correct.

23 Q What would it -- does vodka come in different
24 proofs?

25 A Yes.

1 Q What are they?

2 A 80 and 100 most vodka is. I don't know if there's
3 any -- there have been and I don't know what they can --
4 you can buy vodka -- you can buy Everclear in some places,
5 depending on where you are, which is 190 proof. But most
6 vodka is 80 and 100 proof. Everclear is the same thing,
7 it's just grain alcohol. But 80 and 100 proof. I don't
8 know if any other proofs are sold any place. Those are the
9 only -- in most states, those are the only two that are
10 sold.

11 Q How many drinks would it have taken if Captain
12 Hazelwood was having 100 proof vodka.

13 A Well, that's about 20 percent -- yes, it's
14 actually about ten percent stronger, so it takes about ten
15 percent less, a couple less.

16 Q Which would be how much?

17 A 12, I suppose.

18 Q 11 to 12? And that would be say only about six
19 double shots, is that correct?

20 A That's correct.

21 Q Thank you, I have nothing further.

22 JUDGE JOHNSTONE: We're going to take a little
23 recess now. Remember my former instructions not to discuss
24 the case among yourselves or form or express any opinions.
25 We'll see you back after the recess.

1 THE CLERK: Please rise. This Court stands at
2 recess.

3 (Whereupon, the jury leaves the courtroom.)

4 (Whereupon, at 10:08 a.m., a recess is taken.)

5 (Whereupon, the jury enters the courtroom.)

6 THE CLERK: -- is in session.

7 JUDGE JOHNSTONE: Mr. Madson.

8 REDIRECT EXAMINATION

9 BY MR. MADSON: (Resuming)

10 Q Mr. Burr, Mr. Cole asked you a number of questions
11 about your experience with gas chromatograph and things
12 like this, correct?

13 A That's correct.

14 Q As I understand it, the gist of it was you see
15 nothing wrong with using gas chromatograph to test blood
16 alcohol, it's a valid test.

17 A That's correct, yes.

18 Q Sir, you were never asked to critique or look at
19 the test results in this particular case with the view of
20 whether they were accurate or inaccurate, were you?

21 A No, I was not.

22 Q You were asked just to assume it was accurate.

23 A That's correct, that was the assumption that I
24 worked under.

25 Q Now Mr. Cole asked you a number of questions about

1 a breath test and comparing it with a blood test and which
2 one was best. Can you describe for the jury, please, how
3 breath tests are done, commonly done, and how it relates to
4 blood alcohol levels?

5 MR. COLE: Objection, relevance.

6 JUDGE JOHNSTONE: Objection overruled.

7 THE WITNESS: Yes. Breath tests are done by
8 having a person blow into any one of a number of
9 instruments. For example, in the State of Alaska, they use
10 an instrument called the Intoximeter 3000, which is an
11 infrared based instruments for measuring alcohol on the
12 breath. You take a sample of a person's breath and, based
13 on a built-in ratio of 2100 parts to one, it gives you a
14 number which will give you a fairly accurately answer or
15 relationship to a person's blood alcohol concentration.

16 BY MR. MADSON: (Resuming)

17 Q Is there a commonly used or accepted factor that
18 relates from one to the other?

19 A Yes, 2100 to one is the factor that commonly
20 relates from one to the other. And so when you take a
21 breath test and you take a blood test, you get results that
22 are close to each other. They're never going to be
23 identical in all cases, but they're going to be close.

24 Q But if you really want to know how much alcohol is
25 in a person's blood, it's best to have a blood test, as

1 opposed to a breath test.

2 A That's correct.

3 Q But you can still get a fairly close
4 approximation.

5 A That's correct.

6 Q In this case, there was no breath test taken that
7 you are aware of.

8 A Not that I'm aware of, no.

9 Q The research that you're aware of, does it use
10 both breath and blood alcohol, by the writers that you've
11 read in the field?

12 A Yes, the writers that I've read in the field,
13 depending on what study and what they're doing when they're
14 dealing with the absorption, distribution, elimination of
15 alcohol and studying those issues, myself included, have
16 done both blood and breath tests. Oftentimes, breath tests
17 are done if your purpose of the study is to determine how
18 people's alcohol goes up and how people's alcohol goes
19 down. You can do that with a breath test just as easily as
20 you can with a blood test. Whether your correlation
21 between the breath and the blood is a hundred percent,
22 you're still looking at the same progression. Your breath
23 test results are going to be consistent as people go up and
24 down in their alcohol consumption, the same way as your
25 blood test. And sometimes you take both to compare to

1 them, to see how they differ when people are absorbing
2 versus eliminating, how blood and breath differ from each
3 other.

4 Q Which of the two is the faster test?

5 A The breath tests are faster and easier to do and
6 that's why they're often done in studies that look at
7 elimination and distribution of alcohol and so on, because
8 they're easier to do.

9 Q Mr. Cole asked you about the urine test that was
10 taken of Captain Hazelwood, the .094. Does this, by
11 itself, mean anything as far as what percent of alcohol was
12 in his blood at a given time?

13 A Not particularly, no.

14 Q Maybe you can just explain why there's a
15 difference between say a blood and a urine alcohol, very
16 briefly.

17 A Yes. The urine -- a person's body has a different
18 water content in the blood, for one thing, and, also, the
19 urine is a reservoir in which, as your body eliminates
20 alcohol and as alcohol is excreted from your body, it gets
21 into the urine and it collects there. So your urine has
22 alcohol in it when you've been drinking. That alcohol will
23 be somewhat related to the alcohol that's in the blood, but
24 not directly related, unless you do some special things in
25 taking the sample in order to get it to relate directly to

1 a blood alcohol test. But it's basically an indication
2 that there is alcohol in the system.

3 Q And that could depend on such factors as when a
4 person last urinated, things like this?

5 A Absolutely.

6 Q Now you indicated that you looked at hundreds of
7 videos in Minnesota involving DWI subjects, is that
8 correct?

9 A I've looked at hundreds of videos, yes.

10 Q Mr. Cole asked you a number of questions about
11 impairment versus drunk. Is there a distinction that
12 you're aware of or is this just a term of art or how would
13 you describe the difference?

14 A Well, scientifically, there isn't any. Alcohol
15 impairs a person. Alcohol has an effect on a person's body
16 and on the brain and on the muscles and so on and so on and
17 that's all. It all really has to do with the influence of
18 alcohol on the body's system.

19 Oftentimes, we use the term "impaired" to mean
20 that somebody's affected by the alcohol and "intoxicated"
21 to mean that they're very noticeably under the influence.
22 Both of them have to do with the impairment. They're the
23 same thing that alcohol is doing to the body.

24 Q In other words, if you're making visual
25 observations of someone, you may conclude they're drunk or

1 impaired or intoxicated.

2 MR. COLE: Objection, leading.

3 BY MR. MADSON: (Resuming)

4 Q Is there any distinction in those terms, as far as
5 you know?

6 A No, not really.

7 Q Can you then, based on your experience, look at a
8 person and determine whether they were visibly impaired?

9 A Oh, absolutely. I think it's very easy to do, to
10 look at someone and tell if they're impaired by alcohol, to
11 see symptoms of alcohol intoxication, particularly when you
12 get to the higher levels.

13 Q Now you told Mr. Cole and the jury, in response to
14 his question, that a blood alcohol test would be more
15 accurate, a more accurate means of determining a person's
16 intoxication level or whether he's under the influence, if
17 I understood you correctly.

18 A Yes, a blood test basically is better than a
19 breath test.

20 Q But does a blood test, by itself, give you a clear
21 indication or criteria to determine whether a person is
22 actually impaired or not?

23 A Sometimes it does, if it's high, if it's real
24 high, but not always.

25 Q What would you use, if anything, to correlate the

1 number you get with your conclusion that a person is
2 impaired? What other factors could you use?

3 A The other factors that you want to use is your
4 observations of this particular individual, how they
5 responded to your questions, how they walked, how they
6 talked, how they looked, your perception of their -- your
7 judgment of their perception of time and space and where
8 they were and what they were doing and your evaluation of
9 how they're acting, compared to how you normally would
10 expect someone to act, how you've normally seen this person
11 act before or something like that. You know, you can
12 notice these symptoms of alcohol on their body.

13 Q And for instance, if you had people that said,
14 "Yes, I saw the person and he seemed impaired," and you had
15 a blood alcohol level, the two may go together and
16 correlate.

17 MR. COLE: Objection, leading.

18 JUDGE JOHNSTONE: Well, you can discontinue the
19 leading questions, please.

20 BY MR. MADSON: (Resuming)

21 Q Mr. Burr, what would you look for, then, as far as
22 any relationship, if any, between observations and blood
23 alcohol?

24 A One would look for the observations to corroborate
25 the results of the test and the test corroborate the

1 results of the observations and that's when you have an
2 alcohol concentration test, you can make some pretty
3 accurate predictions as to what you would expect to see in
4 people at that particular level and those things, in most
5 cases, agree with each other.

6 Q Have you, in your experience, had occasion to
7 examine police reports, that is officers' arrest reports
8 about arresting a person and then taking a toximeter test
9 of some type?

10 A Absolutely, many of those.

11 Q Have you had occasion to review the officers'
12 observations in his report versus the number that was
13 reached by the breath test or blood test?

14 A On tons of occasions.

15 Q Do you have an opinion, based on your observations
16 or your knowledge of those reports, whether they go
17 together, commonly correlate?

18 A They commonly correlate very well, yes.

19 Q If a person is assuming in the area of about .15
20 blood alcohol content, okay, what, if anything, can you say
21 about the observations made by arresting officers in that,
22 whether they correlate with the officers' observations of
23 impairment or not?

24 A Yes, I can say that I don't ever remember seeing a
25 police report when somebody tested a .15 who the police

1 officer did not find obvious signs of impairment in that
2 individual, that they elucidated in their reports and their
3 conclusions and findings that this person was under the
4 influence and exhibited certain signs and symptoms of
5 intoxication. At that 15 level, I've never seen a police
6 report where the person showed no signs of impairment, but
7 tested .15.

8 Q You indicated that in your observations, it was
9 common to notice some changes, such as personality.

10 A That's correct.

11 Q Would this be true, sir, if you knew the person
12 before or didn't know them?

13 MR. COLE: Judge, I'm going to object to leading
14 questions by Mr. Madson. This is direct?

15 JUDGE JOHNSTONE: Mr. Madson.

16 BY MR. MADSON: (Resuming)

17 Q Mr. Burr, what difference, if any, would there be
18 between observations of a person whom you knew the past
19 experience or one that was a stranger to you?

20 A Well, obviously, to determine if somebody's
21 personality has changed, one has to know the person, how he
22 was before. The fact that somebody's very boisterous and
23 talkative and so on may not reflect a personality change at
24 all. That may be the way they are. Or if somebody's very
25 retiring, quiet and shy, that may be the way they are

1 normally.

2 By a personality change, obviously, you have to
3 know what the person was like before and that's the sort of
4 thing you see in controlled drinking experiments, human
5 subject studies, where you observe somebody's behavior at
6 the beginning of the session and then when they get under
7 the influence, their behavior changes and you notice that
8 change in behavior.

9 Q Is there a term that is used in the field of
10 alcohol physiology or studies known as mood swings?

11 A Yes.

12 Q What would that be, sir?

13 A Well, a mood swing would be when a person would be
14 basically happy at one moment and crying the next minute
15 and so on, to go from one emotional state to the next, you
16 know, their mood swings from happy to sad very quickly, and
17 that's common under alcohol influence.

18 Q Mr. Cole asked you about such things as leaning on
19 an object, rather than standing erect, right?

20 A Correct.

21 Q Do you have any opinion as to how valid this is by
22 itself. For instance, I'm leaning on this podium. Does
23 that tell you whether I'm drunk or not?

24 A No, it does not. Obviously, people lean on things
25 when they're not under the influence, just because

1 it takes some weight off your feet and it's something you
2 just do.

3 Q You were also asked about people I believe doing
4 tests or alcohol sobriety tests at a level of about 17 or
5 18. And your answer I believe was that some do fairly
6 well. Can you tell the jury an estimate of how many people
7 actually could do fairly well?

8 A Yes, I would say, at that level, less than ten
9 percent of the people could do what I would consider fairly
10 well in the test. I would say virtually no one would show
11 no signs of that alcohol influence.

12 Q If the level of intoxication or blood alcohol
13 would increase, do you have an opinion as to whether that
14 percentage of people that could do the test would go up or
15 down?

16 A As the alcohol increases, there are fewer and
17 fewer people that can pass the test, to use the term, that
18 would perform fairly well on the test on a standardized
19 field sobriety test as the alcohol level goes up until you
20 get in the range of .25 and very few people will do
21 anything like a passing test in a field sobriety test.

22 Q Mr. Cole asked you about that and I think you said
23 that the term "masking" is often used to disguise or for a
24 person to not show the effects as readily as someone else.

25 A That's correct. Masking refers to a person's

1 ability to hide some of the symptoms of alcohol influence.

2 Q When would masking, from your experience, be
3 utilized by a person at all?

4 A Masking and this tolerance that you build to
5 alcohol is something that operates, in my experience and
6 much of the research and the literature, at the lower
7 levels of alcohol intoxication. When you get up to higher
8 levels, .15 and above, yes, you're dealing with all kinds
9 of involuntary things that happen in your body that you
10 basically have no control over, things you can see in
11 people's faces and just things that you can't consciously
12 control.

13 Q What about a time period? Do you have an opinion
14 as to whether a longer period of time for a person to have
15 to consistently do this would make any difference?

16 A Oh, absolutely, absolutely. The longer period of
17 time that you -- if your alcohol is up and you're trying to
18 act sober, if you will, when you've been drinking a lot and
19 you have a high alcohol level in your system, you may have
20 some success in doing that for a short period of time and
21 do a fairly good job at it. But the longer the period of
22 time goes on, the less likely you are to be able to
23 continue doing that.

24 Q Does it matter as far as the circumstances are
25 concerned, let's say when the police officer is trying to

1 make an arrest or something. Would that be something that
2 you would use, in your opinion?

3 A Oh, absolutely, you can see that very much in the
4 field. When people are given a task to do and asked to
5 perform, they tend to do better at it than if you just
6 casually observe them. So when people get arrested by the
7 police, they tend to do better than they would when they
8 were in the bar, drinking, for example.

9 Q Now assuming a person has built up a tolerance to
10 alcohol, does this normally require -- how would you
11 describe this drinking on a day-to-day basis or -- would
12 that require day-to-day drinking to build up this tolerance
13 that you described?

14 A Yes, it would. In order to build a tolerance to
15 alcohol and be able to somewhat accommodate the effects of
16 alcohol on your body, you have to be a regular consumer of
17 alcohol and you have to regularly drink to the level that
18 you're going to be at, masking the symptoms of that.

19 For example, if you are normally the type of
20 person that has three drinks and you go and have ten,
21 you're not going to be able to hide the fact that you had
22 ten drinks. You're going to be in bad shape. But a person
23 who routinely goes out and has ten drinks will probably do
24 a lot better than you if you only normally have one or two
25 drinks.

1 Q And, again, this would depend upon the
2 circumstances involved as to whether it would be noticeable
3 by others.

4 A Absolutely.

5 Q What about -- would there be a change, sir, in
6 your opinion, in a person's burn-off rate if they were at
7 that level that you say is tolerant and drinking large
8 quantities of alcohol on a daily basis?

9 A Yes, there would. There's abundant evidence that
10 people who are regular consumers of alcohol and who drink
11 quite a bit regularly, they end up having higher burn-off
12 rates than people who drink rarely, at least to the point
13 where they start suffering a lot of damage to their body
14 from the alcohol. People who drink a lot, eventually,
15 they'll reach a stage where their body is beginning to
16 break down from the alcohol and their burn-off rates go
17 down. But when they're at the point when they just are
18 normally drinking a lot, they tend to have higher burn-off
19 rates because the body is adjusting to the high doses of
20 alcohol it's getting.

21 Q Now assuming, sir, you have a blood alcohol test,
22 let's say a 14, 15, something like that -- that's
23 estimated, okay -- but all the other evidence, the
24 testimony is there are no signs of impairment, what, if
25 any, conclusions could you draw, based on that?

1 A. Well, it would be my conclusion that if there are
2 no other signs of impairment and nobody else or people who
3 are watching this individual have any indication that this
4 individual is impaired, then it's unlikely that that's
5 their alcohol concentration because people at that level
6 over an extended period of time would show some signs of
7 intoxication.

8 Q Mr. Cole asked you about a report, sir. You were
9 not asked to do one in this case, were you?

10 A No, I was not.

11 Q Did you ever see the report that was reportedly
12 made by Mr. Prouty regarding this case?

13 A No, I saw no report by Mr. Prouty.

14 Q Do you know if he did a report?

15 A I don't know of any. I don't think he did.

16 Q You indicated that you took some courses, sir, in
17 the field of toxicology, even though you are not a
18 toxicologist, correct?

19 A That's correct.

20 Q Is it your understanding or belief that it is
21 necessary to be a toxicologist to understand the concepts
22 of alcohol and its effect on humans?

23 A No, absolutely not. Toxicology is -- actually,
24 toxicology is a big term. A lot of people are
25 toxicologists who don't know anything about alcohol and

1 other drugs in the human body because toxicology is a wide
2 field. And there are forensic toxicology people who
3 specialize just in that and then there's a lot of other
4 people in the area of forensic science who work and
5 specialize in the area of toxicology who aren't
6 toxicologists. So it's a matter of experience, interest,
7 and area of study and work, rather than what your title
8 is. People are called all kinds of things who work in the
9 same area.

10 Q Now Mr. Cole asked you some questions about -- and
11 he referred to a Dr. Debowski and a doctor I believe A.W.
12 Jones, correct?

13 A Correct.

14 Q You said you were familiar with their studies.

15 A Yes, I am.

16 Q And do you place any reasonable reliance on the
17 work that they've done?

18 A I certainly do.

19 Q Then, sir, do you know whether Dr. Debowski, for
20 instance, agrees with the concept of a retrograde
21 extrapolation over a long period of time?

22 MR. COLE: Objection, hearsay.

23 MR. MADSON: Your Honor, he went into all the
24 questions about whether he agrees with Debowski and Jones
25 and whether he disagrees. I think I should be entitled to

1 ask him the very same questions on the same subject matter.

2 JUDGE JOHNSTONE: That's calling for some
3 hearsay. There was no objection to Mr. Cole's questions;
4 there is to yours. I'm going to sustain the objection.

5 MR. MADSON: Your Honor, once again -- well --

6 BY MR. MADSON: (Resuming)

7 Q Now you said you disagreed with Mr. Prouty in a
8 number of respects.

9 A That's correct.

10 Q For instance, you said the Widmark factor,
11 correct?

12 A That's absolutely correct.

13 Q You said you can, I believe, tell by looking at a
14 person pretty well?

15 A One can make a real good estimate of the Widmark
16 factor by looking at someone, that's correct.

17 Q How can you do that, sir?

18 A Well, the Widmark factor, what the Widmark factor
19 has to do with is the body water content of an individual.
20 The body water content of an individual is directly related
21 to the body fat, with .67 being the average for a male, .5
22 being the very low end of someone who is particularly high
23 in body fat, obese, and the other end, about .8, maybe as
24 high as .85 for somebody who's lean, muscular individual, a
25 body builder, a running back on a football team or

1 something like that. They have a high body water and have
2 a high Widmark factor and a real obese person would have a
3 low Widmark factor. The average ordinary male would be in
4 the area of .67. Well, you can look at someone and get a
5 pretty good estimate of whether they're on the lean end or
6 on the fat end or the middle end of that and get a good
7 idea of what kind of Widmark factor to use.

8 Q And I believe you also said the .008 burn-off rate
9 was something you disagreed with if that was used to draw
10 the conclusion that Dr. Prouty did.

11 A Yes, that's correct.

12 Q And why is that, again, sir?

13 A Well, I disagree with using that because I think
14 using that kind of a burn-off rate over a long period of
15 time is -- I don't think that's particularly good because
16 that's not a realistic number to use. I mean it's quite
17 unlikely that somebody's going to do that and, you know,
18 it's not a likely scenario.

19 Q Assuming, then, that his other considerations, the
20 other burn-off rates that Mr. Prouty used, were used by
21 yourself to calculate backwards, and assuming that you got
22 a value of .25, 30, right --

23 A Correct.

24 Q -- would that mean -- let's assume that there's
25 still no visible signs of impairment at those levels, is

1 that consistent or inconsistent with the estimated blood
2 alcohol rate?

3 A That's inconsistent, absolutely inconsistent.

4 Q Why?

5 A At that alcohol concentration, a very high
6 percentage, 97 percent or greater at the 25 and close to a
7 hundred percent at the 30, people are visibly impaired to
8 any one observer and, over a period of time with a number
9 of people, I can't imagine somebody not being noticeably --
10 noticed to be intoxicated at those alcohol levels.

11 Q Mr. Cole asked you about times in which you have
12 used retrograde extrapolation yourself.

13 A Correct.

14 Q Would you give the jury an example of when you
15 would feel there's some validity to this type of test, or
16 estimate rather?

17 A Yes. First of all, as I stated, retrograde
18 extrapolation, in my opinion and based on my previous
19 testimony, is good for indicating that somebody's alcohol
20 concentration may have been higher at a particular time or
21 close to the level that it was. And I believe it's useful
22 in a situation where, for example, you have someone who's
23 driving an automobile and they're stopped at 1:00 o'clock
24 and they're run through police procedure and they're tested
25 at 1:45 or 2:00 o'clock, they're given a breath test or a

1 blood sample is drawn. And you have information that they
2 quit drinking at 11:00 o'clock and so on and were drinking
3 in an ordinary social manner, you know, a few drinks and so
4 on. And to say was their alcohol likely higher or lower or
5 close to what it was and, you know, whether they're going
6 up or down and that sort of thing.

7 Q At what time period would --

8 A At that time period when they're tested, say at
9 2:00 o'clock in the morning and were driving at 1:00
10 o'clock in the morning, barring some unusual consumption
11 pattern or something, that they were probably close to the
12 level or slightly higher than the level they're tested at,
13 to give you an idea of the fact that they were close to the
14 level that they were tested at and that the test is time
15 related to the particular incident and that it has some
16 scientific validity in looking at the level of influence an
17 hour earlier, maybe two hours earlier.

18 Q Then in this situation, the one you were asked to
19 look at here over a period of say 11 to 14 hours, is it
20 your opinion, sir, that that would be necessary to assume
21 absolutely no drinking on the part of Captain Hazelwood
22 during this period of time to have any validity to the
23 extrapolation theory?

24 A Oh, absolutely. If there was any alcohol
25 consumption during this period of time, then there's no

1 validity whatsoever. There's no number you'd say anything
2 about, you can make any estimate of any numbers.

3 Q Well, assuming, then, sir, if you drank at 7:00
4 a.m., 8:00 a.m., 9:00 a.m., would this test have any
5 validity at all?

6 A None whatsoever.

7 Q You were also asked questions about the stylized
8 curve. Now if I understand correctly, the curve you drew
9 was -- maybe you could explain "stylized," sir, what is
10 that?

11 A Yes, by stylized it means it just shows a smooth
12 up and a smooth down, which is not what normally happens.
13 It normally goes up and down on less than a regular basis
14 and all the points don't fall in a line, you just kind of
15 draw a line in between the points. And there also was an
16 average out curve showing absorption and I believe it was
17 about an hour or something like that. And of course you
18 can draw a hundred different curves, given the same
19 drinking scenario.

20 Q Well, would it vary on the same person? In other
21 words, could you get a curve on him one time and then do
22 another one later? Would they always be the same?

23 A Oh, absolutely not, they may be completely
24 different. The rate at which they absorb the alcohol may
25 change from one time to another, depending on all kind of

1 factors and their burn-off rate may change from one to
2 another somewhat, so there's -- you know, that can vary.
3 Given the same amount to drink over the same period of
4 time, you can get two completely different curves from the
5 same individual on two different occasions.

6 Q Now Mr. Cole showed you a report by I think Dr.
7 Jones, I think one curve. Do you know if that was done on
8 one individual or an average of many?

9 A That particular curve was one individual, I
10 believe.

11 Q Would you have an opinion as to whether that would
12 be consistent with tests on other individuals?

13 A It might not be. That's one individual's alcohol
14 curve and another individual could have a different alcohol
15 burn-off curve.

16 Q Assuming, sir, that someone is in the elimination
17 phase, that is their alcohol is decreasing, but the curve
18 is not nice and linear, it goes up and down --

19 A Sure.

20 Q -- if you happen to take a blood test at one of
21 those little peaks where it's off the curve, what effect,
22 if any, would this have on the conclusion going backwards
23 11 or 12 hours?

24 A It would give you the wrong number going back 11
25 or 12 hours because you'd be starting at the wrong point

1 and you'd be extrapolating backwards from there, so you'd
2 be off in your estimate.

3 Q Mr. Cole asked you about absorption times and, if
4 I recall, you said the literature says that it could be at
5 least as long as six hours to absorb alcohol?

6 A That's correct.

7 Q What about drinking on an empty stomach and eating
8 afterwards, what, if any, effect would this have?

9 A That's one of the things that can cause that
10 phenomenon to happen that's been reported in the
11 literature, that if you drink alcohol and then eat after
12 you drink, that's one of the things that can cause real
13 delayed absorption of that alcohol.

14 Q Now you were also asked to assume that he, meaning
15 Captain Hazelwood, had peaked, that is in alcohol content,
16 had peaked before 2:00 a.m., I believe, right?

17 A Yes.

18 Q Do you know if any test was done on Captain
19 Hazelwood at 2:00 a.m. to give you any more information on
20 whether this is true or not?

21 A There was no test done on him at that time, no.

22 Q You were also asked whether you could do burn-off
23 rates on an individual, you could determine a person's
24 burn-off rate.

25 A You can determine it today, yes. You can give

1 somebody alcohol to drink and take tests and draw their
2 alcohol curve.

3 Q What about tomorrow?

4 A Tomorrow, it may differ, their absorption rate may
5 differ, it will differ probably, and their burn-off rate
6 may be slightly different than it was. As a matter of
7 fact, it would probably increase if you did it three days
8 in a row.

9 Q Was there, in your opinion, any difference between
10 the works that you were asked about, Jones, Debowski, as to
11 whether a blood test or a breath test was used on the
12 individual subject?

13 A No, that's really ancillary to the issues that
14 were addressed in the scientific concepts being done in the
15 paper. It was just -- breath or blood was just a method of
16 getting an analytical number and looking at alcohol
17 concentration curves and factors that affect the
18 absorption, distribution, elimination of alcohol and those
19 sorts of things. Whether you take a blood test or a breath
20 test really is not relevant to the issues addressed in the
21 papers.

22 Q What were the issues that were addressed, what's
23 the subject?

24 MR. COLE: Objection, hearsay.

25 MR. MADSON: Your Honor, if he asked him about the

1 paper, I think I can ask what the title was.

2 JUDGE JOHNSTONE: Go ahead with your question,
3 what were the issues.

4 BY MR. MADSON: (Resuming)

5 Q What were the issues that were addressed in those
6 papers?

7 A The issues that were addressed in the papers by
8 Jones and Debowski that you're referring to were issues
9 that have to do with the absorption, distribution,
10 elimination of alcohol in a particular individual and the
11 factors that affected those things and the issues involved
12 in per se drinking/driving laws and those things.

13 Q Now, sir, do you have an opinion as to what -- as
14 far as Mr. Prouty is using the Widmark factor of .51,
15 burn-off rate of .008, assuming these to be correct, what
16 value would they have? I mean what would be his purpose in
17 saying these are realistic and good values, in other words,
18 they support the State's scenario in this case?

19 MR. COLE: Objection, speculation, compound
20 question.

21 JUDGE JOHNSTONE: Maybe you can rephrase your
22 question. There were several questions in that one it
23 sounds like.

24 BY MR. MADSON: (Resuming)

25 Q Using Mr. Prouty's figures, .51 and .008, what

1 value would you place on them with regard to whether
2 they're realistic or not in this particular case?

3 A First of all, I don't believe that those numbers
4 are realistic numbers to use in terms of what Dr. Prouty
5 did. And what they did is it made a possible scenario
6 where five shot and a half drinks, actually seven and a
7 half drinks, could turn out to give you that alcohol
8 concentration .06 in the morning, using a Widmark factor
9 that's unrealistic and using a burn-off rate that's
10 unrealistically at the low end.

11 Q If realistic were used, then what, if any, effect
12 would this have on that end result of so many drinks versus
13 blood alcohol of .06?

14 A If you use an average burn-off rate and you use a
15 realistic Widmark factor for Captain Hazelwood, you would
16 end up with needing considerably more than five ounce and a
17 half drinks. Then you'd end up more in the range of 14 or
18 something like that.

19 Q Thank you, sir, I don't have any other questions.

20 MR. COLE: Can we approach the bench?

21 JUDGE JOHNSTONE: Yes, sir.

22 (The following was said at the bench.)

23 MR. COLE: I want to make an application at this
24 point. We've been very careful in our examination of Mr.
25 Prouty not to go into an experienced drinker because I

1 think that's (inaudible).

2 JUDGE JOHNSTONE: Let's do this outside the
3 presence of the jury.

4 (The following was said in open Court.)

5 JUDGE JOHNSTONE: We're going to need to take up
6 this matter outside your presence because it will take a
7 little longer than we have for a side bench conference.
8 Don't speculate on what we're doing and don't discuss the
9 case among yourselves or with any other person or form or
10 express any opinions. When we're completed with this,
11 we'll call you back.

12 (Whereupon, the jury leaves the courtroom.)

13 JUDGE JOHNSTONE: Mr. Cole?

14 MR. COLE: Your Honor, my application goes to the
15 fact that in our direct of Mr. Prouty, we were very
16 careful, when talking about the terms masking, not to refer
17 to experienced drinkers. Dr. Prouty used the words "some
18 people." Now, in this case, Mr. Madson has opened up the
19 door by going into a long recitation with Mr. Burr about
20 people that drink often and that build up a tolerance
21 level. I believe that I should be entitled to go into,
22 with Mr. Burr, his knowledge about heavy drinkers and how
23 they react -- how alcohol affects them, whether or not they
24 are better able to cover up the signs, the physical signs
25 of intoxication, how they are the ones that are better able

1 to perform field sobriety tests at higher levels, how that
2 does not necessarily mean a person that drinks day to day,
3 how this could be a reason why a person could have a number
4 of drinks and not show the physical manifestations.

5 I believe Mr. Madson has opened up that door.
6 I've been very careful in my case not to go into it. And
7 now they've pretty much brought it up. I think I should be
8 able to cross examine his knowledge on it.

9 MR. MADSON: Well, Your Honor, this was a classic
10 example of an attempt to sandbag. My notes show that Mr.
11 Cole asked this witness what is masking, what does that
12 mean, how is that done. That requires him to respond by
13 saying some people are able to do this because they are
14 more tolerant to alcohol and he went into that
15 explanation. Obviously, I was left to the position then of
16 letting the jury just hear this, which they could draw
17 inferences from, which I believe would be incorrect, or
18 asking additional questions. I was forced in that position
19 by the State, not me, in asking these things.

20 Secondly, I think there are some questions that
21 the State could ask on this, on tolerance and just the same
22 area that I covered. But I certainly would object if
23 they're going to try to get at any specific inference that
24 this jury -- that they would try to draw that Captain
25 Hazelwood is somehow a heavy drinker and he belongs in this

1 category when there's certainly no evidence to support that
2 at all.

3 JUDGE JOHNSTONE: It's my understanding, based on
4 other cases I've had and hearing other experts testify,
5 that some people can mask the symptoms of alcohol better
6 than others and I recall hearing some experts, I think Dr.
7 Rogers at one time indicated that people who are used to
8 drinking can generally mask the symptoms better than people
9 who are not. I haven't heard evidence like that in this
10 case, but that seems to be relevant evidence in
11 determining --

12 MR. MADSON: Your Honor, I have no problem with
13 that, you know, in general terms, I fully agree that's a
14 subject --

15 JUDGE JOHNSTONE: Well, what are your intentions,
16 then, Mr. Cole?

17 MR. COLE: Well, I'd like to ask people that have
18 -- what he considers serious drinkers and go into that
19 people who drink heavily do better on a field sobriety test
20 than people who don't drink heavily; that people that drink
21 heavily are able to mask the signs of intoxication better
22 than other people, that people drink heavily drink -- it's
23 not uncommon for them to drink things like vodka, rather
24 than say beer, vodka straight; that people that drink
25 heavily can drink for longer periods of time than people

1 that cannot; that people can obtain higher blood alcohol
2 concentrations and still perform routine activities.

3 JUDGE JOHNSTONE: What are you trying to prove
4 with this line of inquiry? Isn't the inference you're
5 trying to raise with the jury that Captain Hazelwood might
6 be a heavy drinker and that's why he might have been able
7 to mask his symptoms when he went through the guard gate
8 and walked up the ladder and was on the bridge at the time
9 of the grounding? Isn't that the inference you're trying
10 to raise?

11 MR. COLE: Yes.

12 JUDGE JOHNSTONE: What support do you have for
13 that inference, other than these questions and answers?

14 MR. COLE: What support in the evidence --

15 JUDGE JOHNSTONE: Admissible evidence do you
16 have --

17 MR. COLE: In this case?

18 JUDGE JOHNSTONE: -- that he's a heavy drinker?
19 What admissible evidence do you have, other than the
20 inferences that are naturally drawn from those kinds of
21 questions?

22 MR. COLE: Well, I think that the fact that he
23 starts drinking at 1:45 and drinks for approximately six to
24 seven hours in a bar, that's one inference. Number two,
25 that he's not drinking just a beer or two, but he's

1 drinking vodka, straight, in tumbler glasses. Number
2 three, that he's able to perform very well in the eyes of
3 others, even though he has a very high -- he had to have
4 had a very high blood alcohol level at the time he was
5 performing these things. Those are the inferences that I
6 have that's been admitted in this case.

7 JUDGE JOHNSTONE: Mr. Madson, anything else?

8 MR. MADSON: Only that the State's own evidence,
9 Your Honor, showed that assuming the 1:45 start of drinking
10 time is correct, which the evidence is certainly disputed
11 on, that's almost about a four-hour period, four hours or
12 better, and the State's own evidence says it was
13 approximately five drinks, which we're saying is even on
14 the high side. How in the world you can draw an inference
15 about a drink in hours, heavy drinking, I think that's
16 totally unrealistic and doesn't make a bit of sense.

17 JUDGE JOHNSTONE: All right, Mr. Cole, I think you
18 should be entitled to explore all the possibilities that
19 could lead to a blood alcohol that the evidence reflects
20 could have been present here and the effects on the
21 Defendant, which would include the possibilities that some
22 people can mask better than others if they are heavy
23 drinkers if you think you can get that out of this
24 witness. However, it's a thin line that you're walking
25 here. If you start using it for an improper purpose, I'm

1 going to interrupt you. It's only merely to show the other
2 parameters that might exist.

3 Before you argue that Captain Hazelwood may have
4 been a heavy drinker and, therefore, he could mask his
5 symptoms better, you'll have to apply to the Court. Be
6 very careful in this area, Mr. Cole.

7 Call the jury back in.

8 (Whereupon, the jury enters the courtroom.)

9 JUDGE JOHNSTONE: And being very careful can
10 translate into being brief and to the point.

11 Thank you for your patience. You may proceed.

12 MR. COLE: Your Honor, I'm --

13 RECROSS EXAMINATION

14 BY MR. COLE: (Resuming)

15 Q Now I believe you testified on redirect with Mr.
16 Mason that under this scenario right here, if a person
17 stops drinking at 11:00 o'clock and then drives and is
18 stopped at 1:00 o'clock and then is tested at 2:00 o'clock,
19 you would feel comfortable about testifying about the time
20 as far as what their blood alcohol level would be at 1:00
21 o'clock, is that correct?

22 A I said that that's the kind of case in which one
23 can make some -- since the time period is close, that one
24 can make some reasonable inferences about what the alcohol
25 level would have been under an ordinary drinking scenario,

1 a person was consuming in a normal social manner, absent
2 some drinking down a heavy amount. It's if you have some
3 facts, you could make some inferences about what the
4 alcohol would have been at a prior time, right.

5 Q And that's even though you testified that your
6 understanding of the literature is that the absorption rate
7 could take between one-half hour and six hours, correct?

8 A Absolutely, and there's no reason that the person
9 could -- you know, given this scenario, I didn't say that I
10 would take an average burn-off rate and add it to the
11 results to get the person's alcohol concentration, I didn't
12 say that at all.

13 Q But you testified that you said you would be
14 fairly confident in testifying that it was going up.

15 A I said I would be confident in testifying as to
16 the issues involved in that and we could draw some
17 reasonable relationship between this test and a prior time
18 if it was close in time and that there's not enough -- that
19 if the person had absorbed all their alcohol and was on the
20 way down, for this short period of time, it would be
21 reasonably close to this level, absent some strange set of
22 facts of drinking. And the burn-off rates don't make that
23 much difference because you have a short period of time and
24 so on, so that's what I am saying.

25 Q Isn't it true that the general literature accepts

1 about an hour as the absorption rate, generally, for the
2 absorption time between alcohol is consumed and when it
3 enters into your blood system?

4 A I suppose, on an average, an hour is probably a
5 good number.

6 Q And that's what you would use in a situation like
7 that, correct?

8 A Well, in a situation like that, if you were an
9 hour -- well, if somebody is drinking at 11:00 and stopped
10 at 12:00 and tested at 1:00, you know -- so you have
11 certain things you could say about that without depending
12 on the other facts you have of drinking. If you have no
13 drinking history, then you can't say anything.

14 Q And obviously you wouldn't use a six-hour
15 absorption rate in a fact pattern like that, would you?

16 A Depending on the -- well, you know, you could say
17 that some of it can't be absorbed until six hours, sure.
18 So depending on how they were drinking, it may affect the
19 results of your number.

20 Q So you would still feel comfortable about
21 testifying about the blood alcohol level under that
22 scenario.

23 A Yes, I think there's some relevant scientific
24 information you can produce, given that kind of scenario,
25 right.

1 Q You testified on cross examination and I just want
2 to make sure. Blood tests of the blood within -- of the
3 alcohol in a person's system are more accurate than breath
4 tests.

5 A That's not what I said.

6 Q Well, is that true?

7 A No, it's not true.

8 Q So breath tests are more accurate than blood tests
9 for determining the amount of alcohol in a person's system.

10 A Well, now, it depends on -- see, you're asking me
11 different questions.

12 Q Well, let me ask it to you again.

13 A Sure.

14 Q Are blood tests more accurate than breath tests in
15 determining the amount of blood alcohol in a person's
16 system?

17 A No.

18 Q In a person's blood?

19 A In a person's blood, yes, blood tests are a more
20 accurate method of measuring alcohol in a person's blood.
21 If you want to know how much alcohol they have on their
22 breath, then a breath test is better.

23 Q But in a person's blood, a blood test is better.

24 A Exactly. If you want to know how much alcohol is
25 in a certain media, the best test is to test that media.

1 You may be able to test something else and estimate the
2 alcohol in the other media based on that test. But, you
3 know, if you want to know how much alcohol is in their
4 body, it depends on what you mean by their body.

5 Q And blood supplies the brain with alcohol,
6 correct?

7 A Oh, sure, blood is the most relevant test to --

8 Q Correct?

9 A Yes, correct.

10 Q Blood is the most relevant test to determining how
11 much alcohol is going to the brain.

12 A Oh, absolutely.

13 Q And blood is the most accurate test in determining
14 how much alcohol is being eliminated from the blood system,
15 correct?

16 A That's being eliminated from the blood, yes,
17 right.

18 Q So my understanding is that in issues about
19 absorption and burn-out, you're saying -- you said on
20 redirect that the accuracy of the test that you used to
21 determine absorption rates and burn-off rates is not
22 relevant.

23 A Well, that's not what I said at all. I said that
24 breath tests are absolutely acceptable and just as good as
25 blood tests if your goal is to determine how alcohol is

1 being absorbed and eliminated from the body. Although
2 you're measuring a media that might not correlate exactly
3 to the blood level, you're measuring a media that will
4 remain consistent over the time of your testing. So if
5 your answer that you get is .12 and if you did a blood test
6 and you got a .11 or a .13, that's really irrelevant in
7 terms of determining -- of what you're determining.

8 Q A blood test is more accurate than a breath test,
9 isn't it?

10 A For determining blood alcohol, sure.

11 Q Now you testified that clinical observations like
12 the way a person walks and talks are things that you would
13 take into consideration in determining whether a blood
14 alcohol concentration corroborates -- is corroborated by
15 the facts, correct?

16 A Yes, clinical observations and alcohol levels
17 corroborate each other. We talked about that area, sure.

18 Q Okay. And you would also agree that decision
19 making is another way of determining whether or not a
20 person is impaired.

21 A Oh, sure, it's much harder to measure than a lot
22 of things, but people's decision making ability is impaired
23 by alcohol, sure.

24 Q And I'm sure that you've testified on a number of
25 occasions that say, for instance, in automobile accidents

1 -- when a person is driving a car and he's involved in a
2 great number of decision making processes, correct?

3 A Oh, absolutely.

4 Q And when there's evidence that a person has made
5 more decisions, like they've run through a red light or
6 they have been speeding in a particular case or they have
7 an accident, they hit another car, that's evidence of bad
8 judgment that corroborates a blood alcohol content,
9 correct?

10 A Correct, those are things that involve bad
11 judgment and are consistent with if somebody has an alcohol
12 concentration of something, may be consistent with that,
13 sure.

14 Q Now you talked about officers and police reports.
15 Officers are trained in the field of alcohol detection,
16 aren't they?

17 A Some of them are.

18 Q A lot of them are. In fact, I'm sure that you did
19 some training of officers on how to observe indications of
20 intoxication, correct?

21 A Sure, they all have some training in that area.

22 Q And, in effect, you were a teacher at times,
23 correct?

24 A Absolutely.

25 Q And people with special training in observing

1 alcohol would be better at it, you would think, than
2 persons that are not trained in detecting alcohol, correct?

3 A You would hope so.

4 (Tape changed to C-3672)

5 BY MR. COLE: (Resuming)

6 Q Now it's true, isn't it that -- you talked about
7 masking, some people mask better than other people,
8 correct?

9 A That's correct, some people can do better at the
10 same level of alcohol concentration than others.

11 Q And the studies have shown that people that drink
12 more, more experienced drinkers -- I think you talked about
13 it earlier, are better at masking, correct?

14 A That's correct.

15 Q And if a person didn't want to have other people
16 observe him, observe his signs of intoxication, one of the
17 things he could do would be to go somewhere where nobody
18 could observe him, right?

19 A I suppose.

20 Q That would be a pretty good idea, right?

21 A If you didn't want to be seen, you'd go to some
22 place where nobody could see you, that makes sense.

23 Q Makes sense?

24 A Yes.

25 Q Like maybe go below on a ship.

1 MR. MADSON: Objection, Your Honor.

2 MR. COLE: Okay, I'll withdraw the question.

3 BY MR. COLE: (Resuming)

4 Q Now, it's true, is it not, that in people that you
5 saw that did well on field sobriety tests, even though they
6 had high BAs -- well, let me withdraw that.

7 You indicated that a person has to drink daily in
8 order to be an experienced drinker?

9 A Well, routinely is a better word than daily. I
10 maybe did say daily, but it doesn't have to be daily, no,
11 but routinely, you have to routinely drink in order to
12 accommodate or mask the effects of alcohol. You can't mask
13 the effects of a 15 alcohol, unless you regularly drink to
14 that level. You don't learn to do it if you never get
15 there.

16 Q And it's not uncommon for people who regularly
17 drink to drink harder alcohol, harder liquor.

18 MR. MADSON: I'll object to the form of that
19 question, Your Honor. It calls for sheer speculation.

20 MR. COLE: This person says he's done tests.

21 JUDGE JOHNSTONE: He can give his opinion, based
22 on his experience.

23 THE WITNESS: I don't know what determines
24 people's preference for alcohol.

25 BY MR. COLE: (Resuming)

1 Q So you wouldn't agree with that?

2 A Wouldn't agree with what, that people who drink a
3 lot drink harder liquor?

4 Q It's not uncommon for people --

5 A It's not uncommon for people who have drinking
6 problems and drink a lot to drink whiskey. It's not
7 uncommon for them to drink beer.

8 Q You said it's not uncommon for someone to be
9 involved in the area of toxicology and not be a
10 toxicologist, is that correct?

11 A Yes, I said -- as a matter of fact, probably most
12 of the scientists that are involve in the area of alcohol
13 and drug toxicology in the forensic area are not
14 toxicologists by education, are educated in some other way
15 and have worked in that area and have become toxicologists
16 by experience, rather than education.

17 Q Oftentimes, they work -- their actual position is
18 toxicologist, right?

19 A Yes, some people do certain -- are hired and their
20 job title is toxicologist, sure.

21 Q Isn't it true that people that take toxicology and
22 study toxicology are generally better versed than people
23 who don't?

24 A Generally speaking, sure.

25 Q Now at one point -- would you consider Mr. Prouty

1 a forensic toxicologist?

2 A Yes.

3 Q A fairly experience forensic toxicologist,
4 correct?

5 A He's fairly experienced, yes.

6 Q 40 years in the field, correct?

7 A I don't know.

8 Q You read his transcript.

9 A I don't remember if it was 40 years.

10 Q You didn't read any of his qualifications, then.

11 A I did read some of the qualifications. I don't
12 remember 40 years.

13 Q You'd agree that they're quite a bit more than
14 your qualifications.

15 A He's very well qualified in the area of forensic
16 toxicology.

17 Q Better qualified than you are.

18 A I guess that's a judgment. He's got more
19 experience than I do.

20 Q Nearly 20 years more, correct?

21 A I don't remember if it was 40 years or not. I
22 didn't know he was that old. But however many, I have 22
23 years of experience of work in the field. If he has more,
24 than that's how much more he has, I guess.

25 Q And you consider him a forensic toxicologist.

1 A Yes, he's worked in the area of toxicology for a
2 long time.

3 Q You wouldn't consider yourself even a
4 toxicologist.

5 A I don't call myself a toxicologist. That's not
6 what I call myself.

7 Q Now from the way I understand your testimony about
8 the .008, him using that as an elimination rate, you're
9 faulting him for being conservative.

10 A I'm saying that .008 is not a likely burn-off rate
11 to use.

12 Q Let me repeat my question. You're faulting him
13 for being conservative, right?

14 A Well, he's using what he considers to be the
15 lowest possible burn-off rate.

16 Q One more time. You're faulting him for being
17 conservative, correct?

18 A I don't know if that's being conservative or not.
19 I guess I can't answer that question because I don't know
20 if that's being conservative or liberal.

21 Q Well, do you consider a .008 a liberal amount?

22 A Depending on what you're trying to prove.

23 Q It's conservative in the fact that it protects
24 Defendants.

25 A In some cases, yes.

1 Q Now, sir, you were asked some questions by Mr.
2 Madson about drinking that Captain Hazelwood might have
3 done prior to this test, is that correct? Do you remember
4 him asking you, "This would have no validity if he had
5 anything to drink at 7:00 o'clock or if he had anything to
6 drink at 8:00 o'clock or if he had anything to drink at
7 9:00 o'clock." And you expressed your opinion that this
8 back calculation had no validity, correct?

9 A That's correct, if there was drinking -- if you're
10 doing a back calculation, obviously if there's some more
11 drinking going on in between there, there's no -- it means
12 nothing. The numbers are useless.

13 Q What evidence have you to support the fact that
14 Captain Hazelwood was drinking after 8:00 o'clock?

15 A Did I say he was drinking after 8:00 o'clock?

16 Q I want to know if you have any evidence from the
17 record that we have before this jury that he was drinking
18 after 8:00 o'clock that evening.

19 A I have no evidence of that.

20 Q So you have no reason to doubt or no reason to say
21 that there is anything wrong with the validity of this
22 test, due to some type of drinking that may have occurred
23 or you were asked to hypothesize occurred between 12:00
24 o'clock and 10:30 that morning, correct?

25 A If there was no drinking then, there was no

1 drinking. If there was, there was.

2 Q And so that -- if there was no drinking, then
3 that's not --

4 A That's not a factor.

5 Q -- grounds for saying that this is not a valid
6 test, correct?

7 A Correct, if there was no drinking, then it's not a
8 factor in the issues. If there was drinking, it is. It's
9 as simple as that.

10 Q You are aware of no evidence, correct?

11 A That's correct, I have no evidence that there was
12 any drinking after 8:00 p.m. or whatever.

13 MR. COLE: I have nothing further.

14 MR. MADSON: I'll be very brief, Your Honor, just
15 cover a couple of things.

16 FURTHER REDIRECT EXAMINATION

17 BY MR. MADSON: (Resuming)

18 Q The diagram on the board, Mr. Burr, you said, in
19 response to Mr. Cole, that you could draw reasonable
20 inferences from that scenario. For instance, would you use
21 a particular burn-off rate in the times that you've used
22 retrograde extrapolations?

23 A In the times that I've done it, I've used .015,
24 018, those kinds of -- those ranges, somewhere between 10
25 and 20 as being an average type of burn-off.

1 Q Would you try to get a figure that you would come
2 up with and say, "Well, at 11:00 o'clock, his blood alcohol
3 was . . .," X, Y or Z?

4 A No.

5 Q Why not?

6 A Well, because you can never really know what
7 somebody's alcohol concentration was, given a number at an
8 earlier time. You can say based on the evidence, he was
9 probably post-absorptive, he was probably going down and
10 it's close in time, so given some unusual amount of
11 absorption during that period of time, he was relatively
12 close if he was going down, he was a little bit high if he
13 was coming up, a little bit lower.

14 Q Well, let me ask you a hypothetical on that. If
15 say a person was in an accident and the police officer
16 comes along on the scene and arrests him and the guy says,
17 "Yes, I was driving, but I was sober, but then I had six
18 drinks right away after the accident." Is that in a
19 situation where you believe, or do you have an opinion,
20 where retrograde extrapolation may or may not have some
21 scientific value?

22 A Yes, that sort of situation, obviously, if
23 somebody had an accident and then drank a bunch after the
24 accident and was tested later on, you certainly couldn't go
25 back to their alcohol at the time of the accident.

1 Q Mr. Cole asked you about decision making and
2 judgment. Do you know of any studies, any tests, any
3 scientific data to show how a person can be judged for his
4 judgment or decision making at various alcohol or
5 intoxication levels?

6 A No, those are very difficult things to measure and
7 they really aren't measured. What's basically measured is
8 the results or consequences of behaviors that, you know, by
9 looking at things like rates of people having accidents and
10 so on, but to actually measure someone's judgment ability
11 is a really hard thing to do.

12 Q But, for instance, if someone went through a red
13 light, that would be a factor you could consider then in
14 determining whether he used judgment or not?

15 A Yes, right, running through a red light is
16 obviously not using good judgment. You know, that's a
17 factor you can consider, sure.

18 Q If, on the other hand, you had evidence to show a
19 person had exercised good judgment and there was still an
20 accident, what, if any, value could you place on the
21 judgment quality of the -- the effect of intoxication on
22 judgment.

23 A If people are under the influence, one of the
24 things they exhibit is bad judgment and if you exhibit good
25 judgment, obviously, it's indicative of somebody who's

1 not under the influence of alcohol.

2 Q Now does one have to be a police officer or should
3 one be a police officer or is it necessary to detect
4 visible signs of intoxication at let's say a .15, 20 or a
5 25 level of blood alcohol level?

6 A Oh, absolutely not, most ordinary people can
7 detect those symptoms of intoxication.

8 Q Mr. Cole asked you about Mr. Prouty's use of .008
9 as a conservative burn-off rate, a conservative value to
10 benefit a person. Do you have an opinion, sir, as to
11 whether or not the use of those figures could come up to a
12 blood alcohol level of say .14 or 15 that would be
13 consistent with intoxication and consistent with persons'
14 personal observations, in other words, intoxicated, but not
15 to the point where it's visibly intoxicated by
16 observations?

17 A Yes.

18 Q So using those factors, that would complete that
19 scenario?

20 A That's correct.

21 Q Lastly, do you believe Mr. Prouty is better
22 qualified to determine when retrograde extrapolation is a
23 valid forensic tool in a particular situation than you are?

24 A No.

25 Q I don't have any other questions.

1 MR. COLE: I have one question, Judge.

2 FURTHER RECROSS EXAMINATION

3 BY MR. COLE: (Resuming)

4 Q Mr. Burr, I'd like you to assume that the blood
5 alcohol test was valid between 10:30 and 10:50 on the
6 morning of March 23d, 1989, okay?

7 A Right.

8 Q And I'd like you to assume that retrograde
9 extrapolation was possible, there was no drinking and the
10 absorption rate ended prior to midnight.

11 A Correct.

12 Q Can you do that?

13 A Okay.

14 Q No matter what the person's elimination rate, it
15 would always be greater than a .10 at midnight, wouldn't
16 it?

17 A With that hypothetical, yes.

18 Q Thank you.

19 JUDGE JOHNSTONE: May the witness be excused?

20 MR. MADSON: Yes, Your Honor.

21 JUDGE JOHNSTONE: Okay, you're excused.

22 THE WITNESS: Thank you.

23 Whereupon,

24 MICHAEL P. HLASTALA

25 having been called as a witness by Counsel for Defendant,

1 and having been duly sworn by the Clerk, was examined and
2 testified as follows:

3 THE CLERK: Sir, would you please state your full
4 name and spell your last name?

5 THE WITNESS: Yes, my name is Michael P. Hlastala
6 and that's spelled H-l-a-s-t-a-l-a.

7 THE CLERK: And your current mailing address?

8 THE WITNESS: It's 7393 Braemar Drive,
9 B-r-a-e-m-a-r, Edmonds, Washington 98020.

10 THE CLERK: And your current occupation, sir?

11 THE WITNESS: I'm a professor at the University of
12 Washington in Seattle.

13 JUDGE JOHNSTONE: Mr. Madson, when you complete
14 the qualifications of this witness, let's take a break
15 before you get into substantive examination.

16 MR. MADSON: That's fine, Your Honor.

17 DIRECT EXAMINATION

18 BY MR. MADSON:

19 Q Do you have a Ph.D., sir?

20 A Yes.

21 Q Dr. Hlastala, your last name is a little unusual.
22 What type of name is that?

23 A It's a Czech name.

24 Q What is your current position, sir?

25 A I'm a professor in Seattle at the University of

1 Washington and my field is physiology. I have appointments
2 in three different departments, the Department of Medicine,
3 the Department of Physiology and Biophysics and I'm an
4 adjunct professor of bioengineering.

5 Q And in that capacity, what are your actual duties?

6 A Well, my duties are pretty standard for a
7 university faculty member. I'm involved in teaching, in
8 research and administrative work. My teaching is to
9 medical students and also graduate students. These are
10 students that are going for master or Ph.D. degrees, mostly
11 in health related areas.

12 I'm a director of research in the division of
13 pulmonary and critical care medicine, so I have some
14 administrative work to do in that area. I do research. My
15 research relates to the lungs, the way that substances move
16 between the breath and the blood in the lungs and also the
17 way that substances are moved around to the body by the
18 blood stream.

19 Q Now in teaching, you teach medical doctors, in
20 addition to students?

21 A Yes. I also teach -- just let me amplify on that
22 a little bit. Some of the students that we have are
23 already physicians. They're becoming specialty trained in
24 the field of pulmonary and critical care medicine and my
25 role is to be involved in teaching them how to do research

1 and assisting them with their research projects.

2 Q And you're not a medical doctor, though, sir.

3 A That's correct.

4 Q Now with regard to what you said, your teaching
5 and research experience in substances moving around the
6 body through the blood stream, would those substances
7 include alcohol?

8 A Yes, that's one of them.

9 Q And have you studied and researched this
10 particular topic --

11 A Yes, I have.

12 Q -- of alcohol in the blood?

13 A Yes, I have.

14 Q Would you describe your educational background
15 just briefly, sir?

16 A Yes. I have a bachelor of science degree in
17 physics and that's from the University of Washington in
18 Seattle. I received that in 1966. I have a Ph.D. degree
19 in physiology and that's from the State University of New
20 York at Buffalo. I received that in 1969.

21 Q And you've worked in this field continuously since
22 receiving your Ph.D.?

23 A Yes, that's correct. After returning from
24 graduate school, I went to Seattle and worked in the
25 aerospace industry for just a short while and then joined

1 the University of Washington and I've been there since
2 1970.

3 Q Have you received any particular honors or awards
4 for your work or research?

5 A Yes, I've received a couple of awards from the
6 National Institutes of Health in Washington, D.C. One of
7 them is called the Research Career Development Award; the
8 other is called a Merit Award. I've also received a
9 Guggenheim Fellowship, which is an award given by the John
10 Simon Guggenheim Foundation. That was for work that I did
11 in the 1979-1980 academic year, I was on sabbatical leave,
12 and it allowed, supported the research that I did during
13 that time.

14 Q And have you received or done any foreign
15 appointments?

16 A Yes. Actually, during the time I was a Guggenheim
17 fellow, I was on sabbatical leave and my research was in
18 Germany at a place called the Max Plank Institute for
19 Experimental Medicine. It's a research establishment in a
20 university town called Gerthinger. I did research during
21 that whole year.

22 Q And do you have any national responsibilities,
23 sir, in a particular field in which you are a professor or
24 researcher?

25 A Yes, I do. I'm a member of a number of

1 scientific organizations and I have some responsibilities
2 in a few of those. Most of the time is spent in two
3 areas. I'm an associate editor of a major journal, the
4 Journal of Applied Physiology, and this is the journal
5 where most scientists dealing with physiology related to
6 the lungs publish their research. My job is to review
7 papers that are submitted and to, with the assistance of
8 other reviewers, to make a determination as to whether or
9 not the paper should be published or whether it should be
10 rejected or, in fact, how it might -- we might also make
11 suggestions to the authors on revising their paper, as
12 well.

13 Q What about publications or scientific papers
14 yourself, have you written any, sir?

15 A I have. I have about 180 publications and about
16 75 of those are full-length scientific articles. There's
17 one other thing that I didn't mention with respect to my
18 national responsibilities and that's that I sit on a
19 committee at the National Institutes of Health which takes
20 a significant period of time. There, we're involved in
21 reviewing very large grant applications that come in from
22 other scientists in other universities. Our job is to
23 prioritize those grant proposals.

24 Q And, lastly, sir, what would you say is your area
25 of expertise? How does it relate to the determination of

1 blood alcohol and the physiology involved in blood alcohol
2 and intoxication, if I can use that term?

3 A My general field of work relates to measurement of
4 substances in breath and in blood and the physiology of the
5 substances, the dynamics of them, how they change in the
6 body, how they increase and decrease. That's the general
7 field of work that I do and where I perform my research.

8 Q Thank you, sir.

9 MR. MADSON: I think that's all the questions I
10 have on qualifications, Your Honor.

11 JUDGE JOHNSTONE: Okay, we'll take a recess,
12 ladies and gentlemen. Don't discuss the matter among
13 yourselves. Don't form or express any opinions.

14 THE CLERK: Please rise. This Court stands at
15 recess.

16 (Whereupon, the jury leaves the courtroom.)

17 (Whereupon, at 11:44 a.m., a recess is taken.)

18 (Whereupon, the jury enters the courtroom.)

19 (During the recess,
20 Defendant's Exhibits CC
21 through CI were marked
22 for identification.)

23 THE CLERK: The Court now resumes its session.

24 MR. COLE: Judge, is Mr. Madson through with his
25 qualifications? If he is --

1 MR. MADSON: No, I've got a couple of others I
2 just remembered.

3 JUDGE JOHNSTONE: All right.

4 BY MR. MADSON: (Resuming)

5 Q Dr. Hlastala, have you testified before as an
6 expert in the field of blood and alcohol and blood alcohol
7 physiology?

8 A Yes, I have.

9 Q On how many occasions, sir?

10 A Well, I'm not sure exactly, in excess of 400. I'm
11 not sure exactly, though.

12 Q Have you testified on this particular subject as
13 an expert in the State of Alaska?

14 A Yes, I have.

15 Q On how many occasions?

16 A Again, I'm not certain, but it would be somewhere
17 between half a dozen and a dozen times.

18 Q Over what period of time?

19 A Over about a two-year period.

20 MR. MADSON: That's the qualification questions.

21 MR. COLE: Judge, I object to Dr. Hlastala being a
22 witness and I would ask to voir dire.

23 JUDGE JOHNSTONE: I haven't heard a question,
24 yet. I have no idea what the questions are going to be.
25 Let's wait until we hear a question.

1 BY MR. MADSON: (Resuming)

2 Q Well, Dr. Hlastala, do you consider yourself an
3 expert in the field of the substance of alcohol in the
4 blood stream and how it affects the physiology of a human
5 being?

6 A Yes.

7 MR. COLE: Objection, relevance. What he
8 considers himself is not relevant.

9 JUDGE JOHNSTONE: I'll let the answer stand.
10 Objection overruled.

11 BY MR. MADSON: (Resuming)

12 Q Let me ask you this, sir. Do you feel qualified
13 to speak on that subject?

14 A Yes, I do.

15 Q And what basis do you have for that belief, sir?

16 A Well, based on my 20 years' experience with
17 physiology and with research related to physiology.

18 Q Perhaps you could explain physiology. Maybe some
19 of us don't understand.

20 A Physiology could be defined as the physics and
21 mathematics of the human body, also animals, as well. And
22 it's the processes that go on in the body, the way that
23 alcohol is absorbed, for example, the way that it burns
24 off, the way that it comes out in the lungs, the use of the
25 breath to make measurements of substances in the blood.

1 All of these are physiological type tests and procedures
2 and that's my general field.

3 Q Do you utilize the work of other experts in the
4 same field to advance your own knowledge of the subject?

5 A I certainly do. That's part of the scientific
6 process. First, one has to have a little background in the
7 area. You need to train in an area. Then performing
8 research I think is very important in developing expertise
9 in an area. But you also have to recognize other people
10 that have done work in this area and learn from what
11 they've done and the things that they've gone through and
12 that's the whole process of publishing in the scientific
13 literature. It's a process I go through in publishing my
14 research findings. And, also, I'm involved in reading the
15 publications that other scientists have put in the
16 literature.

17 Q And, Dr. Hlastala, there's been some testimony
18 about the relationship or difference between breath alcohol
19 and blood alcohol.

20 MR. COLE: Objection, relevance.

21 JUDGE JOHNSTONE: Objection overruled. So far,
22 the question has not even been asked, Mr. Cole. Just wait
23 until the question gets asked.

24 BY MR. MADSON: (Resuming)

25 Q Can you tell us briefly, sir, how alcohol in the

1 blood relates to alcohol in the breath and whether there is
2 a difference in the physiology involved here?

3 MR. COLE: Objection, relevance.

4 JUDGE JOHNSTONE: Objection overruled.

5 THE WITNESS: There's a substantial difference
6 between blood alcohol and breath alcohol. Breath alcohol
7 is often used to make a determination of blood alcohol and
8 the breath alcohol that gets out here to the breath does so
9 by coming from the lungs. There is -- the air going down
10 into the lungs through a branching network of airways and
11 air sacs comes in close proximity to the blood. And then
12 some alcohol, if it's in the blood, will come out into the
13 breath and the breath then passes along these narrow
14 airways to get out to the mouth. And so there's a lot of
15 things that go on in the meantime between the two and
16 that's the reason why there is a substantial variation
17 between blood and breath. They're really two very
18 different things, the blood alcohol and the breath alcohol.

19 BY MR. MADSON: (Resuming)

20 Q If you wanted to know a measurement of a person's
21 blood alcohol level at a given time, which of the two
22 methods of testing would you say is the best and most
23 preferable?

24 A Well, without question, it's the blood.

25 Q Now are you familiar with the absorption of

1 alcohol in a human being after drinking has commenced and
2 ceased?

3 A Yes.

4 MR. COLE: Objection, lack of foundation to answer
5 that question.

6 BY MR. MADSON: (Resuming)

7 Q How are you familiar with that subject, sir?

8 A Well, I've done research in that area. We've
9 published a study, in fact just recently, in the Journal of
10 Studies on Alcohol related to the relationship between
11 breath alcohol and blood alcohol. And in doing so, one has
12 to -- in doing experiments on humans, you have to
13 understand the dynamics of the absorption and burn-off
14 because it's very important to know whether a subject is in
15 the burn-off phase or in the absorption phase in making
16 these measurements. So we have performed research related
17 to this.

18 In addition, I've reviewed probably in excess of
19 50 articles where people have made actual experimental
20 measurements of blood and breath and the dynamics of
21 alcohol.

22 Q What about alcohol elimination rates from the
23 body, are you familiar with that topic? And if so, how?

24 A Yes, for the same reasons. I've done some
25 measurements myself and I've also reviewed the literature

1 in that area.

2 Q Then, sir, I wonder if --

3 MR. MADSON: Your Honor, would it be all right if
4 I could move this up just a little and have Dr. Hlastala
5 explain some charts?

6 JUDGE JOHNSTONE: Are they visible from back there
7 so that he doesn't have to stand up?

8 MR. MADSON: I'm not sure, Your Honor. It depends
9 on eyesight. They probably are, to a certain extent. We
10 can certainly try it.

11 BY MR. MADSON: (Resuming)

12 Q Let me put on here now what's been marked as
13 Defendant's Exhibit CC for identification.

14 MR. COLE: Judge, I would object to showing any
15 exhibits to the jury until they've been admitted. That's a
16 standard procedure and it's anything -- but the proper
17 procedure is to get them admitted and then he can show them
18 to the jury.

19 MR. MADSON: I'm not admitting these. They're for
20 illustrative purposes only, Your Honor. He can draw it on
21 the board, but this is much faster. It's already been
22 done. He's prepared these.

23 MR. MADSON: He's made a point, Mr. Cole.

24 MR. COLE: That's fine, if that's what its purpose
25 is, then I have no problem.

1 BY MR. MADSON: (Resuming)

2 Q Can you identify what's been marked as Exhibit CC
3 there, sir. And I ask you, first of all, did you prepare
4 this yourself or assist in its preparation?

5 A Yes, I did actually prepare it myself. I didn't
6 prepare the hard copy here. I prepared something on a
7 computer with a laser output and then it's been blown up by
8 someone else.

9 Q Okay. There may be a pointer right there handy
10 somewhere if you need it.

11 A Well, that will come in handy.

12 Q Right by your left hand, I believe.

13 A There we go.

14 Q Would you briefly explain what that purports to
15 be, sir?

16 A Well, this is a pretty standard curve that you may
17 have already seen before and it's -- the process that
18 alcohol goes through in the body is a process of absorption
19 and burn-off and this is just to illustrate that. This
20 shows the blood alcohol concentration over here and down
21 below here is the time in hours. Here's zero hours, one,
22 two, three, and the time of drinking is marked here with
23 this little box down here.

24 Q Why is there a little line underneath there?

25 A Line underneath where?

1 Q On your base line there, there seems to be two
2 lines. I don't know if that means anything or not.

3 A These little marks? Oh, this little curve right
4 here is the period of drinking, right here.

5 Q Now does that purport to be an exact curve of
6 every individual or how would you describe this?

7 A Well, it's actually quite different from person to
8 person and this is just sort of a general curve. See, what
9 happens is you ingest alcohol into the stomach. A little
10 bit is absorbed from the stomach, but not too much.. What
11 happens is the stomach begins the initial digestion
12 process. Then there's a muscle that separates and closes
13 down the connection between the stomach and the intestines
14 and that relaxes. The stomach contents will go into the
15 intestines and it's from the intestines where alcohol is
16 absorbed primarily.

17 The absorption process is indicated right here.
18 While the alcohol is being absorbed the blood alcohol
19 content is increasing gradually. And while it's
20 increasing, it's going into the blood. The blood is
21 distributing it around to the body and it's going into
22 primarily the watery tissues in the body. There is also
23 fatty areas in the body and not very much alcohol goes into
24 that portion of the body. It's distributed around in a
25 dynamic sense. As the blood alcohol is increasing, the

1 amount of the alcohol in the arm is increasing, in the
2 legs, everywhere, it's increasing, in the brain also.

3 And then after a peak is reached, after all of the
4 alcohol is absorbed from the gastrointestinal tract, then
5 this burn-off occurs and this is the elimination phase or
6 the post-absorption phase. Most of this elimination is due
7 to breakdown of the alcohol in the liver. There are
8 chemical processes that go down, that go along that break
9 down the alcohol and that accounts for this. As the blood
10 passes through the liver, it's that blood and the alcohol
11 in that blood which is being broken down.

12 While that's being broken down, the alcohol is
13 then washing out or coming out of the arm and other
14 tissues. So it's a process of going in and out. It's a
15 very dynamic process, a changing process. And you see here
16 an example of it going up and coming down a straight line.

17 Q Let me ask you, sir, so there's no confusion
18 here. If you took a blood test of a person and say you got
19 a sample from his left arm and got one from the right arm,
20 would they be the same or would be there some differences
21 because of the dynamics?

22 A There would be differences, depending upon where
23 you took the blood samples. They may be very similar in
24 the two arms if you took a venous. The venous blood is the
25 blood that's coming away from the tissues. The arterial

1 blood is the blood that's going to the tissues. If we're
2 in the absorption phase, that initial part over here, and
3 alcohol is increasing, it's being unloaded or it's
4 increasing in the tissues. The blood is coming into the
5 artery, delivering alcohol, and then as it's departing in
6 the veins, it would have a lower alcohol concentration
7 because it's being given to the tissues and less would be
8 available in the returning blood.

9 But in this post-absorptive phase, it's just the
10 opposite. The blood actually increases in alcohol as it's
11 passing through the tissues, it's picking up alcohol
12 because it's washing out and going down in concentration.

13 So it depends on where you get the blood sample.

14 Q Then, sir, let me hand you now what's been marked
15 for identification as Exhibit CD and ask you if you can
16 identify this particular chart, sir.

17 A Yes, that's a similar chart. You'll notice it's a
18 little bit different. This particular chart illustrates
19 the fact that there are differences amongst individuals in
20 the burn-off rate or the elimination rate and that may have
21 already been mentioned to you. But this shows an example
22 of three different curves for three individuals that would
23 have the same absorption, reach the same peak and burn off
24 at different rates. The normal average burn-off rate is
25 shown in the middle. The increased burn-off rate is shown

1 here; it would go down faster and reach a lower level. And
2 this is a lesser burn-off rate, this top curve, and that
3 shows a case where that would be a higher alcohol
4 concentration at a later time.

5 Q You can, I assume, determine a person's individual
6 burn-off rate at a given time, can you not?

7 A You can if you make measurements of the person.
8 What you need to do is to take blood measurements along
9 this curve and measure the slope or the change of the
10 curve.

11 Q Would that change from one day to the next in the
12 same individual or remain constant throughout his life?

13 MR. COLE: Objection, lack of foundation.
14 There's been no showing that this person has done any type
15 of -- any type of studies, himself, concerning blood
16 alcohol concentrations.

17 JUDGE JOHNSTONE: Objection overruled.

18 BY MR. MADSON: (Resuming)

19 Q Can you answer the question, sir?

20 A Yes.

21 Q What is your answer?

22 A Well, it's pretty constant with a person, from
23 person to person, this particular aspect. But it's
24 important to realize that it can change with time. And I'm
25 not aware of any studies that have a single person measured

1 with time, how those curves change. But there are known to
2 be differences between males and females, for example, and
3 other sorts of differences.

4 Q Now going to the next chart --

5 A Can I continue my answer to that previous one?

6 Q Oh, sure, I assumed --

7 A Well, I thought of something else that I think is
8 important to say. I've drawn this as a fairly straight
9 line and there's much debate in the literature and among
10 scientists about the degree of straightness of this line or
11 linearity is another way of saying it. Most people argue
12 that --

13 MR. COLE: Objection, his answer calls for
14 hearsay.

15 MR. MADSON: Your Honor, I think we've already
16 established that under Rule 703, an expert can rely,
17 reasonably rely upon the opinions and work of others. As
18 long as there's a reasonable reliance to formulate his
19 opinion, he can testify to what would be normally
20 inadmissible evidence. That's the reason experts are
21 given greater latitude as opposed to lay witnesses.

22 JUDGE JOHNSTONE: There's no question he can rely
23 on evidence that sometimes is not admissible. However,
24 before the jury can hear it, I have to hear what it is,
25 first, to see if its probative value is outweighed by its

1 undue prejudicial effect. I don't know what this is going
2 to be, so confine your questions and answers to his
3 opinion. And preliminary things that might be hearsay are
4 okay, but -- as far as him giving his opinion, that's one
5 thing, but to have him relate the opinions of others is
6 impermissible.

7 BY MR. MADSON: (Resuming)

8 Q Then, Dr. Hlastala, do you have an opinion as to
9 whether or not the elimination line shown on the graph is
10 necessarily a straight or a linear function, as opposed to
11 one that might be curved?

12 A Well, the data that I've obtained, in fact,
13 there's some question about that. Most of the individuals
14 have fairly straight curves. Some individuals have a
15 curviness in this direction. That is that it will bow down
16 a little bit and flatten out a little bit. And there are
17 also some biochemical reasons to believe that it may be
18 slightly different in different individuals. So this is an
19 idealized curve.

20 Q Okay. Are you finished with this?

21 A Yes.

22 Q Next is Defendant's Exhibit CE. Could you explain
23 that, please?

24 A This is a similar curve, only in this case, it's
25 designed to illustrate variations in absorption time.

1 There's a well known variation that occurs from individual
2 to individual in the absorption time that I think that, in
3 general, it's thought that without any food that this may
4 vary between around a half an hour to reach a peak, up to
5 around three and a half hours to reach a peak. But that's
6 kind of a limit. There are also different kinds of values
7 and a lot of people may absorb in a one-hour time frame.
8 There's just variations from time to time.

9 But this shows an example of different curves if
10 there's different absorption times. What you do is you may
11 increase rapidly your alcohol. Here's the drinking
12 period. You may increase and, after half an hour or so,
13 reach a peak and then come down this straight curve. Or
14 you may have a curve where you reach a peak afterwards, a
15 little later, in this case about an hour. And in this
16 case, it's almost an hour and a half for this peak. In
17 this case, this peak is reached about three and a half
18 hours. But you'll notice that all of them come up and
19 reach the same straight line after the alcohol is
20 absorbed. If everything else is identical in all of these
21 individuals, they would reach the same point.

22 The later the absorption period, the longer the
23 absorption period, the lower the peak. Notice that this
24 peak is lower than those peaks. And in addition, the peak
25 is reached later in time than those peaks.

1 Q Now does that assume each individual -- let me ask
2 you, what assumption is this based on? Is this different
3 individuals drinking the same amount of alcohol or just --

4 A That's right, these would be different individuals
5 that have the same body fat content, the same body weight,
6 the same burn-off rate, but have different absorption times
7 within the normal range without any food.

8 Q Before the next chart, sir, let me ask you, you
9 were retained by the Defense with regard to this case, were
10 you not?

11 A Yes.

12 Q What is your fee arrangement, sir?

13 A Well, the fee depends upon the time that I'm here
14 and there's a charge dependent upon the time, both working
15 on the case beforehand and also the time that I'm here.

16 Q Do you have an idea -- have you billed anything,
17 yet, for example?

18 A Not yet.

19 Q Do you have any estimate of what your time
20 involved in this case will be and your approximate fee?

21 A Well, that depends a little bit on, when I'm done
22 with testifying, if we -- it would be probably likely on
23 the order of, my guess would be somewhere around 15 hours
24 or so, charged at about \$100.00 an hour.

25 Q Approximately \$1,500.00 then?

1 A Something like that, plus expenses.

2 Q And that includes your testifying, too.

3 A That's right, that's about what I expect it to be.

4 Q Now putting up Exhibit CF, before you explain
5 that, sir, I'd like to ask you a few more questions. What
6 were you asked to do with regard to this particular case?
7 In other words, what function did you have or what role
8 were you asked to play?

9 A In this particular case, my understanding of your
10 request to me was that there was a situation where there
11 was an incident at around 12:00 o'clock, a few minutes
12 after 12:00 o'clock, the grounding of a ship, and that
13 there was a blood test taken at or around 10:40 or so, in
14 this time, and the value had a value -- am I allowed to say
15 what the value is?

16 Q Sure.

17 A The value, as I understand it to be, is a .061 and
18 that's what this point represents. And I was asked to make
19 a determination as to what we can say about information
20 about the blood alcohol content in the individual back at
21 the 12:00 o'clock time frame.

22 Q What information were you given, sir, what did you
23 look at, in addition to what you just described, if
24 anything?

25 A Well, let's see, I was given some information on

1 the test on the blood sample. I was given some written
2 information and my recollection is it was from a hearing of
3 the National, NTSB, that was a hearing that provided some
4 information about times involved here. And I can't
5 remember if the time of the blood sample came from that or
6 from other information, but I had received a little bit of
7 literature from you.

8 Q What about testimony, sir, have you reviewed any
9 testimony?

10 A Yes, I received some testimony from that NTSB
11 hearing.

12 Q What about trial testimony, have you seen trial
13 testimony relating to this topic or subject?

14 A Yes, I've seen some trial testimony from Mr.
15 Prooty or Prouty.

16 Q Do you know Mr. Prouty, sir?

17 A I know his name, but we have not met.

18 Q Then, sir, calling your attention to what I
19 believe is Exhibit CF there --

20 A Yes.

21 Q -- would you explain that -- well, let me ask you,
22 first of all, can you explain that chart and relate that to
23 the information you were given with regard to this case?

24 A Yes. This chart shows a plot of blood alcohol
25 concentration on this axis -- you can't see it over there

1 -- going from zero. This is a .10 here and this is a .50
2 up here. The time of drinking I have noted down here goes
3 from around 4:30 p.m. to around 7:30 p.m.

4 Q Now why did you make those assumptions, sir?

5 A Because there was some information in the
6 literature that I was sent that indicated that that is an
7 approximate time. But that's just noted down here.

8 Q So when does the drinking stop, according to your
9 chart?

10 A Well, 7:30 is what the chart says here. Also, I
11 have a line at 12:00 a.m., right here, a straight line
12 going up, which is the time -- the time of the incident I
13 understand to be a few minutes after 12:00. And then the
14 blood sample is over here.

15 Q Are you familiar with this term called retrograde
16 extrapolation?

17 A Yes, I am.

18 Q What exactly is that, if you could just briefly
19 explain it? There's been testimony on that already, sir.

20 A Okay, retrograde extrapolation, the words just
21 mean backwards estimation. Retrograde is backwards and
22 extrapolation is to go out beyond where you have
23 information. If you were going between points where you
24 had information, you'd call it interpolation. So we're
25 extrapolating, going beyond where we have information. So

1 the idea is we have information here and we're
2 extrapolating or projecting back to some other time.

3 Q Do you recall, in your review of Mr. Prouty's
4 testimony, that -- where he said that this particular
5 subject was at least a subject of debate among experts in
6 the field?

7 A That's an understatement.

8 Q How would you describe it, sir?

9 A Well, there's a substantial amount of debate and
10 question about that and it's primarily because of some of
11 these variations that we've already talked about a little
12 bit before.

13 Q Could you describe it as having any forensic
14 validity at all or under what circumstances would it have
15 validity, in your opinion, if you have one?

16 A Most experts that I'm aware of that deal with this
17 on a regular basis are hesitant to --

18 MR. COLE: Objection, hearsay.

19 JUDGE JOHNSTONE: Objection overruled.

20 THE WITNESS: -- are hesitant at extrapolating
21 back for such a long time. Because of the variations that
22 occur amongst individuals, it's usually argued that
23 information can be obtained within a few hours, perhaps, of
24 the time of the blood by making this backward guess or
25 estimation. But even then, you have to recognize a range

1 of variation and these different curves illustrate why
2 there's some of this variation. But the farther you go
3 back into time, the greater is the variation to the point
4 where once you're beyond a few hours, it's virtually
5 impossible to make any sense out of an extrapolation.

6 BY MR. MADSON: (Resuming)

7 Q Then would you describe, sir, what the lines
8 you've drawn on there, the downward sloping lines, if you
9 will --

10 A Sure. These are different curves showing burn-off
11 rates for different individuals that all go through the
12 same blood point. So it asks the question, "If we were to
13 extrapolate back for different people that have different
14 burn-off rates, what would their blood alcohol be at the
15 time of this 12:00 o'clock time frame?" And shown here are
16 different curves and the curves that I have shown here -- I
17 know you won't be able to see over there, but that's --
18 here, it says a .017 per hour. That's an average burn-off
19 rate. Different studies show slightly different values,
20 but that's a reasonable average value, .017 per hour.

21 Also shown here is a range that I would consider
22 would include the majority of the population, perhaps
23 somewhere between 90 and 95 percent. No one has done a lot
24 of good statistical work on this, but we know that most of
25 the people fall in the range of a .010 per hour up to

1 around a .025 per hour. And, again, there are differences
2 amongst males and females.

3 The extreme values that I've shown here are --
4 here's a value of a .004 per hour.

5 Q You say extreme. What basis do you have to use
6 this figure?

7 A That's kind of the low end of what has been
8 published. I personally haven't seen numbers this low, but
9 others have. At the high end, a .040 per hour probably
10 represents the most extreme burn-off rate. So this just
11 shows different values.

12 Now if you were to go back to this 12:00 o'clock
13 time frame with these different burn-off rates, it just
14 shows that if you are willing to make the assumption that
15 at this 12:00 o'clock time frame, all of the alcohol is
16 absorbed and you are, in fact, in the post-absorptive
17 phase, that you're anywhere between about a .10 and up
18 here, about a .50. Now that's incredible variation and it
19 kind of demonstrates why it's so difficult to go back so
20 far. If you don't have any information on the specific
21 individual's burn-off rate, it's virtually impossible to go
22 back to this point in time.

23 Q Now, for instance, a .50 blood alcohol level is --
24 how would you relate that in terms of a person's ability to
25 do virtually any physical activity?

1 A There would be a lot of difficulty. That's to the
2 point of death, approaching the point of death.

3 Q And, yet, that's consistent with your knowledge
4 and the information you have in the literature from values
5 that other researchers have found?

6 A Yes, yes.

7 Q Next, sir, let me hand you what's been marked
8 Exhibit CG and ask you to explain this, sir.

9 A This particular curve illustrates a few other
10 things and one of the things that you see here -- I'm going
11 to use this pencil because it's a little easier than this
12 big thing. I've added on here not just the straight
13 extrapolation back, but I've also added on an absorption
14 curve here, so this shows you then what a typical curve
15 might look like.

16 Q Now let me interrupt a second. Are you still
17 using the same elimination rates?

18 A That's correct, this is the same scale. These are
19 the same lines, these five lines, that were on the previous
20 chart and I've added some things in here.

21 Now this shows a typical kind of absorption curve
22 where you come up, reach this point and then come down the
23 curve. Notice that my time of absorption here -- let's
24 see. This drinking in this particular case is over a
25 three-hour -- let's see, that's -- excuse me -- 4:30 to

1 7:30, about three hours. And this is more than when I
2 showed those earlier charts, where we had only about a
3 20-minute absorption time. But you see here that we have
4 drinks coming along all the way along here, depending on
5 how much was consumed, and there would be absorption going
6 on. And, here, the absorption is reaching completion about
7 a half an hour or so after the end or the finish of the
8 drinking.

9 Q So that would be at approximately 8:00 o'clock,
10 8:30, roughly in that range?

11 A That's what this is. That would be straight up
12 here. That's about 8:00 o'clock. So this just shows what
13 typical kinds of curves there might be to be compatible
14 with these burn-off rates. This is the 004 per hour. This
15 is the 010 per hour, the 017 per hour, the 025 per hour and
16 the 040 per hour. And in this case, it was pretty high and
17 I didn't even put this on the chart.

18 Q So at 12:00 o'clock, then, what figures do you
19 come up with with regard to blood alcohol content, based on
20 your assumption of the absorption rates?

21 A Well, these are the same numbers. At 12:00
22 o'clock, these are the same numbers that we had on the
23 previous chart varying between a .10, since these are the
24 same lines. But this makes the very important assumption
25 that there is complete absorption here before that

1 particular time.

2 Also shown here are some numbers over here and
3 maybe I should explain that.

4 Q Let me ask you that next. What is that?

5 A Well, these particular numbers are a calculation
6 of the amount of alcohol that would have had to have been
7 consumed to achieve these levels, making assumption of an
8 average individual with an average body fat content. And
9 for each of these curves -- let me just read these numbers
10 if you can't see them. This is 7.7 standard drinks. Maybe
11 I should explain what --

12 Q What's a standard drink, sir?

13 A A standard drink is a one-ounce shot of 80 proof
14 liquor or a 12-ounce beer or a three and a third-ounce
15 glass of 12 percent wine. So, again, it's a one-ounce shot
16 of 80 proof liquor or a standard beer, those are about the
17 same.

18 So this would be about 7.7 standard drinks. So in
19 order to be on this curve, even with this low burn-off
20 rate, to reach that blood value, there would have had to
21 have been 7.7 drinks consumed, standard drinks, and also we
22 would have had to have had complete absorption.

23 Now, further on, this .10 -- excuse me, the .010
24 curve, again at the low end of most of the population,
25 there would have had to have been 14.1 standard drinks

1 consumed over that period and fairly rapid absorption. For
2 this curve, for an average burn-off rate, there would have
3 had to have been 21.5 ounces consumed, or standard drinks,
4 to reach that point here. For this .025 per hour, we have
5 30 standard drinks and for this very high burn-off rate, we
6 have 45.9 standard drinks.

7 Now maybe I should just mention that a fifth of
8 liquor has about 25.4 standard ounces in it, so this would
9 be -- that would be a fifth of -- this is roughly or almost
10 the equivalent of a fifth of 80 proof liquor.

11 Q And that's assuming the average burn-off rate,
12 average absorption.

13 A That would be -- in this case, you have the
14 average burn-off rate.

15 Q I'm going to hand you next, sir, Exhibit CH. What
16 additional information or factors have you assumed or
17 placed on there?

18 A Well, I've added a few more things on here. For
19 one, I've put some dash lines across here at the .10 area,
20 so that's easier to see. And this is a .05 area right
21 here. Now the other thing is you'll see three other curves
22 here and these are curves for individuals that have a
23 longer absorption time and this is a hypothetical curve.

24 Q Now let me just stop you for a second. This still
25 assumes the same individual, the same number of drinks, the

1 same number of everything else.

2 A That's right. In this case, I've taken the
3 liberty of using the value where a person would have a .004
4 burn-off rate, the lowest extreme value, and I show an
5 example where a person may be absorbing and reaching a peak
6 out here, in which case the value at 12:00 o'clock would be
7 lower, about a .075 or so. And here's some examples of
8 absorption that's very prolonged and where an individual
9 has values below a .05, about a .02 and about a .04, at the
10 12:00 o'clock time frame, still compatible with a blood
11 alcohol of a .061 at this time. Now that's for an
12 individual who falls on this low burn-off rate curve.

13 Q And I assume, then, sir, that if you change that
14 assumption, that is the low burn-off curve, you could draw
15 additional curves, but they'll be raised higher.

16 A Yes, that's right. In fact, I have another chart
17 that shows an example of curves like this for a higher
18 burn-off rate.

19 Q Perhaps we could look at that one.

20 A All right.

21 Q And last, then, sir, is Defendant's Exhibit CI.
22 Would you explain that, please?

23 A Yes. This is an example of a normal curve, a
24 normal standard curve, with a .017 burn-off rate. And it
25 shows three curves where the same absorption times, the

1 same rates of absorption, but now intersecting or coming
2 into this curve here later on. You see, later on in time
3 down here, the value is in fact greater than a 1.0. But
4 back here, earlier on, it's not, it's lower than that.

5 This really illustrates the reason that it's
6 argued that it's so difficult to go back so far in time
7 because here's an example where, consistent with
8 everything, we've got a normal -- we've got a blood alcohol
9 reading here and we've got a tremendous range, from almost
10 zero all the way up to -- in that other chart -- all the
11 way up to a .50 for the value of possibility. That's why
12 it's virtually impossible to go back and get meaningful
13 information about what the blood alcohol is at that time.

14 Q And, lastly, sir, do you agree or disagree with
15 Mr. Prouty's conclusion that you can draw some valid
16 forensic conclusions, based on the retrograde extrapolation
17 in this case to relate back to 12:00 o'clock to illustrate
18 Captain Hazelwood's expected blood alcohol level at that
19 time?

20 A I would disagree in that I don't believe there
21 would be any sense at all in trying to make any kind of
22 extension back to that period of time.

23 Q Thank you, sir, I have no other questions.

24 MR. COLE: Your Honor, may I approach the clerk.
25 I'd like to have a couple of exhibits marked.

1 JUDGE JOHNSTONE: Yes, sir.

2 MR. COLE: State's 176 through 179.)

3 JUDGE JOHNSTONE: Thank you.

4 (State's Exhibits 176 through
5 179 were marked for
6 identification.)

7 CROSS EXAMINATION

8 BY MR. COLE:

9 Q Good morning, Dr. Hlastala. You work as a
10 professor, then, at the University of Washington, correct?

11 A Yes.

12 Q And you have appointments in approximately three
13 areas, physiology, biophysics and bioengineering, correct?

14 A And in medicine, yes.

15 Q But you're not a doctor.

16 A I am a Ph.D. I'm not a physician.

17 Q You're not a physician.

18 A That's correct.

19 Q Now my understanding is that you have testified in
20 the past that you are a respiratory -- your field of study
21 is called respiratory physiology, correct?

22 A Yes, it is.

23 Q And that is the study of the -- well, let me make
24 sure I get this right -- my understanding is that is the
25 study of the way substances come from the blood and the

1 lungs, out to the breath, one part of it.

2 A Yes.

3 Q And, also, the way substances are distributed
4 throughout the body, substances through the blood, correct?

5 A Yes.

6 Q Now for the past 20 years, you've been involved in
7 research in respiratory physiology, correct?

8 A Yes.

9 Q You're not a forensic toxicologist.

10 A That's correct.

11 Q You've been asked to testify in Alaska, you said,
12 about a half a dozen times, is that correct?

13 A Yes, I'm not sure. I've also testified
14 telephonically a few times and I just don't recall exactly
15 how many.

16 Q The jury trials that you've been asked to testify
17 in the State of Alaska, one of them was the State of Alaska
18 versus Sarah Bellinger, correct?

19 A Yes.

20 Q And that was in Ketchikan.

21 A Yes.

22 Q Another one was State of Alaska versus Mr.
23 Stagnell, correct?

24 A That's correct.

25 Q And another one was State of Alaska versus Mahan,

1 correct?

2 A Yes.

3 Q That was one you did with Mr. Madson, correct?

4 MR. MADSON: What was the name of it?

5 THE WITNESS: No.

6 BY MR. COLE: (Resuming)

7 Q Mr. Stagnell was with Mr. Madson, yes.

8 A Okay. You've testified many times in the State of
9 Washington, correct?

10 A Yes.

11 Q One of them was in a case called State of Alaska
12 versus Schantz, do you remember that?

13 A No, I don't.

14 Q If I showed you a copy of your testimony in that,
15 would that refresh your recollection?

16 A Where was it?

17 Q I'll find out here.

18 A It was the State of Washington versus Schantz. I
19 also don't recall -- this was in King County. I don't
20 remember the name, but --

21 Q Do you know the name Chris Madson?

22 A Yes.

23 Q And he's an attorney in --

24 A In Seattle, that's correct.

25 Q He's hired you on numerous occasions?

1 A On a few.

2 Q Does this refresh your recollection of --

3 A Well, it's my name, but I don't remember the case,
4 but --

5 Q Now in the Bellinger trial, Sarah Bellinger, that
6 was down in Ketchikan, correct?

7 A Yes.

8 Q And you were qualified as an expert in the area of
9 physiology aspects of breath and other areas dealing with
10 the lung and respiratory conditions, correct?

11 A It could have been, I don't remember.

12 Q In that case, you testified for a person by the
13 name of Ray Brown, correct?

14 A Yes, that's correct.

15 Q He was the Defense attorney in that case, correct?

16 A Yes.

17 Q And you were testifying as to the validity of the
18 breath test in that case, correct?

19 A I believe so. I don't recall for sure. That may
20 have been a blood test. I'm afraid I don't remember.

21 Q You don't remember that.

22 A That's correct.

23 Q Okay. Now in the case of State versus Mahan, you
24 were qualified as an expert in lung physiology and blood
25 testing, is that correct?

1 A I don't know, but I would presume that would be
2 it, yes.

3 Q And in Washington versus Schantz, you were
4 qualified in the area of respiratory physiology, correct?

5 A Again, I don't even remember the case, so I don't
6 know.

7 Q I'll show you a copy of that and refresh your
8 recollection.

9 A Well, that's what it says there, respiratory
10 physiology.

11 Q That case dealt with a breath test, correct?

12 A I presume it was, but I do not recall.

13 Q In all the cases that I've just mentioned, you
14 were testifying about the inaccuracy of breath testing,
15 correct?

16 A I don't recall, I believe so.

17 Q In 20 years of research, you've used the gas
18 chromatograph to measure substances in your lab in
19 Washington, correct?

20 A Yes, I have.

21 Q And I think you testified in the past that you
22 have an accuracy level of plus or minus two percent,
23 correct?

24 A I don't remember that. I've often testified about
25 the general accuracy of gas chromatography for measuring

1 blood alcohol and it's thought to be about plus or minus
2 .01. In my particular case, we measure other substances
3 also and the accuracy is different for those different
4 substances.

5 Q You don't have any firsthand experience in
6 measuring alcohol in blood using gas chromatography.

7 A We've only done a little bit of testing with
8 alcohol and blood and most of it is -- when we do test,
9 mostly we have some associates at the toxicology lab in the
10 State of Washington at Harbor View Hospital. They run them
11 for us.

12 Q You have no firsthand experience in measuring
13 alcohol content in blood using gas chromatography.

14 A My own tests have been with other substances,
15 that's correct, except for on one or two occasions is all.

16 Q One or two occasions, you've been asked to test
17 alcohol using a gas chromatograph.

18 A That's right. Most of my research deals with
19 other substances. You're using exactly the same
20 chromatography principles.

21 Q You've never done any controlled experiments on
22 the different levels of blood alcohol content in a person
23 and its relationship with physical and mental impairment.

24 A I've done some tests, but they have not been in a
25 controlled fashion. We were doing --

1 Q Excuse me. My question was you've never done any
2 controlled experiments --

3 MR. MADSON: Excuse me, I don't believe that was
4 the question. He said tests. You didn't use the word
5 "controlled." So I think the witness is entitled to answer
6 the question as it was originally phrased.

7 JUDGE JOHNSTONE: Well, let's just ask the
8 question and see if the witness can answer it.

9 BY MR. COLE: (Resuming)

10 Q You've never done any controlled tests on the
11 different levels of blood alcohol content in a person and
12 its relationship with physical and mental impairment.

13 A That's correct, I have not.

14 Q You've never done any controlled tests on the
15 absorption rate of alcohol in the human body.

16 A We have done tests on absorption rates in the
17 human body.

18 Q Those tests were based on breath tests.

19 A No, they were with blood.

20 Q Are those tests that you did yourself?

21 A Yes. We took the blood samples. The actual
22 measurements were done in a toxicology lab in Seattle.

23 Q How many of those samples did you take?

24 A Oh, there were somewhere between 15 and 25
25 subjects.

1 Q And you took blood samples from those subjects.

2 A Yes.

3 Q And based on those 15 or 20 subjects -- when was
4 this test that you did?

5 A Well, it's part of a study that was just published
6 in the Journal of Studies on Alcohol in the January issue.
7 We did the work a couple of years ago.

8 Q Now looking at your curriculum vitae that you --
9 that I have a copy of, you talked about the number of
10 articles that you've written and I believe you said
11 somewhere in the neighborhood of 180.

12 A Yes, those are the total, but the scientific
13 articles would be a smaller fraction of that.

14 Q Now in the CV that I have, there is a group of 74
15 full-length articles, correct, is that about right?

16 A Sounds about right.

17 Q And only the last one deals at all with alcohol,
18 correct?

19 A No, that's not correct. Do you want me to point
20 out the ones that do?

21 Q No, I want you to look at the first 74 of this.

22 A All right.

23 Q And find which ones deal with alcohol.

24 A Well, there's some information about alcohol in
25 Number 67. There's -- Number 66 does not actually include

1 alcohol, but it is very closely related to that issue.

2 Q But it doesn't have anything on alcohol, right?

3 A That's right, a subsequent study that we're
4 working on now does have alcohol, it follows from this.

5 Q But that article doesn't.

6 A That one does not.

7 Q And that article deals with soluble gas exchanges
8 in human analysis, correct?

9 A Which one is that?

10 Q The one that you just pointed to, 66.

11 A That was 66, correct. Number 67 is the influence
12 of gas physical properties on pulmonary gas exchange and
13 that has some alcohol information in it.

14 Q But that one is dealing with breath testing,
15 right?

16 A That's correct, yes. But I think you asked about
17 studies that relate to alcohol.

18 Q Well, I'm going to ask you other questions when
19 you point them out.

20 A I'll also point out Number 59, which is the
21 interaction of ethanol with airway mucosa during
22 exhalation. Ethanol is ethyl alcohol which is the kind
23 we're talking about.

24 Q But that has to do with breath testing, correct?

25 A Of course, yes.

1 Q What else, of the first 74?

2 A This Number 74, which has now been published,
3 that's the one that I referred to earlier.

4 Q Okay, other than that, all the rest of them deal
5 with respiratory physiology, right?

6 A They all deal with respiratory physiology.

7 Q But none of the other ones deal with alcohol blood
8 testing.

9 A No, they deal with blood testing for other related
10 substances.

11 Q But not for alcohol.

12 A You have to understand that the properties and the
13 testing of the way that these gases come out depend on
14 their physical properties. And in order to really
15 understand alcohol, you need to make measurements of other
16 substances, as well, in order -- to study them in order to
17 do something kind of like extrapolation and interpolate,
18 also. Depending on the solubility and the diffusion of
19 these gases, they all behave a little bit differently.

20 Q Sir, of the first 64 articles, one deals with the
21 measurement of blood alcohol concentration, correct or
22 incorrect?

23 A I understood your question to be --

24 Q My question now to you is of the 74 articles that
25 we just looked at, one deals with blood alcohol

1 concentrations?

2 A That's correct.

3 Q Now you contributed some stuff to books, book
4 chapters and book reviews, correct?

5 A Yes.

6 Q And one deals with blood gas transport, correct?

7 A I don't remember, I believe so. Which book was
8 that? Was that in the physiology textbook?

9 Q Applied Physiology. No, let me rephrase that. Of
10 the four articles that you have written in your CV, none of
11 them deal with alcohol.

12 A I'm not sure, let me take a look at them. I'm
13 preparing one at the present time and I'm not sure if any
14 of those currently published do. I believe not, but --
15 that's correct, none of the four chapters do.

16 Q Now you have -- the next category you have is
17 other articles and there, you list 14 other articles that
18 you have published, correct?

19 A That's correct.

20 Q And all except for one deal with alcohol breath
21 testing, correct?

22 A That's correct, but those are not scientific
23 articles. Those are more review and summary articles.

24 Q Let me ask you again. All except for one focus on
25 alcohol breath testing, correct?

1 A I don't remember how many, I'll have to look at
2 it. I believe most of them do, all of them, but what I'm
3 not sure about is that one you're referring to. Well, all
4 of them relate to alcohol.

5 Q I said alcohol breath testing, they all relate to
6 alcohol breath testing.

7 A All of them relate to alcohol breath testing, yes.

8 Q Thank you. And then you list another 79
9 abstracts, correct?

10 A Yes.

11 Q And all deal, in one way or the other, with lung
12 physiology, correct?

13 A Yes.

14 Q And not one of them deals with alcohol.

15 A No, I believe some of them do deal with alcohol.

16 Q Their dealings with alcohol are all alcohol breath
17 testing, correct?

18 A I don't know, let's see. Well, there's one on
19 alcohol, but that is breath testing for alcohol, related to
20 the interaction with the airways, Number 53, and these are
21 closely related articles, but neither of those two we did
22 we make blood measurements.

23 Q There's not one of those articles that's related
24 to blood testing of alcohol.

25 A Oh, yes, they're related, many of them are

1 related, but in them, we didn't measure blood alcohol.
2 Many of those articles have blood measurements for other
3 substances and the process is virtually the same.

4 Q But they aren't -- any of these articles aren't
5 about testing for alcohol.

6 A No, they're for other closely related substances,
7 not alcohol

8 Q Not alcohol, correct?

9 A Sure, that's right.

10 Q Now -- let's see now, you're a professor at the
11 University of Washington. I assume that you give lectures
12 at various points, correct?

13 A Yes.

14 Q Important to be prepared for those lectures.

15 A Yes.

16 Q You make notes and prepare in advance material to
17 help remind you what you want to say in those lectures?

18 A Sometimes. More recently, I don't need to use
19 notes, but I have in the past.

20 Q Is that because you've gotten to know the subject
21 so well?

22 A That's one of the reasons, yes.

23 Q Did you make any notes or reports in this case?

24 A I've made some notes. The only reports I've made
25 are this information that I've sent up to Mr. Madson. I

1 haven't sent any other reports.

2 Q How many times have you been called to testify in
3 criminal matters?

4 A Well, I mentioned that I have testified in excess
5 of 400 times and the majority of those are in criminal
6 matters

7 Q I assume that because you deal with attorneys who
8 may not have the required knowledge to question you
9 properly on your field of expertise, you've drawn up a list
10 of questions and answers to help them prepare to examine
11 you, right?

12 A On an occasion, if an attorney asks for such
13 questions, I've provided it. That's pretty common practice
14 for expert witnesses, as you mentioned, because they don't
15 know the field and it's easier to convey that information
16 in that format.

17 Q Did you send one to Mr. Madson?

18 A I don't recall. Not with regard to this case. I
19 may have in the previous case, I don't remember.

20 Q In fact, you've done -- you've changed these
21 questions that you send attorneys over time, haven't you?

22 A Because issues change and, also, they're different
23 in different locations because different instruments are
24 used, different processes are involved. There are
25 different requirements.

1 Q And it's also because prosecutors find out about
2 these questions and they ask you embarrassing questions
3 about what you write in here, don't they?

4 A I don't think there's anything embarrassing in
5 there. I have also sent these to prosecutors who have
6 asked for them from me and I've done that on numerous
7 occasions.

8 Q Do you recognize what's been marked for
9 identification as Plaintiff's Exhibit Number 176?

10 A Well, this may have been a very old set of
11 questions from five or six years ago. I don't remember,
12 the date is not shown up here at the top. This is a fax
13 copy from somewhere else, so I'm not sure.

14 Q Is that a list of questions that you drew up?

15 A Yes, from a long time ago.

16 Q Is that an accurate representation of those
17 questions?

18 MR. MADSON: Your Honor, I'm going to object. I
19 don't see any relevancy in this at all. It's some other
20 case. He can't remember where. The questions are probably
21 a totally different issue.

22 JUDGE JOHNSTONE: Mr. Cole?

23 MR. COLE: Your Honor, I can tie this up. It goes
24 to his ability to be fair and objective.

25 JUDGE JOHNSTONE: I'll let Mr. Cole have more

1 questions. If it doesn't get tied up promptly, you'll have
2 to go on to another matter, though.

3 BY MR. COLE: (Resuming)

4 Q Sir, the top of this reads Suggested Defense
5 Questions Directed To Dr. Hlastala, correct?

6 A That's correct.

7 Q And in this, you tell the person that you send
8 this to, "These questions are designed to allow concise
9 answers," correct? That's what you say, right?

10 A Yes.

11 Q "More complex scientific answers are best left for
12 the response to questions from the opposing party,"
13 correct?

14 A Yes.

15 Q And the reason is because you want to try and
16 embarrass a person who's cross examining you when you --

17 MR. MADSON: Your Honor, I'll object to that.

18 JUDGE JOHNSTONE: Objection sustained, Mr. Cole.

19 BY MR. COLE: (Resuming)

20 Q Well, in this script that you've written out, you
21 tell an attorney the order of questions, of how the
22 questions should proceed, don't you?

23 A Now they can choose to use that if they're
24 uncomfortable with designing their own questions. If they
25 use their own questions, that's no problem. I mean they

1 don't have to use those.

2 Q You tell the attorneys the answers you expect to
3 give them.

4 A Yes, that's again common practice.

5 Q You tell them the amount of time it will take to
6 answer the question, you give them an estimate.

7 A I don't think so. Where are you referring to?

8 Q Well, the length of the answers that you provide.
9 You give them an idea of how long it's going to take.

10 A I don't think I have that in there. Maybe I'm
11 wrong, I may have done it in one, I just don't remember.

12 Q You tell them when you're going to use charts.

13 A That's true, on one of the questions, I use a
14 chart and I say in there that I'm going to use a chart.

15 Q You suggest to them what type of redirect
16 questions to ask after the person has gotten through cross
17 examining you.

18 A That's right, for some young attorneys, that's
19 handy to have.

20 Q As a consultant, you've been asked to testify in
21 Washington a number of times, we've talked about that,
22 right?

23 A Yes, we have.

24 Q You've testified in King County in Washington?

25 A Correct.

1 Q In District Court, Municipal Court and Superior
2 Court.

3 A Yes.

4 Q Pierce County, Washington, District Court, three
5 or four times, correct?

6 A At least that. More than that, I believe.

7 Q Snohomish County, you've testified there.

8 A Yes.

9 Q And other areas around Washington.

10 A Yes.

11 Q You've been called on as an expert in 11 other
12 states, 11 or 12?

13 A 12, I think, once in British Columbia. That would
14 be 13 different places, but I think it would be 12 states.

15 Q And in all the criminal trials where you've been
16 called to testify as an expert, you've always testified on
17 behalf of the Defendant, correct?

18 A That's correct, I've never been called by the
19 prosecution in a criminal matter.

20 (Tape changed to C-3673)

21 BY MR. COLE: (Resuming)

22 Q So a hundred percent of the cases, you've
23 testified, correct?

24 A Say that again?

25 Q You've testified as a Defense witness, correct?

1 A No, in criminal cases, but in --

2 Q A hundred percent of the criminal cases, you've
3 testified as a Defense expert.

4 A That's correct.

5 Q Now you've been asked this question before by
6 prosecutors, haven't you?

7 A What question?

8 Q The question I just asked you, how many times
9 you've been asked to testify by --

10 A Yes.

11 Q And you've prepared answers for that question,
12 correct?

13 A Prepared answers for it, the number of times --
14 regarding the number of times that I've testified?

15 Q You have a prepared answer for Mr. Madson -- why
16 don't you just read it and save him the time on redirect of
17 asking your response to that question?

18 MR. MADSON: Excuse me, I don't know what we're
19 referring to here, something that was given to me?

20 JUDGE JOHNSTONE: Why don't you show Mr. Madson
21 what you want this witness to do and then ask your
22 question, Mr. Cole?

23 BY MR. COLE: (Resuming)

24 Q Well, you have a response that you typically give
25 prosecutors after they've asked you how many times you've

1 testified for Defendants, don't you?

2 A I don't recall. My response varies from time to
3 time. I mean the more often as I testify, that increases
4 the number of times that I've testified, so it would
5 change, I suppose.

6 Q Okay. The professional organizations that you
7 belong to all relate to the field of respiratory
8 physiology, correct?

9 A No, not completely.

10 Q Which ones don't?

11 A Well, let's see, I belong to the American Heart
12 Association and that deals with the heart. It also deals
13 with the lungs. I belong to the American Thoracic
14 Society. That deals with the lungs, not only physiology,
15 but also clinical matters. I belong to the Undersea
16 Medical Society. That relates to aspects of diving, not
17 just respiratory physiology. Let's see, I also belong to
18 the Aerospace Medical Association and that deals with other
19 stress related areas and not just respiration. I'm a
20 member of the Comparative Respiratory Society. That deals
21 with respiratory physiology, but in animals, not in
22 humans. The American Physiological Society deals with
23 different aspects of physiology. Respiration is just one
24 of those aspects. And there are a few more, but I don't
25 recall them.

1 Q You're not a member of any forensic sciences.

2 A No, that's correct.

3 Q Your editorial responsibilities are all related to
4 the field of respiratory physiology.

5 A That's correct, we've dealt with physiology here
6 today and that's my field.

7 Q Your national responsibilities are all related to
8 your field of respiratory physiology.

9 A Yes.

10 Q Now you make money outside of the salary that you
11 receive as a professor, correct?

12 A Yes, in consulting, I do.

13 Q And you're making money in this case. That's
14 another form of income, correct?

15 A I mentioned that earlier, yes.

16 Q And you have not billed anything yet?

17 A That's correct.

18 Q The amount of money that you charge depends on the
19 extent of your involvement, correct?

20 A That's correct.

21 Q Some small DWI cases, you've charged as little as
22 \$350.00, correct?

23 A Even less for the Public Defender's Office in
24 Seattle.

25 Q Your expenses up here are about \$750.00 a day?

1 A That's correct, plus expenses, travel expenses.

2 Q Would it be fair to say that you get almost as
3 much money consulting as you do working as a professor?

4 A That's possible. My last income tax, that wasn't
5 the case and the previous one it was not the case and the
6 previous one, to my recollection, it was not the case. It
7 may have been in the past, I don't recall.

8 Q Now my understanding is you've been called to
9 testify on how alcohol concentrations accumulate in the
10 blood, correct?

11 A That would be one way of phrasing it, yes.

12 Q Different absorption rates of individuals?

13 A Yes.

14 Q Different elimination rates of individuals.

15 A Yes.

16 Q How elimination rates affect back calculation or
17 retrograde extrapolation.

18 A Yes.

19 Q And the calculation of the number of drinks to get
20 to a certain BAC, blood alcohol content, at a certain time,
21 correct?

22 A Yes.

23 Q Did you conduct any tests of Captain Hazelwood to
24 determine his absorption rate?

25 A No, I have not.

1 Q Did you conduct any tests with Captain Hazelwood
2 to determine his elimination rate?

3 A No, I have not.

4 Q You could have done that, correct?

5 A One could, but it would be impossible to reproduce
6 the absorption profile, so people usually don't do that
7 with respect to absorption because you just can't, it
8 varies so much from time to time. With regard to the
9 burn-off rate, you possible could, but the burn-off rate I
10 don't really think is the issue.

11 Q The burn-off rate is not the issue.

12 A It doesn't really matter what the burn-off rate is
13 in this particular case.

14 Q Well, before we get to that, you -- it appears to
15 me, in your testimony, you've assumed that the blood
16 alcohol content between 10:30 and 10:50 on March 23d, 1989,
17 was accurate.

18 A Yes, I have made that assumption.

19 Q You have no reason to doubt the assumption of
20 that.

21 A No, my understanding is the error -- you see,
22 usually, if it's operated properly, a chromatograph will be
23 plus or minus .01 or so and whether we've got a .05 or a
24 .07 doesn't matter in terms of the main issue. The main
25 issue is this distant extrapolation and absorption

1 possibility variation. So I've assumed it's a --

2 Q You have no reason to believe it's not accurate.

3 A No, I've assumed it to be accurate. I have no
4 reason to believe it's not accurate.

5 Q Now the absorption phase, this is when alcohol
6 that is consumed -- when the amount of alcohol that's
7 ingested is greater than the amount of alcohol that can be
8 eliminated in the body, correct?

9 A When the rate of absorption is greater than the
10 rate of burn-off, then you would be increasing, that would
11 be the absorptive phase.

12 Q And in your studies, what was your findings on
13 various absorption rates?

14 A I don't recall it in detail, but my recollection
15 was that some individuals reached a peak within about an
16 hour, whereas others took in excess of two hours to reach a
17 peak.

18 Q Did you find in any of your studies that a person
19 took say six hours?

20 A No, we did not.

21 Q Have you ever read anything where a person took
22 six hours?

23 A Yes.

24 Q Would you consider that to be the norm in the
25 community, the six hours?

1 A No, I think those extended times occur under
2 certain circumstances. And the primary circumstance that
3 that appears to occur is what's called -- the term is
4 preprandial alcohol consumption where taking in alcohol
5 before you have anything in your stomach, there's some
6 evidence that, published in the literature, that that
7 extends that absorption time. And, in fact, if you take a
8 look at Bob Boriak and Meade, in 1970, they found half
9 times for emptying of the stomach in excess of seven hours
10 caused by alcohol to --

11 Q Those are with fatty foods, correct?

12 A No, that was -- I don't recall, but they were
13 testing the difference -- my recollection was that it was
14 the same food given with and without alcohol and there was
15 a delay in the release time from the stomach contents, but
16 I don't remember the food that they had.

17 Q You don't remember the --

18 A It was the same food under both circumstances.

19 Q But, generally, your opinion has been in the past,
20 when you've testified, that it takes about an hour, most
21 people fall within the hour, hour and a half.

22 A No, that's not been my opinion. I think the
23 majority of people probably, it's usually argued, fall
24 within an hour, an hour and a half, but that --

25 Q The ranges are between a half an hour and three

1 and a half hours, correct?

2 A That's correct, yes, except under the unusual
3 circumstance where the alcohol is taken in fairly high
4 concentration without food and then it can extend the
5 emptying time.

6 Q And you've also testified, have you not, it's your
7 opinion, that hard alcohol, hard liquor, absorbs faster
8 than say beer, correct?

9 A In general, I believe the studies show that,
10 except in these unusual conditions we were just talking
11 about. But if you have a normal absorption pattern --
12 maybe I ought to put that up here -- I think a reasonable
13 study to look at on that is Leak and Silverman and they
14 showed -- my recollection was -- and this is not the kind
15 of curves they had, but they showed that beer is -- because
16 the stomach recognizes the beer as having a food content in
17 it, something to process, that it tends to go farther to the
18 right here and purer form of alcohol is more likely to be
19 absorbed faster, unless this clamp-down thing occurs where
20 the pyloric sphincter closes down.

21 Q But in most instances, most people, it occurs
22 between a half an hour and three and a half hours, correct?

23 A I would say that is usually the case, yes.

24 Q And that's the accepted amounts in the literature.

25 A Without food and when you're not having this

1 clamp-down.

2 Q The problem related with absorption, as you see it
3 in back calculations, is the difficulty in determining when
4 the peak time was, correct?

5 A That's one of the problems, yes.

6 Q That's a major problem.

7 A Indeed.

8 Q I'm not trying to trick you, but that's one of the
9 major problems.

10 A Yes.

11 Q You spent a fair amount of time talking about it.

12 A I agree, that's one of the major problems.

13 Q Now in this graph that you drew, you're showing
14 Captain Hazelwood peaking at 8:00 o'clock, right?

15 A Well, I didn't mean this to refer to Captain
16 Hazelwood, but I -- in fact, I don't think I said that, but
17 this is sort of taking the assumption of a half-hour
18 post-drinking peak on all of those cases.

19 Q And in every one of those scenarios, if he has
20 peaked at 12:00 o'clock, he's above a .10, right?

21 A On those five curves, yes. This is right about a
22 10, but essentially all those are about, yes.

23 Q And if the peak occurs at a time over here further
24 toward midnight, your numbers that you have here would be
25 wrong, would be less, right?

1 A No, not in terms of the numbers of standard
2 drinks, that would be the same, but the curve would look a
3 little different. This refers to any curve that intersects
4 that curve right there. So if somebody came over here and
5 hit or came over here and hit, it would still be consistent
6 with 7.7 to get to that value.

7 Q So if someone takes longer to peak, they're not
8 going to have -- they're going to have the same amount of
9 drinks.

10 A Yes, it's just a delayed absorption.

11 Q Now -- so if Captain Hazelwood was still drinking
12 at nearly 8:00 o'clock, or between 7:30 and 8:00, the
13 likelihood is that he peaked some time after 8:00 o'clock,
14 correct -- or that he peaked before midnight that night,
15 correct?

16 A Yes. We wouldn't know that for sure, but the odds
17 -- since absorption times are usually an hour to an hour
18 and a half, that would indicate that that would likely be a
19 peak here. If -- well, yes.

20 Q You'd agree with that.

21 A Well, I would agree that the odds -- if you want
22 to talk about the odds, more likely than not, then it's
23 more likely than not that the peak would be achieved before
24 that time.

25 Q Is it 75 or 90 percent of the people that would

1 have peaked before midnight?

2 A I don't know.

3 Q Three and a half hours later.

4 A It probably would be that.

5 Q Well, then, in your studies, how long was the
6 longest you saw that it took somebody to peak?

7 A Well, in my particular studies, we never saw
8 anybody in excess of three and a half hours and we didn't
9 see anybody that had this --

10 Q Excuse me. What was the longest time that you
11 saw --

12 A I think I mentioned before that it was a couple of
13 hours, two hours.

14 Q And the material that you've read -- well, let me
15 withdraw that question. Would it be fair to say that under
16 the information that you've received in your studies that
17 you feel comfortable with saying that Captain Hazelwood
18 would have peaked by 12:00 o'clock, correct?

19 A No, I'm not comfortable with that.

20 Q You're not?

21 A No.

22 Q And that's even though you never saw anybody that
23 went beyond two hours, their absorption rate, correct?
24 Correct?

25 A I said that. That's not the reason I'm

1 uncomfortable.

2 Q Correct?

3 A That's correct.

4 Q And you generally feel that the amount -- the
5 times are half an hour to three and a half hours, correct?

6 A That's correct.

7 Q Now on another chart, you indicated different
8 elimination rates, but they're there, right? And you
9 testified in this case -- the elimination rates are set
10 from 10:30, right, in the graph?

11 A You mean these curves here?

12 Q Yes.

13 A Yes, that's on this chart.

14 Q 04, .01, .017.

15 A You referred to another chart. I'm not sure which
16 chart you're talking about.

17 Q That chart.

18 A Oh, I see. You asked me about another chart.

19 Q That chart.

20 A This chart? There's different elimination rates
21 in there.

22 MR. MADSON: Wait a minute, what chart?

23 JUDGE JOHNSTONE: Maybe if we identify it by
24 number, it will be of some assistance.

25 BY MR. COLE: (Resuming)

1 Q Can you identify that?

2 A Well, if you're referring to this one, it's CG.

3 Q CG. You, in your studies, found what type of
4 elimination rates for individuals?

5 A What type of elimination rate?

6 Q Yes, what are the variations?

7 A Oh, you mean the magnitude of the elimination
8 rate? The average male elimination rate that we found in
9 ours was a .018, plus or minus a .004 per hour. That's a
10 standard deviation.

11 Q What was the maximum and the minimum?

12 A I don't remember that, but they weren't too far
13 off of that range. We could calculate it, but I just don't
14 remember the specifics.

15 Q Everybody that you tested was right around a .018?

16 A Well, there was a standard deviation of a plus or
17 minus .004 and, you know, I could figure that out. That
18 would be plus or minus three standard deviations would
19 include 99 percent of what we did. That would be -- maybe
20 we should figure 95 percent which would be plus or minus
21 two standard deviations. That would be a plus or minus .0
22 -- that would be a .009 up to a .025 would be the range
23 that we found, approximately.

24 Q The ones that you remember.

25 A I'm calculating that from what I remember the

1 variations to be. I don't remember what the maximums and
2 minimums were.

3 Q Okay, all you have to say is you don't remember
4 the maximum and the minimum. You testified on several
5 occasions how difficult it is to perform retrograde
6 extrapolation, correct?

7 A Yes.

8 Q One of it is based on the absorption rate, the
9 difficulty involved in the absorption rate, and the other
10 is the variability of burn-off among people, correct?

11 A Yes.

12 Q But in this case -- and you set out this one chart
13 that would show where -- there are scenarios where Captain
14 Hazelwood's blood alcohol could be quite a bit lower,
15 correct?

16 A Yes.

17 Q And we're looking at CH, right?

18 A Yes.

19 Q Under this scenario, for this bottom line, right,
20 that would mean that if he stopped drinking at 7:30, under
21 your scenario, it would have taken nearly 16 -- no -- well,
22 if he stopped at 8:00, it looks like about 12 hours of
23 absorption, right?

24 A Maybe a little more than that. Let's see, this is
25 four, eight, 12. A little more than that. I have no way

1 of knowing that that's the actual curve. That's just an
2 example of a curve that's consistent with the information.

3 Q But it's also a curve that's inconsistent with any
4 medical data that you know of as far as absorption rates.

5 A No, I mentioned --

6 Q Do you know of absorption rates where people have,
7 14 hours later, had alcohol?

8 A I mentioned the study by Boriak and Mead who
9 showed seven hours as a half-time for stomach emptying and
10 that's consistent with that as a possibility.

11 Q As a possibility.

12 A Yes, as a possibility.

13 Q So you think that there's a possibility that if he
14 stopped drinking at 7:30, he still could have had alcohol
15 in his stomach, being absorbed, all the way until 9:00
16 o'clock the next day.

17 A I think that's possible, not likely, but possible.

18 Q Give us a percentage.

19 A Oh, there's a slim possibility. It's about as
20 possible as having an 004 burn-off rate.

21 Q You've gone from possible to slim. Give us a
22 percentage.

23 A I can't give you a percentage.

24 Q It's like less than one percent.

25 A Virtually any of these possibilities have small

1 chances. That's why it's so difficult to extrapolate.

2 Q Well, .17 doesn't have small chances because
3 that's the average, right?

4 A That also assumes -- this curve assumes so much.
5 That's just an average burn-off rate, that's correct.

6 Q Now what about this one, the second line that you
7 have. You have that as between four and six. That would
8 be ten hours?

9 A Yes, about -- oh, it would be from the end of
10 drinking, maybe ten to 12 hours.

11 Q That would mean that you're saying that the
12 absorption rate is ten to 12 hours, correct?

13 A In that curve, that's an example of where it would
14 be that, yes.

15 Q And in your studies, you never saw anybody more
16 than two.

17 A No, I haven't.

18 Q And in prior testimony, you've always said between
19 a half-hour and three and a half hours for most people,
20 correct?

21 A That's assuming sort of a normal process, yes.

22 Q And you referred to Mr. -- Dr. Debowski's tests on
23 that particular point, haven't you?

24 A Yes.

25 Q And you said that in Dr. Debowski's studies,

1 people had slightly longer absorption rates because of food
2 that they had, correct?

3 A No, in his studies, there was no food, Debowski's
4 studies.

5 Q No food, okay. And in this one right here, this
6 scenario that you had, the third one, that would be a
7 six-hour burn-off rate, is that correct?

8 A Absorption rate, yes.

9 Q Absorption. And you didn't find anybody in your
10 studies that was more than two.

11 A In mine, I did not.

12 Q And you generally feel that most people burn off
13 between an hour and an hour and a half, correct, absorb
14 between an hour and a an hour and a half, correct?

15 A I guess the studies that I've done have been
16 between an hour and two hours. But I think if you look at
17 most, it's between an hour and an hour and a half.

18 Q So those are really not that possible, are they,
19 the three _____?

20 A They're as possible as a lot of these other
21 curves. They're difficult -- they're just one of the types
22 of curves that is consistent with that blood value is all.

23 Q Now the -- you've written about retrograde
24 extrapolation, haven't you?

25 A Yes.

1 Q And one of the articles that you wrote is called
2 Physiology of Alcohol in the Body, correct?

3 A That was in a, that's correct, in a Washington Bar
4 Association journal.

5 JUDGE JOHNSTONE: Mr. Cole, would this be a good
6 time to recess for the day?

7 MR. COLE: Yes.

8 JUDGE JOHNSTONE: Ladies and gentlemen, I asked
9 Counsel yesterday approximately how much longer the
10 evidence will be and based on the responses by both, I
11 think probably we'll be coming close to finishing the
12 evidence this week. We may even finish a little earlier
13 than the end of the week, I'm not sure, though. That
14 doesn't mean that the case will be over in a week because,
15 if we do finish the evidence, we'll have probably a day of
16 handling some miscellaneous matters that pertain to this
17 case and then we'll be hearing final arguments next week
18 some time, early in the week hopefully. I can't tell you
19 for sure, but I think we're going to be close to finishing
20 the evidence this week. I'll give you updates as we go.

21 In the meantime, I'll see you back tomorrow at
22 8:15. Please be safe and remember my instructions
23 concerning the media sources about this case. Please don't
24 discuss this case with any persons, including yourselves,
25 among yourselves, and don't form or express any opinions.

1 See you back tomorrow at 8:15.

2 MR. MADSON: Your Honor, could we take up a matter
3 after the jury leaves, please?

4 JUDGE JOHNSTONE: Sure.

5 (Whereupon, the jury leaves the courtroom.)

6 MR. MADSON: Your Honor, with regard to the matter
7 brought up yesterday about the tape and the testimony, we
8 have a witness that's arriving here tonight from New York.
9 He can testify only tomorrow on this topic. I don't know
10 the Court's calendar and I'm only suggesting that if it's
11 at all possible, if we could do the hearing after 1:30, the
12 usual jury time, tomorrow, that's certainly feasible with
13 us. We're willing to do that and I don't know what else we
14 could do, but it would be -- it's imperative that we put
15 him on some time tomorrow.

16 THE CLERK: (Inaudible.)

17 JUDGE JOHNSTONE: I know I have most every day
18 spoken for, 2:30 and 3:30 sentencings and other preliminary
19 hearings. I have two sentencings scheduled tomorrow, one
20 at 2:30 and one at 3:30 and that generally involves
21 participation by multiple persons, including the Department
22 of Corrections personnel. I'm reluctant to try to
23 reschedule that. Perhaps we could let the jury go a little
24 early tomorrow and --

25 MR. MADSON: That's what I would suggest, maybe

1 at 12:00 or something like that?

2 JUDGE JOHNSTONE: Do you anticipate that we could
3 finish in an hour and a half?

4 MR. MADSON: Well, with just one witness, I think
5 we could, Your Honor. That means we have other ones that
6 we probably couldn't use tomorrow. We'll just have to do
7 it when we can, but --

8 JUDGE JOHNSTONE: Well, I don't know what I can do
9 to accommodate you, other than to release the jury a little
10 earlier. If you want me to release the jury by noon, I can
11 do that. But I need at least an hour to start preparing
12 for those things in the afternoon and I'm burning on both
13 ends, too, right now.

14 MR. MADSON: Well, why don't we try that, Your
15 Honor? At least we could have this witness who's available
16 and he could testify. I think that, in all likelihood, he
17 could finish his testimony in an hour. It's pretty simple
18 and straightforward. You know, he's going to give an
19 opinion on these tests -- I mean on these tapes and that's
20 the issue here, as to whether or not they --

21 JUDGE JOHNSTONE: So we need to have some sort of
22 a _____ hearing ahead of that, is that what you're
23 saying?

24 MR. MADSON: It really isn't a _____ hearing,
25 Your Honor. What we're -- the Court tentatively admitted

1 the inbound tape. Now, obviously, the prosecution wants to
2 use the voice of Captain Hazelwood on one, compare it with
3 the other and argue to the jury, "See the difference? He
4 must be drunk." This individual, along with others, is
5 prepared to testify that while these tapes are sufficient
6 quality, that they can certainly be used to transcribe what
7 a person said and you can hear what they said, you cannot
8 infer from those, because there are differences in speed
9 and pitch of these tapes, that you can say a person is
10 really talking or speaking differently from one to the
11 other.

12 JUDGE JOHNSTONE: That's going to go to the weight
13 of these tapes, is that the way you look at it?

14 MR. MADSON: Your Honor, I don't even feel it's
15 sufficient to go to the jury. I mean if that's the
16 inference, just to say, "Listen to these two tapes," I
17 think the Court has to make a preliminary judgment on that
18 to say whether or not they're even admissible for that
19 particular purpose.

20 Now we have no argument about admissibility as
21 long as they're relevant. The inbound tape is irrelevant
22 for anything. I mean it's somebody speaking and talking
23 about -- assuming it's Captain Hazelwood -- we don't even
24 know that for sure --

25 JUDGE JOHNSTONE: Well, as I understand, the

1 relevance is in the manner in which he spoke on the inbound
2 tape compared to the manner in which he spoke immediately
3 after the grounding to determine whether or not he may have
4 been impaired.

5 MR. MADSON: Well, manner I think is going to be
6 argued as speed, in other words, how fast he speaks on one
7 and how slow on the other. We have reason to believe that
8 the first tape is fast and the second tape is slow, that is
9 the pitch of the tape, itself, the way it's being recorded
10 and the way it's played back. It gets kind of complicated,
11 but that can change and we can show how that changes. And,
12 granted, we could certainly argue that to the jury. But,
13 at the same time, I think it's important that this
14 threshold level of admissibility and reliability for that
15 purpose has to be addressed. And I frankly don't feel that
16 that's the case, yet. We just have a tape and we know that
17 with this inbound tape, the original doesn't exist. That's
18 gone.

19 JUDGE JOHNSTONE: What foundation do you have for
20 the admissibility of that tape? Now we're only talking
21 about the inbound tape, Mr. Cole. What foundation do you
22 have to show that this is an accurate duplication of the
23 original?

24 MR. COLE: I'm trying to remember the guy's name.
25 He was the Coast Guard person --

1 MS HENRY: Franklin Shepherd.

2 MR. COLE: -- Shepherd, who testified, who Mr.
3 Madson had an opportunity to cross examine on that issue
4 and chose not to. He testified that this was an accurate
5 representation of his voice and the people that he heard
6 that day.

7 MR. MADSON: Your Honor, what he did -- sure, it's
8 his voice. He wasn't asked by the State whether it seemed
9 the same, fast or anything else. It wasn't even, as far as
10 he's concerned, relevant. The question was, "Do you
11 recognize your voice on that?" "Yes, I do." Sure, we can
12 recognize his voice on there. But if you're looking at the
13 subtle differences -- and that's what we're arguing about
14 here -- that tape was -- it gets complicated, but the
15 original reel-to-reel recording doesn't exist. An
16 individual made a copy of the original by using a Lanier
17 little, portable microcassette, holding it up to a speaker,
18 recorded that and then transferred that onto a basic
19 cassette.

20 JUDGE JOHNSTONE: Is that in evidence?

21 MR. MADSON: Yes.

22 JUDGE JOHNSTONE: That's what my recollection is.

23 MR. MADSON: And I think it's in evidence that the
24 original has been destroyed. Now our experts, our people,
25 will testify that this process changes the original to the

1 extent where you can't say at all that it's an accurate
2 reproduction in that sense. It's accurate in that you can
3 certainly hear the words and we've never had any argument
4 with that. You can hear the words. But are they accurate
5 as far as how they were spoken is really the issue and
6 that's what we're getting at with the individuals that we
7 hope to have testify here. They can't be deemed as
8 accurate in the manner in which that person speaks. You
9 can hear the words, but -- in other words, is he speaking
10 fast, slow, the same, things like this, because that can
11 change, depending on how the tape was made.

12 JUDGE JOHNSTONE: Mr. Cole, anything else?

13 MR. COLE: Well, Judge, he testified, Mr.
14 Shepherd, that this is an accurate representation of his
15 conversation, it accurately portrayed the conversation
16 here. There's an inference from that if they're both being
17 taped, the same conversation is being taped, the same
18 voices in that conversation that the other one is accurate,
19 also. What Mr. Madson is arguing only goes to the weight
20 of that tape, but it doesn't go to the admissibility.

21 JUDGE JOHNSTONE: That's what it sounds like tome,
22 too, Mr. Madson. If you've got a witness that's going to
23 testify as to the inaccuracy or how you can't rely on it,
24 that goes to the weight. You can certainly call him in
25 your case to support that assertion, but whether or not --

1 I don't really think we need to do this outside the
2 presence of the jury, if that's what your point is. We
3 don't need to have a special hearing for that.

4 MR. MADSON: Well, if that's the Court's ruling, I
5 frankly disagree --

6 JUDGE JOHNSTONE: That's my -- well --

7 MR. MADSON: But you know, that's what makes law
8 suits.

9 JUDGE JOHNSTONE: Well, there's two whole floors
10 in this building devoted to the possibility I make
11 mistakes, so I -- by my inclination now is that if you want
12 to call that witness, you may call the witness in your case
13 in chief and we don't need to have a special hearing for
14 it.

15 MR. MADSON: Okay, we'll do that.

16 JUDGE JOHNSTONE: Okay, is there anything else we
17 can take up at this time?

18 MR. COLE: No.

19 JUDGE JOHNSTONE: Instructions are today,
20 remember?

21 MR. COLE: Yes.

22 JUDGE JOHNSTONE: Thank you.

23 THE CLERK: Please rise. This Court stands at
24 recess.

25 (Whereupon, at 1:40 p.m., proceedings adjourned.)

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SUPERIOR COURT)
) Case No. 3ANS89-7217
STATE OF ALASKA) Case No. 3ANS89-7218

I do hereby certify that the foregoing transcript was typed by me and that said transcript is a true record of the recorded proceedings to the best of my ability.

Doris A. Cutler

DORIS A. CUTLER