UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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In the matter of: *
*
MARINE BOARD OF INVESTIGATION *
INTO THE SINKING OF THE *SCANDIES ROSE* *
ON DECEMBER 31, 2019 *
*

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Edmonds Center for the Arts
Seattle, Washington

Thursday,
March 4, 2021

APPEARANCES:

Marine Board of Investigation

CAPT GREGORY CALLAGHAN, Chairman
CDR KAREN DENNY, Member
LCDR MICHAEL COMERFORD, Member

Technical Advisors

LT SHARYL PELS, Attorney Advisor
KEITH FAWCETT, Technical Advisor

National Transportation Safety Board

BARTON BARNUM, Investigator in Charge
PAUL SUFFERN, Meteorologist

Parties in Interest

MICHAEL BARCOTT, Esq.
Holmes Weddle & Barcott
(On behalf of Scandies Rose Fishing Company, LLC)

NIGEL STACEY, Esq.
Stacey & Jacobsen PLC
(On behalf of survivors Dean Gribble and John Lawler)

Also Present

LT IAN McPHILLIPS, Recorder

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1 P R O C E E D I N G S

2 (8:00 a.m.)

3 CAPT CALLAGHAN: It is 8:00 a.m. on March 4th, 2021, and this
4 hearing is now in session. Good morning, ladies and gentlemen.
5 I'm Captain Greg Callaghan, United States Coast Guard Chief of
6 Prevention for the 11th Coast Guard District. I'm the Chairman of
7 the Coast Guard Marine Board of Investigation, and the presiding
8 officer over these proceedings.

9 The Marine Board has established a COVID mitigation plan to
10 comply with federal, state, and local requirements. As a result,
11 no members of the public will be permitted to view this hearing in
12 person. The Board will receive witness testimony through a hybrid
13 of in-person, virtual, and telephonic means. Members of the Board
14 have been spaced out far enough at the main table to remove their
15 masks while seated, to maximize clarity and minimize disruption.
16 Members are to place masks back on at any time when leaving the
17 table, and whenever approached by another person. I ask that
18 anyone who is unable to maintain social distancing please keep
19 their mask on unless actively speaking into the microphone.

20 Due to the extensive technology used to support this hearing
21 and the potential for unanticipated delays or challenges, I ask
22 that you please be patient with us in the event of any
23 disruptions.

24 The Commandant of the Coast Guard has convened this Board
25 under the authority of Title 46 U.S.C. Section 6301 and Title 46

1 C.F.R. Part 4 to investigate the circumstances surrounding the
2 sinking of the commercial fishing vessel *Scandies Rose* with the
3 loss of five lives on December 31st, 2019, while transiting in the
4 vicinity of Sutwik Island, Alaska. There were two survivors.
5 I would like to take this opportunity to express my
6 condolences to the family and friends of the five crew members who
7 were lost at sea. I note again that many of you are watching this
8 hearing on livestream due to the COVID restrictions in place. We
9 appreciate you being with us.
10 Upon completion of the investigation, this Marine Board will
11 submit its report of findings, conclusions, and recommendations to
12 the Commandant of the Coast Guard. Other than myself, members of
13 this Board include Commander Karen Denny and Lieutenant Commander
14 Michael Comerford. The legal counsel to this Board is Lieutenant
15 Sharyl Pels. The recorder is Lieutenant Ian McPhillips. The
16 Coast Guard technical advisors to this Board are Mr. Scott Giard
17 and Mr. Keith Fawcett. This Board's media liaison is Lieutenant
18 Commander Scott McCann.
19 The National Transportation Safety Board is also
20 participating in this hearing. Mr. Bart Barnum, Investigator in
21 Charge for the NTSB *Scandies Rose* investigation, is here with us,
22 along with Mr. Paul Suffern.
23 Witnesses are appearing before the Board to provide valuable
24 information that will assist this investigation. We request that
25 all members of the public be courteous to the witnesses and

1 respect their right to privacy.
2 Members of the press are welcome to attend virtually, and
3 provisions have been made during the proceedings to allow the
4 media to do so. The news media may question witnesses concerning
5 the testimony they have given after I have released them from
6 these proceedings. I ask that any such interviews be conducted
7 with full consideration of the COVID mitigation procedures that
8 this Marine Board has established.
9 The investigation will determine as closely as possible the
10 factors that contributed to the incident so that the proper
11 recommendations for the prevention of similar casualties may be
12 made; whether there is evidence that any active misconduct,
13 inattention to duty, negligence, or willful violation of the law
14 on the part of any licensed or credentialed person contributed to
15 this casualty; and whether there is evidence that any Coast Guard
16 personnel or any representative or employee of any other
17 government agency or any other person caused or contributed to the
18 casualty.
19 The Marine Board planned this two-week hearing to examine
20 events relating to the loss of the *Scandies Rose* and five crew
21 members. The hearing will explore crewmember duties and
22 qualifications, shore side support operations, vessel stability,
23 weather factors, effects of icing, safety equipment, operations of
24 the vessel from the past up to and including the accident voyage,
25 and survey imagery of the vessel in its final resting place. The

1 hearing will also include a review of industry and regulatory
2 safety programs, as well as the U.S. Coast Guard Search and Rescue
3 activities related to the response phase of the accident, after
4 notification that the *Scandies Rose* was in distress.
5 The Coast Guard has designated parties in interest to this
6 investigation. In Coast Guard marine casualty investigations, a
7 party in interest is an individual, organization, or other entity
8 that under the existing evidence or because of his or her position
9 may have been responsible for or contributed to the casualty. A
10 party in interest may also be an individual, organization, or
11 other entity having a direct interest in the investigation in
12 demonstrating the potential for contributing significantly to the
13 completeness of the investigation or otherwise enhancing the
14 safety of life and property at sea through participation as party
15 in interest.
16 All parties in interest have a statutory right to employ
17 counsel to represent them, to cross-examine witnesses, and have
18 witnesses called on their behalf. Witnesses who are not
19 designated as parties in interest may be assisted by counsel for
20 the purpose of advising them concerning their rights. However,
21 such counsel are not permitted to examine or cross-examine other
22 witnesses or otherwise participate in the investigation.
23 I will now read the list of those organizations and
24 individuals whom I've previously designated as parties in
25 interest: Scandies Rose Fishing Company, LLC, represented by

1 counsel here with us today; crewpersons Mr. Dean Gribble and
2 Mr. John Lawler, represented by counsel appearing virtually today;
3 and Mr. Bruce Culver, not present at this time.
4 The Marine Board will place all witnesses under oath. When
5 testifying under oath, a witness is subject to the federal laws
6 and penalties for perjury for making false statements under Title
7 18 U.S.C. Section 1001. Penalties could include a fine of up to
8 $250,000 or imprisonment up to five years or both.
9 The sources of information to which this investigation will
10 inquire are many and varied. Since the date of the casualty, the
11 NTSB and Coast Guard have conducted substantial evidence
12 collection activities. Some of that previously collected evidence
13 will be considered during these hearings. Should any person have
14 or believe he or she has information not brought forth but which
15 might be of direct significance, that person is urged to bring
16 that information to my attention by emailing
17 uscg.scandiesrosembi@gmail.com. This email address will be
18 continuously monitored throughout these proceedings.
19 Mr. Bart Barnum will now say a few words on behalf of the
20 NTSB.
21 MR. BARNUM: Thank you, Captain Callaghan.
22 Good morning. I'm Bart Barnum, Investigator in Charge of the
23 National Transportation Safety Board's investigation of this
24 accident. The Safety Board is an independent federal agency which
25 under the Independent Safety Board Act of 1974 is required to

1 determine the cause or probable cause of this accident, to issue a
2 report of the facts, conditions, and circumstances relating to it,
3 and make recommendations or measures to prevent similar accidents.
4 The NTSB has joined this hearing to avoid duplicating the
5 development of facts. Nevertheless, I do wish to point out that
6 this does not preclude the NTSB from developing additional
7 information separately from this proceeding, if that becomes
8 necessary.
9 At the conclusion of this hearing, the NTSB will analyze the
10 facts of this accident and determine the probable cause,
11 independent of the U.S. Coast Guard. At a future date, a separate
12 report of the NTSB's findings will be issued, which will include
13 our official determination of the probable cause of this accident.
14 If appropriate, the Safety Board will issue recommendations to
15 correct safety problems discovered during this investigation.
16 These recommendations may be made in advance of that report.
17 In addition, on behalf of the NTSB, I would like to offer my
18 deepest condolences to the families and those affected by this
19 tragic accident. Thank you.
20 CAPT CALLAGHAN: Thank you, Mr. Barnum.
21 Yesterday, we heard from a survival equipment expert,
22 representatives from the Coast Guard National Maritime Center and
23 Office of Engineering Standards, as well as a representative from
24 Crawford Nautical School.
25 Today, we will hear from representatives from the National

1 Institute for Occupational Safety and Health, the NPFVOA and
2 AMSEA, as well as Mr. Bruce Culver and Mr. Dan Mattsen.
3 At this time, this hearing will go into a brief recess and
4 resume at 0815.
5 (Off the record at 8:09 a.m.)
6 (On the record at 8:15 a.m.)
7 CAPT CALLAGHAN: The time is no 0815. This hearing is now
8 back in session. We will now hear from Ms. Samantha Case and
9 Dr. Jennifer Lincoln from the National Institute for Occupational
10 Safety and Health.
11 Ms. Case, Dr. Lincoln, Lieutenant McPhillips will now
12 administer the oath and ask you some preliminary questions.
13 LT McPHILLIPS: Good morning. Please stand and raise your
14 right hand.
15 (Whereupon,
16 JENNIFER LINCOLN and SAMANTHA CASE
17 were called as witnesses and, after being first duly sworn, were
18 examined and testified as follows:)
19 LT McPHILLIPS: Please be seated. I need to ask each of you
20 some questions, starting with Dr. Lincoln. Please state your full
21 name and spell the last name.
22 DR. LINCOLN: Sure. My name is Jennifer Marie Lincoln. Last
23 name is spelled L-i-n-c-o-l-n.
24 LT McPHILLIPS: Please identify counsel or representative, if
25 present.

1 DR. LINCOLN: Ms. Jenny Naylor is on the webinar.
2 LT McPHILLIPS: Counsel, please state and spell your last
3 name, as well as your firm or company relationship.
4 MS. NAYLOR: My name is Jenny Naylor. Last name is spelled
5 N-a-y-l-o-r. I'm a senior attorney with the U.S. Department of
6 Health and Human Services, assigned to provide legal counsels and
7 advice to the National Institutes for Occupational Safety and
8 Health. While I'm not appearing as the individual legal
9 representative of Ms. Samantha Case and Dr. Lincoln, I'm here as
10 the legal counsel for their agency, NIOSH, and in support of
11 Ms. Case and Dr. Lincoln's presence officially in this hearing.
12 LT McPHILLIPS: Thank you very much.
13 Dr. Lincoln, please tell us, what is your current employment
14 and position?
15 DR. LINCOLN: Currently I work for the National Institute for
16 Occupational Safety and Health, and I serve as the Associate
17 Director for the Office of Agriculture, Forestry and Fishing
18 Safety and Health at NIOSH.
19 LT McPHILLIPS: What are your general responsibilities in
20 that job?
21 DR. LINCOLN: My general responsibilities is to oversee the
22 research portfolio that NIOSH holds, related to research and
23 outreach and to include workplace safety and health in
24 agriculture, forestry and fishing industries.
25 LT McPHILLIPS: Can you briefly tell us your relevant work

1 history?
2 DR. LINCOLN: Sure. I've worked at NIOSH as an occupational
3 safety and health specialist and injury epidemiologist since 1992.
4 I earned my certified safety professional certification in 1997,
5 and my PhD through Johns Hopkins University in health policy, with
6 a focus on injury control in 2006.
7 I've established the NIOSH Research Program on Commercial
8 Fishing Safety. I'm recognized internationally and nationally as
9 a fishing safety expert, and have provided technical assistance to
10 the U.S. Coast Guard, to the Commercial Fishing Industry Safety
11 Advisory Committee, to the National Transportation Safety Board,
12 and I've testified to Congress.
13 Internationally, I've provided expert consultations to the
14 food and agriculture organizations on fishing nets and safety, as
15 well as how fisheries management policies have affected fishing
16 safety.
17 LT McPHILLIPS: Do you hold any professional licenses or
18 certificates related to your position?
19 DR. LINCOLN: Yes. I have a certified safety professional
20 certification.
21 LT McPHILLIPS: Thank you, Dr. Lincoln.
22 Ms. Case, please state your full name, and spell your last
23 name.
24 MS. CASE: Samantha Laura Case, last name C-a-s-e.
25 LT McPHILLIPS: Please tell us, what is your current

1 employment and position?
2 MS. CASE: I am an epidemiologist with the National Institute
3 for Occupational Safety and Health.
4 LT McPHILLIPS: What are your general responsibilities in
5 that job?
6 MS. CASE: General responsibilities are to support the NIOSH
7 mission and our Center for Maritime Safety and Health Studies. So
8 I, as an epidemiologist, explore patterns and injuries,
9 fatalities, and lesser casualties in the marine industries.
10 LT McPHILLIPS: Can you briefly tell us your relevant work
11 history?
12 MS. CASE: Sure. So I started with NIOSH in late 2014, and
13 since then have worked primarily in commercial fishing safety and
14 health research. I also expand into other maritime industries
15 such as marine transportation. I have my master's in public
16 health degree that I obtained in 2015, and I'm currently a PhD
17 student in the field of safety sciences.
18 I have presented to the Coast Guard on numerous occasions,
19 including formal hearings such as this, and have presented on
20 fishing safety research nationally and internationally.
21 LT McPHILLIPS: Do you have any professional license or
22 certificates related to your position?
23 MS. CASE: I do not.
24 LT McPHILLIPS: Thank you. Captain Callaghan will now have
25 follow-up questions for both of you.

1 CAPT CALLAGHAN: Good morning again, and thank you ladies for
2 joining us this morning. Now I'll turn it over to Mr. Keith
3 Fawcett.
4 Mr. Fawcett?
5 MR. FAWCETT: Thank you, Captain.
6 EXAMINATION OF JENNIFER LINCOLN AND SAMANTHA CASE
7 MR. FAWCETT: Ms. Case and Dr. Lincoln, thank you again for
8 appearing earlier, appearing at the *Destination* hearing, and *Mary*
9 *B II*. And, Ms. Case, I know you've presented to the investigative
10 officers community within the Coast Guard, and we thank you for
11 that.
12 If you would, try to avoid the use of acronyms except for
13 NIOSH or CDC, which are commonly used, throughout your
14 presentation. And, you know, if you'd like to take a break at any
15 time and we don't call a recess, please, if you want one, make
16 sure to ask for one.
17 So we will pull up some exhibits, including a presentation.
18 And if you need us to scroll, zoom, move around, if you tell us,
19 and give us a moment, the Recorder, Lieutenant McPhillips will
20 take us to that position in your presentation or any of the
21 exhibits. We don't have many exhibits, but take time to look at
22 them and familiarize yourself as I perhaps ask you questions about
23 them.
24 So we have asked you to present a presentation, and I know it
25 took considerable time and effort to put that presentation

1 together.
2 And if -- Lieutenant McPhillips, if you'll pull up Coast
3 Guard Exhibit 130, you'll see it's the presentation crafted by you
4 for the, uniquely for this hearing in March. And if you will,
5 present this at your own pace, and ask the Lieutenant please to
6 advance to the next slide. So, with that, if you would please
7 make your presentation.
8 DR. LINCOLN: Okay, thank you. Can everyone hear me okay?
9 MR. FAWCETT: Yes, we can. Go ahead, ma'am.
10 DR. LINCOLN: Okay. So, before we start on the slides,
11 Samantha and I would like to give our deepest condolences to the
12 surviving crew members and the families and friends of the entire
13 crew of the *Scandies Rose*.
14 Tragedies like yours are represented in the statistics that
15 we will be presenting today, and it's not lost on us that each
16 number that we present represents someone who didn't return to his
17 or her family. We take our data collection and analysis
18 activities very seriously, and we note that even one fatality is
19 seen as too many.
20 Samantha and I will not be discussing the incident of the
21 *Scandies Rose* specifically. As epidemiologists, as Samantha
22 already mentioned, we study patterns in populations. And today
23 we'll be discussing the patterns of fatalities, vessel sinkings,
24 and survival factors associated with fishing vessel sinkings that
25 have occurred in Alaska.

1 Our work should be used to inform this Marine Board of
2 Investigation in making their recommendations to reduce risk in
3 the commercial fishing industry in Alaska and elsewhere in the
4 country.
5 So let's go ahead and get started. You can advance to the
6 next slide.
7 Usually when I present to most anybody, I have to start out
8 by explaining what NIOSH is and who we are and who we aren't.
9 NIOSH is part the Department of Health and Human Services. We are
10 part of the Centers for Disease Control and Prevention, or the
11 CDC, and we are a research organization that makes prevention
12 recommendations.
13 NIOSH is not OSHA. I put OSHA on the slide to show that they
14 fall under the Department of Labor, and they are regulators and
15 enforcement -- and have enforcement officers. And then of course,
16 the U.S. Coast Guard, I put on the slide as well, since they do --
17 since you do have jurisdiction over the safety of the fishing
18 fleet, and are located under the Department of Homeland Security.
19 Next slide, please.
20 The work that Samantha and I will discuss comes out of our
21 Commercial Fishing Safety and Research and Design Program. This
22 design program, or this research program was established in about
23 2007, and is part of the Center for Maritime Safety and Health
24 Studies. Our work is scientific research on safety problems and
25 solutions in the fishing and other maritime industries. We

1 provide high quality and relevant information, and our research
2 findings have been used by the fishing industry, by other
3 government agencies, marine safety trainers and marine safety
4 advocates.
5 Next slide, please.
6 Our work can be found on the NIOSH website. The work is
7 broken down into different types of hazards that we have
8 investigated, as well as different regions of the country. We
9 know that regions vary, or regions and risks vary, depending on
10 the type of fishing gear that's used, the vessels that are being
11 fished from, as well as the location and weather, local weather
12 conditions where things occur. So, our data and our information
13 is divided up for easy access by region of the country.
14 Next slide, please.
15 NIOSH values, highly values our partnership with the U.S.
16 Coast Guard. We have a memorandum of agreement with the Coast
17 Guard that was latest, that was most recently renewed in 2019.
18 This grants one NIOSH scientist, in this case, Samantha, with U.S.
19 Coast Guard credentials as a federal affiliate. This allows us
20 access to the MISLE system to manually review cases that the Coast
21 Guard investigates.
22 We conduct statistical analyses of this data, and we share it
23 with the Coast Guard through this memorandum of agreement. And we
24 also use our statistical analyses to identify causes of hazards
25 leading to deaths and injuries in the fishing fleet.

1 Next slide, please.
2 Samantha and I are going to be talking a lot about data
3 that -- in the next 45 minutes or so. And I wanted to explain,
4 the data are found in NIOSH Commercial Fishing Incident Database.
5 And the way that these data are collected and entered into the
6 data is illustrated here in this flow diagram.
7 First a marine casualty occurs, and the casualty is hopefully
8 reported to the U.S. Coast Guard. The Coast Guard investigates
9 that casualty, and then NIOSH reviews that report, and we record
10 the information and code it to enter it in to the Commercial
11 Fishing Incident Database.
12 Next slide, please.
13 So the overview of our talk today will start with a summary
14 of the Alaska fishing industry fatalities that have occurred,
15 really since 1990. Then we're going -- and Samantha will be
16 presenting that. Then I will go in-depth into the safety focus of
17 the Bering Sea/Aleutian Island Crab Fishery. This is at the
18 request of the Marine Board of Investigation, and our initial
19 talks, I think, back in December or January when we first
20 discussed doing this presentation to the Board.
21 Then Samantha will talk about two key research studies that
22 she's completed with others on our team recently, talking about
23 vessel disasters and survival factors. And then finally, we've
24 put all of our recommendations into one summary at the end, that
25 I'll be presenting. So, I'll go ahead and turn it over to

1 Samantha.
2 Next slide, please.
3 MS. CASE: Thanks, Jennifer. Good morning, everybody. So,
4 this first section, we'll be talking about fatalities in Alaska's
5 fishing industry really to provide some history and context around
6 these incidents.
7 Next slide, please.
8 This chart shows the number of fatalities that have occurred
9 in Alaskan waters each year in Alaska from 1990 through 2019, so a
10 30-year period. As Jennifer mentioned at the outset of this
11 presentation, even one fatality is too many, and these tragedies
12 continue to occur. However, I do want to acknowledge the
13 remarkable progress that has been made in the fishing industry
14 since the 90s. We overall have seen a 69 percent decline in
15 fatalities over this 30-year period, and it's just, its pretty
16 remarkable.
17 Next slide.
18 So I want to explore some of the factors that have
19 contributed to such a decline, and I'll kind of walk through these
20 briefly, top to bottom, left to right. So first there are the
21 Commercial Fishing Vessel Safety Act of 1988. The regulations
22 that arose from that legislation were implemented in the early
23 90s, which certainly had a major effect on preventing fatalities
24 among this workforce.
25 We've also seen pretty substantial changes in fisheries

1 management regimes. So as Jennifer will mention and discuss a
2 little bit later on, the way fisheries are managed can directly
3 and indirectly affect safety for fishermen. The examples
4 highlighted here with the arrows are referring to halibut, go into
5 IFQs, the American Fisheries Act for pollack, the pollack fishery,
6 and Bering Sea Crab Rationalization, that Jennifer will discuss.
7 The next two are some specific examples of Coast Guard safety
8 initiatives. They're really excellent examples of the Coast Guard
9 working directly with industry to develop targeted safety programs
10 for specific fisheries and their specific safety problems. So
11 that includes things like the stability checks for the crab fleet,
12 and the ACSA program for the head-and-gut fleet.
13 And just overall, as we see on the bottom, we've seen an
14 overall expansion of marine safety training, getting fishermen
15 trained, seafood companies and even down to individual vessels,
16 where they (indiscernible) safety programs and policies, and an
17 overall improved safety culture in the fleet.
18 Next slide
19 So, the syllabus that in the next few, it's going to narrow
20 down. So we're both going to focus on the 20-year period of 2000
21 to 2019. So, we're removing the 1990s data. During this 20-year
22 period, we lost 237 fishermen in Alaska. This figure here breaks
23 it down by the incident type that resulted in those fatalities.
24 So, we can see the leading contributor to fatalities are vessel
25 disasters.

1 You'll hear this term throughout the presentation. That's
2 our NIOSH definition of a catastrophic vessel event that results
3 in the crew needing to abandon the vessel. These are things like
4 sinkings, capsizings, some groundings, some fires, anything
5 requiring the crew to abandon. And that, we see that's
6 contributed to 44 percent of these fatalities.
7 Next, in blue we have fatal falls overboard at 29 percent,
8 onboard fatalities at 16 percent in yellow. These are referring
9 to both operational fatalities, such as contact with gear or
10 machinery, as well as nonoperational fatalities that happen
11 onboard the vessel, such as suicides and drug overdoses. Less
12 frequent, we have onshore fatalities at 7 percent, is typically
13 falls from docks, and 4 percent diving fatalities, primarily among
14 dive harvesters and cucumber and urchin fisheries.
15 Next slide.
16 So, as you may recall from a few slides ago when we were
17 showing the number of fatalities that occurred each year, there's
18 quite a bit of variability. We expect a lot of fluctuations in
19 the raw numbers each year. So this kind of smooths it out a
20 little, so we can do some easier comparisons. So you'll see that
21 we've broken the 20-year period down into four 5-year periods.
22 And just briefly, we want to talk about how these incident types
23 have changed over time.
24 So you can see, falls in 2000 and 2004, as well as 2005 to
25 2009, vessel disasters were the leading cause of fatalities in

upwards of 50 percent. But then in 2010 to 2014, and even 2015 to 2019, we do see that decrease a little, going down closer to about, representing 30 percent of fatalities within those respective time periods. And in fact, in 2010 to 2014, primarily what we were seeing was skiff capsizings, not vessel disasters involving decked catcher vessels.

Falls overboard, in blue, have been a persistent problem throughout, and of note, you'll see that the yellow, the fatal onboard injuries have increased in recent years. This has been primarily driven by the nonoperational fatalities, the suicides and drug overdoses.

Next slide.

This is breaking down the fatalities by Alaskan fisheries, so we look at species and gear type in Alaska. These nine fisheries are representing 74 percent of all fatalities. So, just walking through this very briefly, the salmon set gill net fishery has the highest number of fatalities during this period. And as you can see by the blue bar, they're primarily driven by falls overboard.

And then next we have pot cod, again with the red being vessel disasters. So trawl, again, vessel disasters. These were primarily catcher processor vessels, so incidents with, for example the *Arctic Rose* and *Alaska Ranger*. Salmon set gill net, primarily affected by skiff capsizings, halibut longline, cod longline, salmon tenders, a mix of events resulting in fatalities. Bering Sea crab, you know, primarily vessel disasters involving

1 the *Big Valley* and *Destination*, and then dive fatalities with the
2 dive harvesters.
3 Next slide.
4 So, in our Commercial Fishing Incident Database, we can
5 really dig into vessel disaster events. So, by using a Coast
6 Guard investigative report, we can try to take these very complex
7 events and try to categorize them into a sequence of events, and
8 try to narrow down what factors may have contributed to the
9 events.
10 So, in our Commercial Fishing Incident Database, we try to
11 list the initiating events, any subsequent events and the final
12 events. So an example is shown on the right. So an initiating
13 event could be a loss of steering. Then the vessel could run
14 aground, have some flooding, but ultimately, if the vessel is
15 grounded, you know, that's the final event.
16 We try to track contributing factors, for example, human
17 factors. So we're looking at, was weather a contributing factor
18 to the incident? Was fatigue a contributing factor? We try
19 capture those where possible when they've been identified in the
20 Coast Guard report.
21 Then, specifically for flooding and instability, we try to
22 capture a little more detail. If a flooding occurs, we look at
23 type of flooding. Was it downflooding, or flooding below the
24 water line? Cause of flooding, was there an open hatch? Location
25 of flooding, did it happen in the engine room, if that's known?

1 And then for instability, what was the cause of the instability,
2 which can include things like overloading, icing, structural
3 modifications, things like that.
4 Next slide.
5 So very briefly, just to show what we've seen with initiating
6 events of fatal vessel disasters. So these, this is at an event
7 level, not a fatality level. So you saw, there were over a
8 hundred fatalities due to vessel disasters. Those occurred during
9 these 47 events.
10 So, next slide highlights how instability is the leading
11 initiating event in these fatal vessel disasters, with 13 events.
12 So again, we're working with fairly small numbers, but we can see
13 that there, 10 of these 13 events were associated with overloading
14 of the vessel, the vessel operating in that overloaded condition.
15 Next slide.
16 And then we have flooding here for five fatal events, just as
17 the initiating event. And what I saw when I looked at these five
18 events was that it was common for details about the flooding to be
19 unknown.
20 Next slide.
21 And with that, I will hand it back to Jennifer.
22 DR. LINCOLN: Okay, thank you, Samantha.
23 So, let's go ahead and advance three slides forward. That's
24 hard to say.
25 So I want to show a photo montage of vessels lost, and this

1 newspaper article is from the 1990s. I'm going to take you back
2 just a little bit to the early 1990s, and sort of set the stage
3 for what the Bering Sea Crab Aleutian Island fleet was, the
4 casualties that they were experiencing.
5 So in 1990 we lost vessels like the *Pacific Apollo* and three
6 lives. In 1991, we lost the *Barbarosa* and six lives. In 1991 we
7 also lost the *Harvey G* with four additional lives.
8 Go ahead and go to the next slide.
9 This type of headline, the Coast Guard was investigating a
10 vessel vanishing, and was unfortunately -- it was unfortunately
11 very common. In the early 1990s, we also lost the *St. George* with
12 four lives, the *Massacre Bay* with three, the fishing vessel *Nettie*
13 *H* with another five.
14 Let's go to the next slide.
15 On October -- I'm sorry, on January 15th, 1995, the *Northwest*
16 *Mariner* sank. This was a highline vessel that was, that sank with
17 six people onboard. While two crew members were recovered in a
18 life raft, both of them were deceased. After this tragedy, the
19 Coast Guard began to assign two 378s to the Bering Sea during the
20 fall and winter crab season
21 Let's go to the next slide.
22 The day before the start of the opilio season in 1996, the
23 *Pacesetter* sank. It was another Seattle-based crab boat. It
24 capsized with seven hands lost. With the new crab fleet, this was
25 the single worst fatality since the sinking of the A-boats, the

1 *Americus* and the *Altair* in 1983.
2 The Coast Guard continued to add resources to the Bering Sea,
3 and by the beginning -- by beginning to pre-stage helos in Cold
4 Bay and St. Paul prior to the start of the fall and winter crab
5 fishing seasons. By January of 1999, the Coast Guard had never
6 had so many resources in the Bering Sea for a single fishery.
7 They had two 378s and H-60s in St. Paul.
8 Let's go to the next slide.
9 In March, on March 18th of 1999, the *Lin J* quickly rolled
10 over, fully loaded, in icing conditions. The Coast Guard Cutter
11 *Hamilton* arrived on scene 50 minutes after the mayday and found no
12 survivors.
13 Let's go to the next slide.
14 Going through that photo montage and newspaper clippings, I
15 hope kind of set the, I don't know, the impact of what was going
16 on in the Bering Sea/Aleutian Island crab fishery, and the
17 fatalities that were being experienced in the 1990s. This
18 graphically shows what I just went through, the red portions of
19 the bars showing the lives lost due to vessel losses.
20 There were other lives lost as well, due to falls overboard,
21 represented in the gray parts of the bars. And then, yellow parts
22 of the bars here represent crewmen that were lost when they were
23 crushed by crab pots or when they fell into a fish hold. But we
24 were losing an average of eight lives each year.
25 The patterns that were emerging were that these vessels

1 were -- these capsizings were occurring usually the first day of
2 the opilio fishery, when the vessels were maximized, they were
3 fully loaded. And the investigations that the Coast Guard went
4 through found that several of the boats were overloaded.
5 So, the Coast Guard in D17 realized, identified that what was
6 needed was to stop overloading of these vessels in the first
7 place. And the Coast Guard program then was developed
8 collaboratively with industry and safety organizations and
9 fisheries managers and naval architects, was the stability and
10 safety checks that we've heard about before. And they were going
11 to conduct these stability and safety checks by accompanying the
12 Alaska Department of Fish and Game on tank checks.
13 So let's go to the next slide.
14 The way that this was put together, and the way it was
15 designed, was that the Coast Guard would travel to main crab ports
16 with -- and get onboard boats. So at that time, there was a
17 start. You know, we had an October 15 start time, and we had a
18 January 15 start time for those two fisheries to start. That was
19 the starting line, so to speak.
20 The Coast Guard personnel would get onboard and they would
21 check the stability reports. And if the vessels weren't loaded
22 properly, then they were -- then they needed to be, that needed to
23 be fixed. When my colleague, Chris Woodley presents this
24 information, he talks about how dangerous it was to climb onboard
25 crab pots and go out the raft, to get to the other, to get to the

1 other boats that were rafted further away from the dock.
2 But that was dangerous, but the real stress was within a
3 wheelhouse, when they had to talk to operators about how their
4 vessels were loaded. And then there were other vessels -- when
5 the Coast Guard started doing this, and they saw that the vessels
6 that they were on had to unload pots, other vessels started
7 unloading pots before the Coast Guard got to their vessels to
8 check their stability reports.
9 Let's go to the next slide.
10 When they first started, when the Coast Guard first did this,
11 in October of '99, within three days they had climbed onboard 50
12 percent of the fleet in Dutch Harbor, and reviewed 75 stability
13 letters with the vessel operators. Two vessels detected in
14 overloaded conditions were that -- there were two vessels detected
15 in overloaded conditions in the first hour.
16 The problem was corrected at the dock, prior to the start of
17 the season. And vessels could correct deficiencies before they
18 had to start, before they went underway, so it wasn't interfering
19 or impacting operations. And again, Mr. Woodley reports this, he
20 talks about the after action report being put together and made
21 available to the North Pacific Fishery Management Council, the
22 December meeting that occurred just two months after they did this
23 work.
24 And leaders in the crab industry publicly proclaimed to the
25 Council that they left -- or that they felt that the Coast Guard,

1 that the Coast Guard's presence on the dock presents, was
2 significantly, or did significantly deter the overloading
3 behavior. So it was a success. The industry liked it.
4 So let's go to the next slide.
5 So this slide expands that timeline that I just showed
6 earlier. We had the decade of the 90s, and then in October of
7 1999 the Coast Guard started these stability and safety checks.
8 And from this '99/2000 season until the 2004/2005 season, we had
9 one vessel loss that occurred. And again, one is -- one, even one
10 is too many. That was the *Big Valley* sinking, and they had not
11 gone through the stability check with the Coast Guard prior to
12 their departure from the dock. The other three fatalities that
13 occurred during this time period were fatal falls overboard.
14 Now a lot of people talk about the importance of crab
15 rationalization, and how the rationalization of that fishery
16 improved and reduced safety -- reduced occupational risk. And I
17 agree with that.
18 Let's go to the next slide.
19 The stability checks certainly have an impact, as well as
20 Coast Guard presence that I mentioned earlier. And then in 2005,
21 the Crab Rationalization Program started.
22 Let's go to the next slide.
23 So, when a quota-based or rationalized management system is
24 put in place, it comes in a variety of different terms. We talk
25 about IFQs. We talk about rationalization. We talk about quota

1 systems. All of that, what I am talking about is that there's an
2 allocation of the catch that's given to either a person, or a
3 vessel, or somehow defined.
4 And it ends the race to fish. So instead of everybody trying
5 to go out and catch as much as they can until the total allowable
6 catch is reached, it's divvied up and allocated to either vessels
7 or individuals, or some other entity. What this typically does is
8 it results in a consolidation of the fleet. It lengthens the
9 total period of time that fish are able to be caught.
10 It does provide, or should provide flexibility to avoid bad
11 weather, so that operators can choose when they're going to fish.
12 And it allows investment in vessel, and in the crew, and in the
13 overall operation. So those are the general advantages that are
14 thought to exist when a quota-based management system is put in
15 place.
16 Something though, that's in the literature by others who have
17 researched the impacts of safety due to these systems, is that
18 there are unintended consequences. And there is evidence that
19 shows that there is a race for catch history that occurs prior to
20 a fishery being converted into a quota-based management system.
21 Let's go to the next slide.
22 So, something that the, that has to be done when a rationalization
23 or quota system is put into place in a federal fishery, is that it
24 has to be reviewed every five years. And when the BSAI Crab
25 Rationalization Program came up for review that first five-year

1 period, myself and at the time CDR Chris Woodley looked at the
2 safety impacts that rationalization had on the Bering Sea/Aleutian
3 Island crab fleet. And so I can report on what we found and what
4 we reported to the Council here in the next few slides.
5 Let's go to the next slide.
6 So when you think about rationalization and the Bering Sea
7 crab fleet, we have to think about where, you know, what might we
8 look at to see if risks were reduced. This is a winter fishery.
9 It is occurring in cold temperatures with icing, high-wind seas
10 and poor weather, many times.
11 Prior to rationalization, there were vessels that were
12 anywhere from, some of them were less than 85 feet in length, and
13 then there were many that were over 125 feet in length. At the
14 time, the season lengths were shrinking. There was a race to
15 fish. Some of the those, some of those fisheries were down to
16 just a couple of days until the total allowable catch was reached,
17 and they shut down, they shut down fishing.
18 These vessels were minimally crewed, with five to seven
19 people. And the pots were 750 to 850 pounds empty, with no ice,
20 and loaded three to five tiers high. So, if we think about the
21 situation of how this, what these vessels were, and how they were,
22 what type of conditions they were operated in, we then tried to
23 figure out, what are the factors that rationalization had, that
24 may have reduced some of these occupational risks? And we were
25 able to find some numbers to support some of our hypotheses.

1 So let's go to the next slide.
2 We looked at information about how the fleet consolidated,
3 and indeed it did, I think by like about 60 percent. And if we
4 look at -- this table is -- I tried to show the two fisheries, the
5 Bristol Bay red king crab and the Bering Sea opilio crab. I then
6 divided things into the size of the vessel. And so vessels that
7 were less than 85 feet in length, in the Bristol Bay, that had
8 participated prior to rationalization, 93 percent of them dropped
9 out of the Bristol Bay red king crab fishery, and all of them
10 dropped out of the opilio fishery.
11 Vessels 85 to 100 feet, there was a 77 percent reduction, and
12 then a 71 percent reduction in the number of vessels that were
13 that size that continued to participate after rationalization.
14 Vessels that were 100 to 125 had a 66 and a 68 percent reduction,
15 and indeed we also, there were also vessels that dropped off that
16 were the largest, with 62 percent of them dropping out of the
17 fishery, as well as then 53 percent coming out of the opilio
18 fishery. So vessels dropped out, and the smaller the vessel, the
19 more frequent they dropped out of the, of participating in the
20 rationalized fishery.
21 Let's go to the next slide.
22 We also looked at vessel days. And so remember, 2005,
23 October of 2005 is when the rationalization program was put into
24 place. When we look at the number of fishing days from 2001 to
25 2005, it had gotten to around five, for each of those fisheries.

1 And then you can see, after rationalization, the average number of
2 days fished greatly increased. So the number of days that there
3 was actually fishing taking place increased.
4 Let's go to the next slide.
5 The fishery pace also slowed. We looked at the average pot
6 lifts per vessel day, and there was a 32 percent decline in red
7 king crab and a smaller decline, but still a decline in the opilio
8 crab fishery. So there were fewer pots lifted per vessel day.
9 Next slide, please.
10 And then anecdotally, we knew that departures were delayed.
11 We also acknowledge that the vessel cooperatives were formed. And
12 this is a great tool to further reduce risks. It gives members
13 the ability to transfer quota to avoid bad weather. And then too,
14 the Coast Guard stability checks, because those continued, there
15 was also recorded fewer pots were being carried on vessels at that
16 time.
17 Let's go to the next slide.
18 So, to summarize, the fatality rates decreased several
19 seasons before rationalization started, and that was shown, that
20 was shown by the stability and safety checks. But the
21 rationalization program continued to control risks, and there were
22 no vessel losses for many years. There was increase in fishing
23 season length. There were fewer smaller vessels. There were
24 vessel cooperatives that were formed. There was a decrease in
25 pots carried and a decrease in pot lifts per day.

1 Let's go to the next slide.
2 So, when crab rationalization started in 2006, and for the
3 next five years, we did have one fatality in the Bering
4 Sea/Aleutian Island crab fishery that was related to a fatal fall
5 overboard. But there were no, there were no vessel losses that
6 occurred during this five-year period.
7 Let's go to the next slide.
8 So rationalization ended the race to fish. It increased
9 flexibility. Vessel operators can choose to avoid poor weather.
10 This -- and you've already learned, and perhaps knew before, that
11 there are mandatory decals that the state requires, and there's
12 also the departure reporting that the state requires. And the
13 stability and safety checks continue, although they can't be
14 implemented the same way that they were pre-rationalization
15 because they don't have that, you know, exact start time. I'm
16 thinking primarily for the January start date for opilio crab.
17 Let's go to the next slide.
18 In 2007, with the first time Mr. Woodley and I told the
19 story, was for the incident of the loss of the *Destination*. So,
20 since rationalization, there has been one vessel loss since that
21 program has been started. And I just want to note that the, you
22 know, crab fishing still takes place in a very dangerous
23 environment.
24 Let's go to the next slide.
25 Winter fishing in Alaska, there's cold water, there's

1 darkness, bad weather, and pots, and icing, and stability issues.
2 All of that still exists, even in a rationalized fishery. These
3 guys are also working long hours. There's 24-hour operations,
4 extended shifts, there's sleep deprivation involved. So, until
5 these kinds of things can be -- well, we can't eliminate all of
6 these things from a winter crab fishery, so we have to continue to
7 make sure that our safety policies and programs are in place to
8 help reduce the risk where we can.
9 Next slide, please.
10 These winter fisheries, there's also a continued desire to
11 minimize days at sea, to reduce operational costs. There are also
12 competing priorities with meeting delivery deadlines. It's -- the
13 Bering Sea/Aleutian Island Rationalization Program is a
14 complicated program, where they match vessel quotas with
15 processing plant quotas. It's a complicated system.
16 And I understand that a schedule prevents everyone from
17 delivering at once, and there has to be a schedule, but it's --
18 but we can't ignore the pressure of meeting various deadlines.
19 And then there's also other priorities that crews have, and
20 operators have, that aren't necessarily related to the operation
21 of a fishing vessel.
22 So, I think that that's the, I think that's the end of the
23 section. I will -- we have taken a deeper dive into looking at
24 the vessel casualties and nonfatal events that have occurred in
25 the Bering Sea/Aleutian Island crab fleet, and I will point that

1 out when we get to the recommendation section of the presentation.
2 So, let's go to the next slide, and to Samantha.
3 MS. CASE: Thanks, Jennifer. So, in this next section, I'll
4 provide some background and the findings from two studies that we
5 recently published, related to vessel disasters and survival
6 factors.
7 Next slide.
8 So, these two studies were published fairly recently, one in
9 2020, one in 2018, that took a more specific look at fishing
10 vessel disasters in Alaskan waters. So they really asked two
11 different questions. The first one that I'll talk about asked, do
12 vessel-related characteristics predict vessel disasters? Is there
13 any type of association there? So we were primarily interested in
14 a history of prior reported vessel casualties, but we also looked
15 at other vessel characteristics, which we'll talk through. And
16 then second, if a vessel sinks, what factors improve survival
17 chances? So we'll talk through both of these.
18 Next slide.
19 But first we'll start with this, "Predicting Commercial
20 Fishing Vessel Disasters," and looking at the vessel
21 characteristics.
22 Next slide.
23 So, for this study, our approach was essentially to compare
24 vessels that had been involved in disasters to those that were
25 not. So, I use this kind of language, and these icons throughout

1 the slides, but essentially the cases, the case vessels, these are
2 vessels that we have in our Commercial Fishing Incident Database,
3 that between 2010 and 2015, they had been involved in a vessel
4 disaster event in Alaskan waters. So again, these are events like
5 sinkings, capsizings and other events that require the crew to
6 abandon the vessel.
7 The controls, what we'll call the control vessels, these were
8 vessels that were active in Alaska during that same time period,
9 2010 to 2015, but did not experience a vessel disaster during that
10 period. So, unfortunately we weren't able to get these vessels
11 from landings data, but we did use permits and license information
12 from the State of Alaska and National Marine Fisheries Service.
13 And then to strengthen this, these comparisons, for each case
14 vessel, we selected three controls. And that really just
15 strengthens the comparisons we can make and conclusions we can
16 make from the findings.
17 Next slide.
18 So this is just a brief rundown of the characteristics that
19 we included in the study. As I mentioned, the reported vessel
20 casualty history was something new for us, that we wanted to look
21 into. So, to clarify here, vessel disasters are a type of vessel
22 casualty. They're the most serious types. But for the purpose of
23 this study and this presentation, I'm going to keep them separate.
24 So a vessel disaster are those, you know, really serious
25 events requiring abandonment. So only the case vessels were

1 involved in vessel disasters. The control vessels were not. But
2 for both groups of vessels, we looked into their vessel casualty
3 history.
4 So we used the Coast Guard's MISLE system to look up these
5 vessels and see if they had reported some of these less serious
6 vessel casualties like loss of power, loss of propulsion, loss of
7 steering, minor groundings, minor fires, minor flooding in the,
8 within the previous ten years from when they were included in the
9 study. We also looked at whether or not they had a fishing vessel
10 safety decal, if they were federally documented or state
11 registered. We looked at vessel age, vessel length, and hull
12 material.
13 Next slide
14 So, the next few slides, you're going to see these pie
15 charts, so just quickly visualize the differences between the
16 cases, those disaster vessels and the controls, the non-disaster
17 vessels. So this is looking specifically at ten-year casualty
18 history. And what I want to point out here is that you can see
19 that for cases, so the vessels that had been involved in
20 disasters, 25 percent of those vessels were, had vessel casualty
21 reports to the Coast Guard in the previous ten years. That's a
22 bit higher than the controls, at 9 percent, but overall you'll see
23 that many vessels didn't have any vessel casualties reported to
24 the Coast Guard.
25 Next slide.

1 Here is documentation status. Between cases and controls,
2 you can see it's fairly consistent, as far as whether they're
3 federally documented or state registered. And overall, we can see
4 for the fleet, the sample included in the study, that they're
5 predominantly federally documented.
6 Next slide.
7 Here we looked at safety decal. We broke it down into three
8 categories, current, expired or none, they have never had a decal.
9 And the difference I want to point out here is in the expired
10 category, so it's that middle slice of the pie, kind of that blue
11 color, where cases had a higher proportion of vessels with expired
12 decals of 32 percent, compared with controls, at 22 percent.
13 Next slide.
14 Here we're looking at vessel age. We broke it down to under
15 25 years and 25 years or older, again, very comparable between
16 cases and controls, and you can see from that light blue color
17 that the majority of the fleet is, consisted of older vessels,
18 above 25 years.
19 Next slide.
20 Now we broke it down by vessel length, under 50 feet, 50 to
21 78 feet, and 79 feet or greater. We do see some differences
22 between cases and controls here. Controls tended to be under 50
23 feet, and the cases tended to be a little bigger, with 31 percent
24 being 50 to 78 feet, and 9 percent being 79 feet or greater, which
25 are bigger proportions than in the controls.

1 Next slide.
2 And lastly, just looking at hull material between cases, the
3 disaster vessels and the controls. Controls were made up more of
4 vessels with fiberglass hulls or aluminum hulls, whereas the case
5 vessels had higher proportions of steel hulls and wooden hulls.
6 Next slide.
7 So, the main messages from our statistical comparison were
8 that vessels involved in disasters were three times more likely to
9 have reported vessel casualties in the previous ten years. They
10 were also 2.4 times more likely to have an expired fishing vessel
11 safety decal. What we've pondered about this and what warrants
12 further study is if this is really indicative of larger safety
13 problems on a vessel such as poor safety culture or climate, lack
14 of routine maintenance, things like that.
15 We also found that vessels involved in disasters were 3.3
16 times more likely to have steel hulls, and this really could be
17 indicative not directly about the hull material but rather the
18 types of fishing operations that occur with these vessels, for
19 example, participating in winter fishing and/or fishing farther
20 offshore, in more serious weather conditions.
21 Next slide.
22 So our conclusions from this study was that we felt it really
23 provided support for some Coast Guard-led initiatives for the
24 Alternate Safety Compliance Programs that kind of turned into the
25 Voluntary Safety Initiatives and Good Marine Practices. You know,

1 this was a safety guidance for unclassed vessels over 50 feet and
2 over 25 years.
3 Similar to the ACSA program for the head-and-gut fleet, you
4 know, this has a lot of good guidance about checking and
5 maintaining vessel systems and the seaworthiness of the vessel,
6 and I think this is very applicable here, as well as the Coast
7 Guard's dockside examinations. You know, our findings related to
8 having a expired vessel, fishing vessel safety decal was striking,
9 and it really shows the importance of these dockside examinations
10 and having lifesaving equipment maintained and really being able
11 to connect the Coast Guard and industry members.
12 Vessel casualties was something that was looked at. It's
13 kind of new for us, having identified this as kind of a risk
14 factor, so again, highlights the importance of really having and
15 adhering to a preventive maintenance plan and schedule. And when
16 vessel casualties do occur, even minor ones, loss of power, loss
17 of propulsion, things like that, ensuring that complete repairs
18 are made and sea tested is really important.
19 Next slide.
20 So this next study was answer -- trying to answer the
21 question, if a vessel does sink, what factors would improve
22 someone's chances of survival?
23 Next slide.
24 So before and after this, going through this study is going
25 to be pretty much the same. The study approach, rather than

1 looking at vessels or events, we really wanted to focus on the
2 survivors and the victims of these events. When we do these kinds
3 of comparisons, we can see, you know, what's different, and that
4 can help target our prevention efforts. So for this study, we
5 used decked commercial fishing vessels that had been involved in
6 sinkings and capsizings in Alaskan waters over a 15-year period.
7 Next slide.
8 And here is a list of survival factors, or potential survival
9 factors that we looked into for this study. What I want to
10 highlight here is that we looked at it in kind of three different
11 layers. First was crewmember-related characteristics, so were
12 they able to get into an immersion suit, were they able to use a
13 life raft? Did they have a history of marine safety training?
14 What was their job position?
15 We then looked at some event characteristics, like distance
16 from shore, did heavy weather contribute to the event, in which
17 region of Alaska did the event occur and in which season. And
18 also, we looked at some vessel-related characteristics as well,
19 such as weight, length, age and hull material. So I'm not going
20 to go through the results for all of these. There were some that
21 I wanted to show the Board.
22 Next slide.
23 So overall, in this 15-year period, we had 187 total vessel
24 disasters that we included in the study. The majority of them,
25 164 were non-fatal, which meant luckily all crew members were

1 rescued from these vessel events. However, 23 events resulted in
2 one or more fatalities among the crew members.
3 Next slide.
4 So, this is showing some event characteristics. So this is
5 weather-related, so was the event related to heavy weather? And
6 you can really see the stark difference between the fatal vessel
7 sinkings and the non-fatal vessel sinkings. Sixty-one percent of
8 the fatal vessel disasters were related to heavy weather, much,
9 much lower among the non-fatal vessel disasters at 24 percent.
10 Next slide.
11 Again, looking at distance from shore of these events, we
12 broke it down between 3 miles or closer to shore, and greater than
13 3 miles from shore. For fatal events, we -- again we're seeing
14 this kind of stark difference between these fatal and non-fatal
15 events. So for the fatal vessel sinkings, about three quarters of
16 them happened farther offshore, greater than 3 miles, compared to
17 the non-fatal events. That drops down to 29 percent.
18 Next slide.
19 Now I'm looking at some crew member characteristics. So this
20 is immersion suit use. This is where we're comparing the victims
21 and the survivors. So victims are on the left, survivors on the
22 right. And this is showing that for victims, about half were able
23 to get into an immersion suit, whereas 70 percent of survivors
24 were able to get into an immersion suit.
25 And just to note that we tried to obtain this information

1 from Coast Guard investigative reports, witness statements, even
2 media reports, and immersion suit use was missing for many, many
3 crew members, about 60 percent. They're not reflected in these
4 percentages here.
5 Next slide.
6 This is showing life raft use differences between victims and
7 survivors. So, only 7 percent of victims were able to enter a
8 life raft, whereas 30 percent of survivors were able to enter a
9 life raft. And we do have some missing information for life raft
10 use as well.
11 Next slide.
12 And here we can see some really stark differences regarding
13 time spent in the water for victims and survivors. So for
14 victims, 95 percent of them were in the water greater than 30
15 minutes. For survivors, 55 percent of them, you know, weren't,
16 didn't spend any time in the water. Thirty-five percent were in
17 the water somewhere between 1 and 30 minutes. So this difference
18 in the time spent in water was something that was, you know,
19 interesting for us to look into more.
20 Next slide.
21 So because of this time-in-water difference that we saw, we
22 kind of wanted to break this down even further. So, in all of
23 these vessel disaster events, we had a total of 617 fishermen at
24 risk. We knew whether or not they entered the water for 545 of
25 them. And then, going to the right, they're split pretty evenly

1 between whether they entered the water or not. So we'll break
2 these down even further.
3 Next slide.
4 And so on the left are 276 fishermen who had to enter the
5 water. And on the right were those that did not enter the water,
6 so they abandoned the vessel directly into some other, you know,
7 some other, like a helicopter, they were able to get directly into
8 a life raft, things like that.
9 So, where we see the biggest difference between survival
10 status, whether someone survived the event or whether they died
11 was after they entered the water. So that's what we really wanted
12 to focus on.
13 Next slide.
14 So, for all the crew members who entered the water, this is
15 for any length of time, they were 17 times more likely to survive
16 if they were able to enter a life raft. They were six times more
17 likely to survive if the sinking was not related to heavy weather.
18 Next slide.
19 Then we wanted to look at the long-term cold water immersion.
20 So, this is specifically for crew members who were in the water
21 for 30 minutes or longer. So this is a subset of those crew
22 members. We found that these crew members were 26 times more
23 likely to survive if the sinking was not related to heavy weather.
24 They were 12 times more likely to survive if they entered a life
25 raft, and six times more likely to survive if they wore an

1 immersion suit.
2 Next slide.
3 So our findings from this are really showing that avoiding
4 cold water immersion is best. Of course being able to abandon to
5 a helicopter or a life raft directly improves chances of survival,
6 so this is really important for early recognition of emergency
7 situations, communication with the Coast Guard and near --
8 potentially nearby good Samaritan vessels, things like that.
9 Additionally, I think our findings show that the use of life
10 rafts and immersion suits saves lives. This really highlights the
11 need for periodic safety training and doing drills routinely,
12 making them as hands-on and realistic as possible. In addition,
13 this equipment, this lifesaving equipment needs to be, you know,
14 well maintained, in good condition, and it must be easily
15 accessible for the crew. Some of these events can happen
16 extremely rapidly, and this equipment must be accessible for the
17 crew members to get to in an emergency.
18 And lastly, we saw that heavy weather can impact chances of
19 survival. Heavy weather can contribute to the disaster occurring
20 in the first place, but it can also hinder search and rescue,
21 could result in crew members needing to be in the water or on life
22 rafts for longer periods of time, and keeping them in these risky
23 situations.
24 And with that, next slide, and I'll hand it back to Jennifer
25 to wrap up.

1 DR. LINCOLN: Okay. There, I'm off mute. I will go ahead
2 and wrap it up. To provide these safety recommendations, Samantha
3 and I and our colleague Casey Elliot (ph.) went through the
4 various NIOSH recommendations that have been made in a variety of
5 different publications that we have. And so let's go to the next
6 slide and I'll briefly go over some of the recommendations and
7 where they come from.
8 As I mentioned earlier, we have done a full report on the
9 assessment of safety in the Bering Sea and Aleutian Island crab
10 fleet. This covered the time period from post rationalization
11 from 2005/06 season to the 2012/2013 season. And this can be
12 located here on the link of the slide.
13 The next -- let's go to the next slide.
14 This just goes through the prevention of vessel disasters and
15 serious vessel casualties that we made in that ASAI crab report,
16 and that includes participation of the Coast Guard at the docks,
17 stability and safety and compliance checks, periodically
18 consulting naval architects to refresh knowledge of safe loading
19 movements and adhering to stability instructions, updating and
20 formalizing maintenance procedures, and all crew members taking an
21 eight-hour marine safety class at least every five years.
22 Let's go to the next slide.
23 Other primary prevention strategies that NIOSH has shared and
24 made -- in this case, this is NIOSH policy, it includes from the
25 1997 current intelligence bulletin where NIOSH made the

1 recommendation to require stability reassessment, and at that time
2 we called them vessel inspections of all vessels that should be
3 seriously considered, as well as equipment, equipping and
4 retrofitting that can substantially affect the stability of
5 vessels. And then that, this recommendation can be found in this
6 publication link here on the slide.
7 Let's go to the next slide, please.
8 As far as our recommendations related to fisheries
9 management, we have made these recommendations because many
10 factors may influence operational decisions related to the weather
11 conditions, including fishery management policies. Economic
12 pressures generated by certain fishery management policies can
13 play an important role in the decision-making made by vessel
14 operators to fish in severe weather or other operation
15 considerations.
16 And then there's -- it's also important to recognize that
17 anticipated changes in policies, such as going from a Olympic
18 style fishery to a rationalized fishery could result in a race for
19 catch history. So when creating and modifying fishery management
20 policies, policy-makers should consider the potential safety
21 repercussions of those policies and make efforts to enact policies
22 to mitigate these hazards.
23 Let's go to the next slide.
24 So, in our Alaska Regional Summary from 2009 to 2014, it's
25 the first time I think that we made a recommendation related

1 something to the proper watch, or proper watchkeeping, and that
2 vessel owners and operators should create fatigue management
3 policies to use, watch alarms and to prevent groundings and
4 collisions.
5 So, as a researcher and a fishing safety advocate, I've
6 struggled with how to acknowledge fatigue as a problem in the
7 fishing industry, and what practical solutions exist to address
8 it. And about a year ago I heard a sleep expert say something
9 that helped me get over this dilemma, and he said that there is no
10 schedule that eliminates fatigue, and that fatigue is a ubiquitous
11 hazard that can't be eliminated. So how we work safety in when
12 people are really fatigued?
13 So we have to manage the risk. The more fatigued someone is,
14 the more other safety measures should be put in place. So, we
15 also have to shift thinking, I think -- thinking, I think -- about
16 the need for sleep. And it frustrates me to see so often that
17 sleep is equal to being weak, or seen as being weak. And it would
18 be great to overcome the culture that sleep is for the weak, and
19 instead, attack -- embrace the culture somehow that sleep is a
20 tactical advantage.
21 So, let's go to the next slide.
22 I know that our U.S. military is focusing more on sleep as
23 being a tactical advantage. And so these, the sleep is related to
24 our ability for problem-solving, decision-making, reaction times,
25 recovery. It certainly affects our safety. And changing our

1 mindset, I guess, of sleep is for the weak versus sleep is a
2 tactical advantage, but keeping in mind that sleep and fatigue is
3 a ubiquitous problem is where we have to balance, and be smart
4 about our recommendations.
5 I know the military is focusing on this. I mentioned that.
6 So what do you do to reduce risk when you know that you are
7 fatigued? What controls should be put in place around a wheel
8 watch? What controls need to be put in place around gear handling
9 when you're fatigued? And I'm sure there are a variety of other
10 places we can think about controls being put into place because we
11 know that our crew is fatigued.
12 So, this expert that I mentioned I heard about a year ago
13 challenged the audience to think of financially friendly and
14 fatigued -- I'm sorry, financially, family and fatigue-friendly
15 recommendations. So, that's some food for thought there.
16 Let's go to the next slide.
17 I did suggest some resources on fatigue that I am aware of.
18 The Coast Guard has put out this crew endurance management system.
19 NIOSH has a website about work schedules and shift work and long
20 hours. And then one of my go-to web pages for this information is
21 the National Safety Council, and what they say about fatigue in
22 that you're more than just tired.
23 Let's go to the next slide, please.
24 I can't say enough about the recommendations that NIOSH has
25 made about hands-on marine safety training. The Coast Guard has

1 the authority to mandate safety training for commercial fishermen.
2 NIOSH has shown that it's important to have marine -- to repeat
3 marine safety training every five years. I hope that they can
4 continue enforcing, continue having hands-on marine safety
5 training.
6 Let's go to the next slide.
7 The additional key Coast Guard safety programs that we
8 enforce, some of these things are the Alternate Safety Compliance
9 Program that had been put in place in recent years based on the
10 2010 Authorization Act. I know those are voluntary programs now,
11 not -- they're not mandatory. The dockside examinations now being
12 mandatory for vessels operating more than 3 nautical miles from
13 shore is an important program to acknowledge.
14 And then most recently, the Coast Guard -- Coast Guard and
15 NIOSH has partnered to administer the Commercial Fishing Safety
16 Training grants and the Commercial Fishing Safety Research grants.
17 The training grants help -- it provides funding to help bring
18 safety training to commercial fishing ports nationally. It makes
19 it easier then to bring the potentially mandated training to
20 commercial fishermen to the ports at either a free or reduced
21 cost.
22 Let's go to the next slide, please.
23 Other considerations -- and this is the last slide. Other
24 considerations are to, for the Coast Guard to continue to
25 prioritize understanding existing hazards for specific fleets, and

1 then designing prevention programs for those hazards, to review
2 and update the U.S. Coast Guard vessel stability regulations and
3 guidance. I understand this guidance was requested in 2017 and
4 was published in 2019, but fishing vessels weren't included in it.
5 So perhaps this can be revisited.
6 Use authority to incorporate training mandates for emergency
7 drills, stability, first aid and navigation. I'm repeating
8 myself, but I think that that is worth repeating. Prioritizing
9 the collection of information about fatigue so that we can see
10 patterns of when operations or our safety systems fail that result
11 in vessel casualties at sea that are related to fatigue, and
12 prioritizing the collection of information such as safety training
13 and the use of survival gear.
14 And finally, develop a strategy to engage the industry and to
15 make it easier for them to adopt safety management systems and new
16 technology. And I think that that is the last slide.
17 I'd like to acknowledge our Coast Guard colleagues in D17 in
18 particular, but our Coast Guard colleagues around the country as
19 well. NIOSH couldn't do our work without this important
20 partnership. I also want to acknowledge Chris Woodley, since the
21 slides that we presented on the Bering Sea crab fleet were
22 initially presented by him and me at an earlier venue. And then
23 we also want to acknowledge Casey Elliot for all of her help in
24 writing this talk.
25 I think the next slide is our contact information, and

1 Samantha and I are willing to answer any questions that you have.
2 Thank you.
3 MR. FAWCETT: So, I don't know if you can see this, but thank
4 you very much for the amount of work that went into that and the
5 depth and breadth of that presentation. So I have two brief
6 questions, and then I'm going to suggest to Captain Callaghan we
7 take our short recess.
8 The rest of my questions are going to be framed to both of
9 you, and it'll take us a little bit of time to get the hang of
10 who's going to answer on your part. Maybe you can give a nod of
11 the head if you'd like to answer, and we'll just wait until one of
12 you answers, so we'll get the hang of it.
13 But so the pot cod fishery that was taking place leading up
14 to the accident date at the end of December of 2019, would that be
15 the race to catch history that you described earlier in the
16 presentation? That species.
17 DR. LINCOLN: Right. So the pot cod fishery is, right now
18 it's, it is not rationalized, you know, so there's a total
19 allowable catch, and everyone races to go out and catch as much as
20 they can until that total amount is caught. And if there is, if
21 there is, you know, thought that that's going to be put into a
22 rationalization program, then there is the tendency for fishermen
23 to go and try to catch as much as they can to establish that catch
24 history, so that when it is rationalized they get a piece of that
25 catch history.

1 MR. FAWCETT: So, my final question related to that, before
2 we take a recess, one of your statistics, I believe, that was
3 shown on Slide 13 showed the larger share of the vessel fatalities
4 related to pot cod fisheries. Would that be correct?
5 MS. CASE: Yes, that's correct. Pot cod, I believe we saw as
6 the fishery with the second highest number of fatalities, and that
7 was primarily driven by these vessel disaster events.
8 MR. FAWCETT: Okay. Thank you both.
9 And, Captain, a short recess if you please.
10 CAPT CALLAGHAN: Yeah, thank you, Keith, and thank you,
11 ladies. This has been a very informative and very great
12 presentation. And if you're both willing, we'd like to take a
13 quick five-minute recess, and then come back and I believe
14 there'll be a number of questions for you both, if that's okay.
15 Okay, it's 0932. I'll take a five-minute recess, and we'll
16 come back at 0937.
17 (Off the record at 9:32 a.m.)
18 (On the record at 9:38 p.m.)
19 CAPT CALLAGHAN: Okay. The time is now 0938. This hearing's
20 back in session, and I will turn it back to Mr. Fawcett for some
21 more questions.
22 MR. FAWCETT: All right. We'll continue with posing
23 questions to both of you. In your presentation, you mentioned the
24 Center for Marine Safety and Health Studies. Could you elaborate
25 a little bit more on where that is, how it's staffed? You know,

1 is there a Coast Guard liaison person assigned to that center?
2 MS. CASE: So, I can take a stab at this, Jennifer. So the
3 NIOSH Center for Maritime Safety and Health Studies is really a
4 virtual center within NIOSH. The director is Alice Shumate, one
5 of our colleagues from our Spokane, Washington office. The center
6 was developed, I believe in 2015, really based off the successes
7 of our Commercial Fishing Safety Research Program that's been in
8 place for many years, and really trying to expand to other
9 maritime industries, such as marine transportation. We have
10 researchers looking at shipyards, marine terminals, seafood
11 processing, commercial diving, aquaculture.
12 So our formal partnership with the Coast Guard, you know,
13 works not only, you know, with me and with Jennifer and the Ag
14 office, but also, you know, we talk with, between Alice Shumate
15 and the Coast Guard. And there is no specific Coast Guard
16 liaison, you know, with our center, specifically. But I would say
17 that we are in a variety of working groups outside of that, that
18 involve the Coast Guard.
19 So, for example, I'm very involved, Jennifer's been involved
20 with the Commercial Fishing Safety Advisory Committee. Alice
21 Shumate, I believe is a member of the Committee on Marine
22 Transportation Systems. And we have been involved in like the
23 COVID-19 Working Group in presenting a webinar for merchant
24 mariners. So we do facilitate conversations with the Coast Guard
25 in those different venues. Is there anything you wanted to add,

1 Jennifer?
2 MR. FAWCETT: So, Lieutenant McPhillips, if you would please,
3 pull up Coast Guard Exhibit 069?
4 And while he's doing that, this is a statistic that's
5 outwardly facing to the public and generated by the Office of
6 Commercial Fishing Safety. And you'll see the trend in fatalities
7 and vessel losses over a period of time. If you'll take a moment
8 to look at that, and while you're looking at that, in a moment
9 I'll ask the lieutenant to scroll down to the line that starts,
10 "Excluded," if you can do that, Lieutenant.
11 I'll read that for you. It says, "Excluded from the
12 statistics are deaths from medical conditions and those that are
13 self-inflicted or due to misconduct, as well as vessel losses from
14 non-operational activity such as moor or dock in port."
15 Does your statistical data and your research, does it include
16 or exclude the same things that this report and graphics
17 demonstrate?
18 MS. CASE: Yeah, that's a great question. So our statistics
19 capture some of those incidents that the Coast Guard would
20 exclude. So at NIOSH, we are interested -- the way we set up our
21 surveillance system, the Commercial Fishing Incident Database was
22 really that we were interested in looking at any traumatic injury
23 which occurs to fisherman while they're at work. We consider them
24 at work any time they're onboard the vessel. It's obviously
25 different than a, you know, maybe a more traditional work site.

1 So, we do include traumatic injuries. We do not include, you
2 know, preexisting conditions, natural -- deaths due to natural
3 causes. We are focused on traumatic injuries. But at the same
4 time, that does include some non-operational deaths, like I
5 mentioned, some suicides, homicides, unintentional drug overdoses.
6 Those are considered traumatic injuries and do appear in our
7 statistics.
8 MR. FAWCETT: So if I was a commercial fisherman and I was
9 engaged in fishing operations and I had a heart attack at sea,
10 would that information be available to you for research?
11 MS. CASE: Those are not included in our Commercial Fishing
12 Incident Database. If a medical emergency like that happens at
13 sea and the Coast Guard responds to do a medevac, you know,
14 sometimes they do respond to these conditions to get the crew
15 member to emergency treatment, and it shows up in MISLE, we could
16 potentially have access to that, but that would require further
17 investigation.
18 MR. FAWCETT: So when you say MISLE, you're talking about the
19 Coast Guard's accident database that includes also law enforcement
20 data?
21 MS. CASE: Yes, that's correct.
22 MR. FAWCETT: So overall, I mean, how good a handle --
23 there's -- I've seen (indiscernible) statistics on many of the
24 commercial fishing vessels in the United States, anywhere between
25 50,000 to 60,000 vessels. How good a handle do we have on

1 accidents that occur in that fleet, in terms of whether it is
2 fatalities, other type of serious accidents?
3 MS. CASE: Yeah. I would say the more serious an event is,
4 if it's a catastrophic vessel loss, if there are any fatalities, I
5 believe we have a pretty good handle on that, because it's -- you
6 know, they tend to be widely covered in the news media and have
7 the involvement of the Coast Guard. So we feel pretty confident
8 in those.
9 For non-fatal injuries, though, some of these less serious
10 vessel casualties, like loss of power, loss of propulsion that may
11 require minor repairs, or being towed in by the Coast Guard or
12 towed in by, you know, a good Samaritan vessel, for example, we do
13 believe that there is under reporting.
14 And that's not specific to the fishing industry. That is
15 pretty much something we see ubiquitously among workers and worker
16 populations, is the tendency to under report, you know, nonfatal
17 injuries, these less serious things if they don't require Coast
18 Guard assistance. If they can resolve them, then there's that
19 chance that we are missing them.
20 MR. FAWCETT: So, Dr. Lincoln, you mentioned in your
21 presentation when you talk about accidents, and reporting of
22 accidents, you used the word hopefully. Do you feel that the
23 Coast Guard's accident database is, accurately reflects the loss
24 of life accidents and so forth that you use for research?
25 DR. LINCOLN: Oh sure. As Samantha just said, I feel very

1 confident in the fatality information that we're able to gather
2 from the Coast Guard systems. I don't question that. I think
3 that the -- as Sam said, the most severe things that occur at sea
4 are captured in MISLE, and therefore we have access to and see
5 those.
6 We also do our -- we also have surveillance for fatal events
7 in other -- we also do that in other ways too. We've got, you
8 know, it's something that we have reporting in from press
9 clippings, Google searches now. You know, so fatalities, I feel
10 very confident that we are -- that this is the picture, this,
11 these -- we're getting all of them.
12 As Sam said, nonfatal injuries are different. I don't think
13 that we're getting all of them, because in order for a nonfatal
14 injury to be captured by our data it has to be reported to the
15 Coast Guard, and I don't think that that happens across the board.
16 I also think that there's a case definition problem. What is
17 a nonfatal injury? Are we talking about something that is severe,
18 that talks about, you know, hospitalization? We probably could
19 get a better picture of those types of injuries that require
20 hospitalization, but the injuries that result in, you know, maybe
21 one lost work day, or no lost work days and were more minor
22 injuries, if they're not reported to the Coast Guard we won't know
23 about them.
24 But I feel a hundred percent that the fatality, that these
25 fatality analyses that we've done is getting information about all

1 fatalities.
2 MR. FAWCETT: In this case, we've worked together before
3 collaboratively, and one of the things that you shared with us was
4 that NIOSH supplement. This is a tool that NIOSH asks the Coast
5 Guard to have investigators fill out, that will provide you
6 supplemental information that's very important for you to conduct
7 this research and the analysis and the recommendations. So you
8 mentioned in the presentation that -- and I'm -- correct me if I'm
9 wrong, you characterize it that, you reported on survival suit use
10 and life raft use wasn't entirely accurate to help you formulate
11 this statistic. Would that be correct?
12 MS. CASE: Yeah. So, what we saw was that when we were
13 looking through our database, we have a lot of unknowns for
14 whether someone was able to get into an immersion suit or get into
15 a life raft. And I think we typically see this more often in the
16 nonfatal vessel disaster events. I know I've been reading through
17 reports and, you know, everyone was rescued and no one was
18 actually injured, so there is actually limited information on the
19 additional crew members.
20 So usually they'll have witness statements, or an interview
21 with the skipper, but maybe not all the deck hands. So that's
22 something that I have seen personally in the reports. And if we
23 can't ascertain that information from the Coast Guard report, then
24 we put that as unknown in our database.
25 MR. FAWCETT: So in this case, over the years, have you seen

1 the regular usage of the NIOSH supplement to support your own
2 research in terms of having that document included in the marine
3 safety database as it relates to investigations that you look at?
4 MS. CASE: I would say it's not very common, actually. Where
5 I have seen it more recently, I believe some investigators in
6 District 17 and District 13 have used it in some recent, or some
7 more recent events. But I do not believe that it is widespread,
8 and that's perhaps an effort that, you know, we could continue to
9 collaborate on, in getting that out.
10 MR. FAWCETT: So Dr. Lincoln, you had some considered
11 prioritizing. Would you say that it would be good for the Coast
12 Guard to consider prioritizing use of collecting this additional
13 information like the use of rescue beacons, (indiscernible) or
14 other types of safety and survival equipment that is used to save
15 lives in (indiscernible)?
16 DR. LINCOLN: Right. And then ascertain whether or not they
17 had marine safety training and where and when that occurred, as
18 well as collecting information consistently around this area of
19 fatigue.
20 MR. FAWCETT: And in this case, just for the record, I think
21 that's a one-page form, isn't it?
22 MS. CASE: I believe so, if I'm recalling correctly. It's
23 fairly brief, I think.
24 MR. FAWCETT: And it also specifies the type of fishing,
25 which allows you to categorize your research. Is that correct?

1 MS. CASE: Yes, absolutely. As Jennifer mentioned, you know,
2 pretty early on in the presentation, the risks vary by region and
3 fishery, depending on the type of vessel, where they're operating,
4 the type of gear that they have. And so it's foundational in our
5 research to look at these events by, you know, the fishery that
6 they're participating in for some greater context. So that's very
7 important for us.
8 MR. FAWCETT: So I had asked you some general questions
9 directed at both of you. Do you identify or capture -- other than
10 rationalization or derivate or Olympic style fishing, do you
11 identify commercial pressure as a risk to fishing vessel
12 operators?
13 MS. CASE: That's a great question. So we don't capture
14 anything specifically about that in our database, but we do help
15 fishery management councils periodically with their reviews of
16 fishery management regimes. And so we just comment on, you know,
17 that's a consideration about these different types of pressures.
18 But we don't -- I don't believe we've specifically done any
19 studies related to those pressures.
20 Jennifer, if you have anything to add there.
21 DR. LINCOLN: Right. We haven't done any work like that,
22 that I can think of.
23 MR. FAWCETT: So these are some general questions. Will it
24 be correct if I say that your recommendations support some sort of
25 mandated safety training for commercial fishermen?

1 DR. LINCOLN: Yes.
2 MR. FAWCETT: How about -- I didn't note it there, but how
3 about medical screening, to make sure that people are physically
4 fit and medically fit to conduct fishing operations, especially
5 when you're really far at sea in hazardous conditions?
6 DR. LINCOLN: Right. NIOSH hasn't published anything related
7 to fit for duty, fit for service, related to the fishing industry.
8 As far as training goes, we have recommended that fishermen
9 receive a training. I think that the original training
10 recommendation that we made was for the state of Alaska and
11 fishermen who fish in the state of Alaska get marine safety
12 training before they are issued a crew -- before they can get
13 their crew license. And that was in that 1997 report that I noted
14 in our recommendations.
15 But we haven't, NIOSH hasn't made any recommendations about
16 fit for duty requirements for the fishing industry.
17 MR. FAWCETT: Just to be clear, the State of Alaska, are you
18 talking about before they're issued their permit to fish?
19 DR. LINCOLN: Right. So yeah, back in that 1997 Current
20 Intelligence Bulletin, we made a recommendation in there that the
21 fishermen -- I think that it said something like that fishermen
22 should be required to have marine safety training before they are
23 issued their -- yes, State of Alaska crew license.
24 MR. FAWCETT: So a general question, does your research
25 identify or support a more rigorous drug and alcohol program

1 whether in screening or requirements that drug and alcohol not be
2 used in conjunction with fishing operations?
3 MS. CASE: Yes. So we have found not only a recent increase
4 in drug overdoses that occur onboard but also drugs and alcohol as
5 a contributing factor to vessel disasters and falls overboard.
6 So, in the Alaska Regional Summary document I believe is perhaps
7 the first time they really published on it, or at least very
8 recently where we really emphasized enacting drug and alcohol-free
9 policies onboards implemented by the skippers.
10 MR. FAWCETT: Okay. Lieutenant McPhillips, if you'll pull up
11 the Coast Guard presentation 130, which is the presentation that
12 you both prepared, and go to slide number 14.
13 Okay. Over on the right, we see a sequence of events that
14 lead up to a vessel disaster. Where do we factor in, in terms of
15 research or prevention, what people do? In other words, we see
16 things. But you know a captain, he or she will make a decision to
17 no longer maintain equipment, turn left, turn right, slow down, or
18 perhaps proceed into an area where there's hazardous weather. How
19 do you capture that in terms of your research, the decisions that
20 lead to events?
21 MS. CASE: That's an excellent question. So some of this can
22 be captured in our contributing factors fields. So we can look at
23 weather, fatigue, navigational errors. But as we know that the
24 events are very complex, there's a lot of decisions being made, I
25 think this presents an opportunity for some more advanced human

1 factors research, to really identify those decisions that are
2 being made. Because outside of our contributing factors fields,
3 you know, those further upstream decision-making events and other
4 things aren't -- they're more tricky to capture. And we don't
5 quite have those in our database. So, I think it is an
6 opportunity for further research for that human factors look.
7 MR. FAWCETT: So you, in examining over the course of time,
8 Coast Guard database investigations may have, you know, this case
9 I'm sure you're familiar, they have page after page of statistics,
10 the time line and so forth. How often do you see human factors as
11 contributing factors to marine accidents?
12 MS. CASE: I would say it's very common, and I think it's
13 pretty established in the scientific literature as well, upwards
14 of 70 to even up to 90 percent of the time that human factors are
15 involved in maritime accidents, just overall. So I think this is,
16 you know, very, very common. And I do see these being pointed out
17 in the Coast Guard investigations.
18 MR. FAWCETT: Dr. Lincoln, have you ever thought about, at
19 any time, maybe including more of the human factors as a research
20 tool to drive -- in other words, if an accident occurs, and we try
21 to come up with some kind of prevention goal from this accident,
22 this one for example, and we were to discover at the end of our
23 investigation that a human factor was a principle source, don't we
24 really want to, in the end, change human behavior, so they don't
25 make decisions that will lead to accidents? Have you ever

1 considered studying that?
2 DR. LINCOLN: Of course. Yeah, of course. I think that the,
3 you know, something that you have to keep in mind whenever you
4 initiate a study like the work that Samantha and I do, is that we
5 need -- if we're going to look for a pattern, we need information
6 on all of them. So, you know, we can't -- right now, we can't
7 even ascertain whether or not an individual fisherman was wearing
8 a survival suit, or got into a life raft, so that we can evaluate
9 the impact of those safety features that are required.
10 If we want to investigate human factors, and how those impact
11 those types of vessel casualties, and vessel tragedies, then we
12 have to have the consistent collection of information by
13 investigators for each and every one of the events that occur, so
14 that we can understand what those patterns are, what those human
15 factors are, and base prevention recommendations on all of them.
16 So, our hands are tied, to a certain extent, because of the
17 way that we collect our information right now is through Coast
18 Guard investigative reports.
19 MS. CASE: And I will mention also, you know, in human
20 factors research, it goes beyond just, you know, what the skipper
21 and the crew do in the event, and the decisions that go into that.
22 It does include policies and, you know, the broader environment.
23 So it's very important to us at NIOSH to not necessarily focus so
24 much on the worker and try to place blame, but really understand
25 the broader context in which they're making those decisions.

1 Because, for example, you know, we see falls overboard as a
2 leading contributor to fatalities in the industry. And it can be
3 easy for us to say okay, well wear a personal flotation device.
4 But we need to understand, you know, why fishermen choose not to,
5 what their risk perceptions are with these vessel disaster events.
6 It could be related to -- we can say, don't go out in bad weather,
7 but they, you know, are making a living, and they have all these
8 pressures on them, so we really need to understand that context.
9 MR. FAWCETT: So I mentioned -- do you have access to state,
10 you know, the other states throughout the United States, their
11 fishing accident reports? If they're state registered vessels,
12 does that feed into your research? For example, if I live in
13 Georgia, do you have access to the records of Georgia related to
14 fishing vessel accidents that are state registered?
15 MS. CASE: Yeah. So state registered vessels can appear in
16 Coast Guard's MISLE system if they had any interaction with the
17 Coast Guard. So, you know, I'm not sure how much of the state
18 registered, you know, fleet we have captured in our database but,
19 you know, if there was a vessel disaster or some type of incident
20 with a state registered vessel, and they required Coast Guard
21 assistance, reported to the Coast Guard, then we do see that.
22 MR. FAWCETT: So you mentioned a broader context, and I
23 thought that was a really good point. You talked about policy
24 hindering your investigations. How much focus have you given to
25 what the owners do? In other words, the framework for safety that

1 the owners establish for the vessel, like did the owners have a
2 safety management system? Did the owner provide sufficient
3 oversight of the operation? Let me see if I can give you an
4 example.
5 Let's say a vessel was known to work in a certain water way.
6 You know, did the owner get the right captain that knew the
7 waterway? If there was an accident, and they found, as the Coast
8 Guard or some other investigator said, well you know, that guy
9 didn't know the water way. Are you able to capture the owner's
10 responsibilities in terms of a causal factor for an accident, and
11 research that? And is it included in your reports?
12 MS. CASE: Yeah, thank you. Great question. So, we capture
13 a little bit of that, I believe. So sometimes in contributing
14 factors, you know, we may be able to, you know, code for
15 inexperience if the Coast Guard have identified that in their
16 report.
17 For these vessel disaster events, you know, we try to
18 capture, you know, if they had implemented drills and how
19 frequently they were doing drills on the vessel, and if they had
20 stability instructions, so those kind of things. But that, I
21 believe, is the extent to which we capture, you know, those
22 broader policies that may be onboard a vessel.
23 MR. FAWCETT: So, I'll make a final statement, and this wraps
24 up my questions for you, but we have taken a great body of the
25 work that the two of you have done, and we have incorporated it

1 into Coast Guard Exhibit 067. It's reports that you provided to
2 us upon request. And those will be available to the public, so
3 they can take a deep dive into not only your presentation, which
4 was very helpful, but the details, the recommendations, and the
5 research you have done over the years. So thank you both very
6 much.
7 That completes my questions, Captain.
8 CAPT CALLAGHAN: Thank you, Mr. Fawcett.
9 And ladies, I'm going to now turn to our colleagues here at
10 the National Transportation Safety Board.
11 Mr. Barnum.
12 MR. BARNUM: Ms. Case, Dr. Lincoln, thank you very much. A
13 very, very informative presentation and terrific testimony here,
14 so thank you. Just three follow-up clarification questions from
15 me. I guess I'll bring up your exhibit.
16 Lieutenant McPhillips, if you'd please bring up 130, page 13.
17 So I think you created here, this is the years 2002 to 2019.
18 Would this include the *Scandies Rose*, which sank on New Year's
19 Eve?
20 MS. CASE: Yes. This does include the *Scandies Rose*. We
21 have preliminary coding for this event, just because obviously the
22 investigation is ongoing. From what we could tell about the
23 fishery, I think there's some confusion about, you know, pot cod
24 versus Bering Sea crab, but they are included in the pot cod
25 numbers.

1 MR. BARNUM: Okay, thank you.
2 And then, Lieutenant McPhillips, could you please go to page
3 -- or slide, I'm sorry, 41?
4 And then this group of data here is from '90 to 2020. And I
5 don't see *Scandies Rose* represented here. Is that because it was
6 classed in the pot cod, not the crab fishery?
7 DR. LINCOLN: Correct. This slide only represents those
8 fatalities that occurred while fishing in the Bering Sea/Aleutian
9 Island crab fisheries.
10 MR. BARNUM: Crab, okay. Thank you for that clarification
11 there. And then, the second question would be, I'm just curious
12 what kind of outreach NIOSH has, you know, to the commercial
13 fishing industry. You know, is there forums that are put on, or
14 social media or pamphlets handed out on a dock? What do you
15 offer?
16 MS. CASE: Yes, excellent question. So we have a variety of
17 venues. We (indiscernible), in non-COVID times, I would go to
18 Pacific Marine Expo, Comfish in Kodiak, Alaska, the Maine
19 Fisherman's Forum. We like to go to these industry trade shows
20 and just really represent NIOSH and talk with fishermen about
21 safety problems, and also safety successes, what works for them.
22 We have a NIOSH Fishing Twitter account, and we try to post,
23 you know, helpful links and resources and infographics there. And
24 then when we do field studies, we do love walking the docks and
25 recruiting fishermen, you know, face to face. A few years ago we

1 did a study looking at PFD use in fishermen, and that included the
2 Bering Sea crab fishermen. And we get to walk the docks and talk
3 with them. And that's, you know, one of the best ways we can get
4 information, is from fishermen directly.
5 MR. BARNUM: Great, thank you.
6 DR. LINCOLN: If I could just add to that, Mr. Barnum, the
7 other thing -- we also have, we also try to publish a regular
8 article in newsletters that exist, so I'm thinking of the AMSEA
9 and the NPFVOA newsletters. We try to get an article in *National*
10 *Fishermen* when we're able to, and we have had, we have placed ads
11 in other fishing news publications.
12 I think another success of -- successful way to get
13 information to fishermen is through Angus Iversen. I don't know
14 if you've ever met him, but he was a character that was created to
15 convey information about wearing life jackets while you, when you
16 work on a fishing vessel.
17 MR. BARNUM: Great, thanks. And then, you've already
18 answered this question for me, but maybe for the benefit of the
19 public further, you -- this is Dr. Lincoln, I suppose, you
20 mentioned recommendations that NIOSH gives to different
21 organizations. How is that tracked, and how is that -- you know,
22 understanding that they're just recommendations, correct?
23 DR. LINCOLN: Right. They're just recommendations. Could
24 you clarify the question a little bit?
25 MR. BARNUM: Yeah, sure. So --

1 DR. LINCOLN: Are you wondering whether or not -- go ahead.
2 MR. BARNUM: Yeah, so when you issue an organization a
3 recommendation to improve their safety culture, or to require life
4 jackets or something else, how is that -- how do they respond to
5 NIOSH and how is that tracked by NIOSH?
6 DR. LINCOLN: It's a complicated question. I think in a
7 variety of -- we will, you know, we'll make a recommendation. So,
8 I'll take the life jacket example. We made a recommendation that
9 fishermen in Alaska wear life jackets when they go to -- when they
10 work. You know, and we did a survey of them in 2008, 2009, and
11 then we went back and asked the same groups of fishermen whether
12 or not they wear life jackets now. And we could show improvements
13 based on their response to whether or not -- to our surveys, you
14 know, pre and post. Could we track, you know, actually somebody
15 wearing a life jacket, an improvement, the improvement in the
16 number of people that do that.
17 As far as recommendations that we make, I think in general,
18 you know, we try to design a research study around it, to see if
19 we can evaluate whether or not something has changed. But that is
20 the extent to which I think that we would do any sort of
21 monitoring of the recommendation.
22 Samantha, does anything come to mind?
23 Oh, go ahead, Mr. Barnum.
24 MR. BARNUM: I was just going to do a follow-up. So the
25 recommendation made that the State of Alaska require this five-

1 year periodic safety training, is that -- have they accepted that
2 recommendation? Have they acted on it? You know, have they
3 responded?
4 DR. LINCOLN: Right. So that recommendation was made back in
5 1997.
6 MR. BARNUM: Right.
7 DR. LINCOLN: I don't remember. I don't remember if there
8 was any -- so it, there's no policy for that. You know, there's
9 no -- we made the recommendation but, you know, I don't remember
10 what happened in 1997, but certainly it's not a requirement right
11 now.
12 MR. BARNUM: Sure. Has that recommendation ever been made to
13 the Coast Guard, that you're aware?
14 DR. LINCOLN: Well, so we made that recommendation to the
15 state of Alaska because they are the ones that issue a crew
16 license. So that was the carrot and the stick, so to speak, you
17 know. To the U.S. Coast Guard, well to -- I think just in
18 general, NIOSH has said that fishermen should take, should have,
19 should take a marine safety class and a refresher class at least
20 every, once every five years. So that is a, that's a
21 recommendation that we say, that we put out there.
22 In my, in the last section of the presentation that I just
23 gave, I encouraged this, your Marine Board to encourage the Coast
24 Guard to adopt the authority that they have and implement
25 regulations for training that were in the 2010 Authorization Act

1 for the Coast Guard.
2 MR. BARNUM: Yes. Thank you for that. And also in the 2010
3 Authorization Act was the Alternate Compliance Safety Program that
4 you mentioned on your presentation that we know that has not come
5 to fruition to this point.
6 DR. LINCOLN: Right.
7 MR. BARNUM: So thank you for that. Thank you for the
8 presentation. That's my final question. My colleague has some.
9 MR. SUFFERN: Thank you, Dr. Lincoln and Ms. Case, again, for
10 the excellent presentation.
11 Lieutenant McPhillips, if you could bring up Exhibit 130
12 again and go to slide 41, I just have two questions in general
13 about the statistics here.
14 I see they're over the course of a year. Was it further
15 broken down by months? For example, did most of the accidents
16 occur between January and March, or October and December?
17 DR. LINCOLN: Sure. That's a great question. So we can
18 certainly divide these data for the Bering Sea/Aleutian Island
19 crab fishery and any of the data that Samantha presented by month.
20 That's something that's very easy to do. In the decade of the
21 90s, when most of these fatalities occurred, certainly the vessel
22 losses occurred most frequently in January on their way out to the
23 opilio crab fishing grounds.
24 MR. SUFFERN: Yeah, I'd be curious to see, you know, if it's
25 all in January or if in the later years there's some February

1 thrown in there or something like that. That would be something
2 I'm definitely interested in. That's helpful information.
3 And then a second question, was there any review? You
4 mentioned weather and heavy weather and icing and stability quite
5 a bit during the presentation. Was there any review of changes in
6 the weather over the Bering, with climate change and things like
7 that, and potentially warmer sea surface temperatures or things
8 therein? Was there any consideration into that, and to the
9 statistics and how things changed from the 90s to the 2000s to the
10 past ten years?
11 DR. LINCOLN: We haven't done any sort of an analysis like
12 that, however, we've thought about doing things like that. If you
13 recall that slide that was just up, there's a dip in the 1990s
14 where there was no vessel losses. And the hypothesis is, is that
15 that year we didn't have severe weather during crab season. So
16 there, that has come up as an idea of further research, but it's
17 not something that our NIOSH researchers have pursued. That work
18 has been done in other places.
19 Oh go ahead, Sam.
20 MS. CASE: Yeah. I was going to comment that there are, you
21 know, staff with the National Marine Fisheries Service, Lisa
22 Pfeiffer is someone in particular who comes to mind, who actually
23 may have been looking at that. And I'm not sure if it was for the
24 crab fishery or not, but did reach out, and we talked a little bit
25 about looking at weather patterns. And she was getting the

1 incident data from our database. So, that is potentially being
2 done, or has already been done by, you know, other agencies.
3 MR. SUFFERN: Okay. That's helpful information. I'll
4 definitely have to dig into that, because earlier during the
5 hearing, I believe the person from the National Weather Service
6 mentioned in 2019 that, you know, they had, in that particular
7 area they had 40 events of heavy freezing spray, and then in 2020,
8 only four events. So the weather can be variable year to year and
9 decade over decade. So, that's interesting. Thank you so much
10 for the presentation again, and I appreciate it.
11 That's all the questions I have, Captain.
12 CAPT CALLAGHAN: Thanks, gentlemen.
13 Ladies, I'm now going to move to our parties in interest,
14 starting with the counsel for the two survivors.
15 Mr. Stacey?
16 MR. STACEY: Thank you, Captain Callaghan, and good morning,
17 Dr. Lincoln and Ms. Case. Do you hear me all right? Okay,
18 wonderful. First, thank you very much for your testimony. Dr.
19 Lincoln, I have to commend you on a fantastic virtual background
20 that you have. I have a couple of questions for you.
21 For the training that you've discussed, that NIOSH thinks
22 that every crew member should go through, I'm not sure if you
23 heard the testimony, that you had Mr. Dean Gribble, who got up
24 there, essentially the day before. This is not uncommon up in
25 Alaska. The kinds of trainings that you're recommending, is that

1 something that the vessel would be able to conduct? Would it be
2 able to be something done in a day's time to give the industry
3 that flexibility while not sacrificing safety?
4 DR. LINCOLN: Yeah, absolutely. There's drill conductor
5 courses that are available, and there are eight-hour courses that
6 were tailored to that particular concern, that somebody be able to
7 complete the course, a hands-on safety course in one day.
8 MR. STACEY: And would that be all -- sorry. Please
9 continue.
10 DR. LINCOLN: I was going to say, and then in the next
11 session you're going to hear from two of the executive directors
12 of the training institutions that are in the Pacific Northwest, as
13 well as trainers, having trainers elsewhere in the country.
14 MR. STACEY: And would that training be able to be conducted,
15 you know, whether it's in Kodiak or Dutch or St. Paul, either by
16 someone physically located there or by, you know, the captain on
17 the vessel or someone with the vessel?
18 DR. LINCOLN: Well (indiscernible) or so, NPFVOA and AMSEA
19 have two different training approaches, I suppose, and you'll hear
20 from them in the next session. NPFVOA focuses on vessels that are
21 home ported in Seattle. And if I have this wrong, Karen will
22 correct me, but they do focus on providing training in Seattle and
23 on vessels in that area, to make it easy for fishermen to be
24 trained.
25 AMSEA, the Alaska Marine Safe Education Association takes a

train-the-trainer approach first. They, at least twice a year, have trainings for people to become instructors. And the idea is that those people will become instructors, and they'll go out and do the instructing. I also know that particularly in the state of Alaska, if you want training on your vessel, that AMSEA will do everything possible to get an instructor there who's qualified to do the instruction and get the true craned -- get the crew trained.

MR. STACEY: (Indiscernible). Thank you very much for that, Dr. Lincoln. And Ms. Case, I'm not sure if you had anything to add to that?

MS. CASE: No, I don't. Thank you.

MR. STACEY: Okay. One other thing that we've heard a lot at these hearings is the benefit of having lots of vessels out so you can report about the weather, about conditions, and if a mayday call is unfortunately had to be made, that there'd be more vessels in the vicinity of that mayday call.

You discussed with the rationalization, how there are fewer vessels that are now out at sea. Do you think that this Board should take that into consideration about how there are fewer vessels out there with rationalization in, you know, determining best practices with how to best capture and send out weather data, with fewer vessels out?

DR. LINCOLN: That seems reasonable.

MR. STACEY: Okay. All right, thank you very much. Those

1 are all of the questions I have for you. Thank you very much for
2 your testimony. It was extremely informative.
3 Thank you, Captain.
4 CAPT CALLAGHAN: Thank you, Mr. Stacey. And now to counsel
5 representing the vessel owners.
6 Mr. Barcott.
7 MR. BARCOTT: Thank you, Captain.
8 Ms. Case and Dr. Lincoln, can you hear me all right? So I'm
9 Mike Barcott. I represent the *Scandies Rose*. Dr. Lincoln, my
10 team met you on the *Destination* hearing. I want to join you in
11 thanking Chris Woodley in this area, who does a fantastic job with
12 the industry, so we certainly join you in that.
13 My understanding is that your work is broader than either
14 (indiscernible). You are looking for patterns. Is that right?
15 DR. LINCOLN: Yes. That's correct.
16 MR. BARCOTT: Okay. So, I've been doing this for a while,
17 and you mentioned, Dr. Lincoln, five events that I've got a fairly
18 significant body of information about, *St. George, Northwest*
19 *Mariner, Lin J, Destination,* and now *Scandies Rose.*
20 So, let me characterize something I see as a pattern in these
21 five events, and there may be others, but I don't have that
22 knowledge. *St. George*, good captain, good boat, in icing,
23 capsized. *Northwest Mariner*, highliner, good captain, icing,
24 capsized. *Lin J*, good captain, good boat, icing, capsized.
25 *Destination*, good captain, good boat, icing, capsized. And now,

1 *Scandies Rose*, by all accounts a very good boat and very good
2 captain.
3 So my question, and this relates to something Mr. Fawcett
4 asked you, has anybody ever looked back at these events,
5 retrospectively, to see if there is something that might have
6 caused these good captains to take their good boats into icing
7 that turned out to be fatal? Has that ever been looked at?
8 DR. LINCOLN: We haven't looked at that, Mr. Barcott.
9 MR. BARCOTT: You would think that is worthy of study. What
10 made -- I will tell you, I think you will find that pattern, and I
11 have some fairly strong ideas about what caused it, but from a
12 scientific perspective, is that worth a look?
13 DR. LINCOLN: Something that I had suggested to Samantha
14 earlier in the calendar year -- actually, I guess it might have
15 even been before the Coast Guard even approached us to do this,
16 was to look at the events and the Coast Guard investigations of
17 these major marine casualties that have been conducted, look at
18 the events.
19 And so the events that we would look at would be these major
20 events where a formal board of investigation was convened, and
21 review what was in those, what the recommendations were made, that
22 were made, and what happened to them. You know, so the Coast
23 Guard made a recommendation. What did the commandant say? Or the
24 board made the recommendation. What did the commandant say and
25 what happened?

1 So, I had considered looking at these Marine Board inquiries
2 and looking at the recommendations. I think that it would also be
3 interesting to look at the in-depth scenario that no doubt is
4 written up in those reports, because of all of the time and effort
5 and energy that went into those investigations. So it is
6 something that Samantha and I have discussed even recently, but
7 it's not something that we have conducted yet.
8 MR. BARCOTT: Well let me suggest to you that something you
9 will find in those studies are the stability reports which existed
10 for those vessels. What you will not find is any close analysis
11 of the relationship of those stability studies to the reality of
12 the fishing grounds.
13 So let me ask you this. You said one of the things that you
14 were able to do is stop overloading of pots. Have you been
15 following the hearing here, and the, what I will call the
16 disconnect between icing conditions and stability studies, and the
17 reality of Bering Sea fishing? Have you followed that?
18 DR. LINCOLN: I'm sorry, Mr. Barcott. I haven't been able to
19 watch all of the testimony. I have tried to stay up to date on
20 what I can read in news clippings, and I get a sense of that type
21 of information that's being discussed during these, but I haven't
22 had a chance to really listen to the testimonies.
23 MR. BARCOTT: So I'm going to suggest, if you could listen to
24 the testimony of the three independent naval architects, it would
25 be valuable information for you. And if it were determined by

1 this Board, that the icing conditions in stability studies do not
2 reflect the realities of fishing in the Bering Sea, would it be
3 worthy of study whether that disconnect might have been part of
4 what led these captains of these five boats into icing conditions,
5 that human factors portion of this, and what led them to make the
6 decisions they made? Is that worthy of study?
7 DR. LINCOLN: Well that, the pattern that you note of all of
8 these vessels with, whether they're highliners or adequate
9 operators or high performance, however you want to talk about the
10 admiration for the captains, and then these vessels still sank,
11 there has to be some investigation into the pattern of all of
12 them. And if some of our underlying assumptions aren't valid,
13 then adjustments should be made.
14 MR. BARCOTT: I'm going to urge you to take a look at that.
15 Thank you very much, Dr. Lincoln.
16 Thank you, Captain. Those are the questions I have.
17 CAPT CALLAGHAN: Thank you, Mr. Barcott.
18 Ladies, I know we've taken more than the time we had
19 originally allotted for you, and it's certainly -- I want to take
20 the opportunity to, you know, extend our appreciation for your
21 willingness to provide that presentation for us, and then have a
22 good discussion about your findings and then answer some of our
23 questions here.
24 Certainly, it goes to show a great appreciation for, you
25 know, the work you've done and your appreciation and support of

1 the fishing vessel industry as a whole, in promoting safety
2 amongst the industry.
3 So thank you very much, and again, thank you for your time
4 this morning. It's been extremely valuable for us, moving
5 forward, and something that we will continue to look at and, you
6 know, gives us a good spot to go look at all the previous
7 recommendations that you've cited, and kind of continue to look
8 where we can move with this investigation as a whole. So thank
9 you very much.
10 Ladies, at this time, you are now both released as a witness
11 at this formal hearing. I thank you for your testimony and
12 cooperation. And if at a later time I determine that this Board
13 needs additional information from you, we'll contact you through
14 counsel. If you have any questions about the investigation, you
15 may contact any member of the Investigation Board, or the
16 Investigation Recorder, LT Ian McPhillips. Thank you both very
17 much.
18 MS. CASE: Thank you.
19 (Witnesses excused.)
20 CAPT CALLAGHAN: It is now 1030. This hearing's going to
21 take a ten-minute recess, and we will go to our next witnesses.
22 Thank you very much.
23 (Off the record at 10:30 a.m.)
24 (On the record at 10:39 a.m.)
25 CAPT CALLAGHAN: The time is now 1040. This hearing's now

1 back in session. We will now hear from Mr. Jerry Dzugan and
2 Ms. Karen Conrad.
3 Mr. Dzugan and Ms. Conrad, 1Lieutenant McPhillips will now
4 administer the oath and ask you some preliminary questions.
5 (Whereupon,
6 JERRY DZUGAN and KAREN CONRAD
7 was called as a witness and, after being first duly sworn, was
8 examined and testified as follows:)
9 LT McPHILLIPS: Thank you. Please be seated. I need to each
10 ask you a few questions, starting with Ms. Conrad.
11 Ms. Conrad, please state your full name, and spell your last
12 name.
13 MS. CONRAD: Karen Conrad, C-o-n-r-a-d.
14 LT McPHILLIPS: Please identify counsel or representative if
15 present.
16 MS. CONRAD: I have no counsel.
17 LT McPHILLIPS: Please tell us, what is your current
18 employment and position?
19 MS. CONRAD: I'm an executive director for NPFVOA Vessel
20 Safety Program.
21 LT McPHILLIPS: What are your general responsibilities in
22 that job?
23 MS. CONRAD: I run the company. It's nonprofit. We do
24 training, and take care of situations, mostly catering to parts of
25 the fishing industry and maritime safety.

1 LT McPHILLIPS: Can you briefly tell us your relevant work
2 history?
3 MS. CONRAD: Excuse me?
4 LT McPHILLIPS: Briefly tell us your relevant work history.
5 MS. CONRAD: In 1988 I graduated from college and went to
6 work as a foreign fisheries observer in the Bering Sea for four
7 years. And after that, I started in -- no, in 1984 I was an
8 observer up in the Bering Sea. In 1988, I started as a human
9 resource manager, managing claims and also in charge of safety for
10 factory trawlers in the Seattle area.
11 LT McPHILLIPS: What is your education related to your
12 position?
13 MS. CONRAD: I have a B.S. in zoology.
14 LT McPHILLIPS: Do you hold any professional licenses or
15 certificates related to your position?
16 MS. CONRAD: I do not.
17 LT McPHILLIPS: Thank you, Ms. Conrad.
18 Mr. Dzugan, please state your full name and spell your last
19 name.
20 MR. DZUGAN: My name is Jerry Dzugan. Last name is spelled
21 D-z-u-g-a-n.
22 LT McPHILLIPS: Please identify counsel or representative if
23 present.
24 MR. DZUGAN: I have no counsel, except my own.
25 LT McPHILLIPS: Please tell us, what is your current

1 employment and position?
2 MR. DZUGAN: I am currently the executive director of the
3 Alaska Marine Safety Education Association, a nonprofit based in
4 Sitka, Alaska.
5 LT McPHILLIPS: What are your general responsibilities in
6 that job?
7 MR. DZUGAN: Oh, to run a nonprofit, to -- our basic
8 responsibility, my basic responsibility is to create and support a
9 network of fishing vessel port-based instructors around Alaska and
10 the U.S., and to provide them with curriculum and training
11 materials and equipment and funding so that they can provide
12 accessible training to fishermen. We also do -- we also have a
13 very active program in the schools in the state. So I have other
14 non-fishing training responsibilities.
15 LT McPHILLIPS: Can you briefly tell us your relevant work
16 history?
17 MR. DZUGAN: I will include my eight years of teaching in
18 inner city schools in Chicago, secondary education teacher. I've
19 been a commercial fisherman in Alaska from 1980 to about six years
20 ago, off and on, owned and worked on halibut long-liners, co-owned
21 and worked on salmon trawlers. Last year -- last -- six years
22 ago, my last fishing was on commercial salmon seiner.
23 We've also been doing marine safety in that time. In terms
24 of work, anything related to fishing vessel safety has pretty much
25 been my work. I operated a charter boat wildlife tour business

1 for about 16 years. I've been a EMS instructor, a full faculty
2 at the University of Alaska. That's, pretty much wraps it up.
3 LT McPHILLIPS: Thank you. What is your education related to
4 your position?
5 MR. DZUGAN: I have a bachelor's degree in secondary
6 education. I have a doctorate degree in grant education and
7 training, from World Maritime University in Malmo, Sweden. I've
8 got the HSM certificates also. You know, I had a (indiscernible)
9 license for 22 years. Certifications, marine safety instructor
10 trainer, first aid instructor certificates.
11 I've taken STCW courses in Europe. I've attended about 12
12 different schools in Europe for different types of training and
13 certification in marine safety, tanker courses, marine simulator
14 instructor certifications, shipboard damage control from NPFVOA,
15 stability for fishermen (indiscernible) drill and, you know,
16 things like that.
17 LT McPHILLIPS: Thank you both. Captain Callaghan will now
18 have follow-up questions for you.
19 CAPT CALLAGHAN: Good morning again, and thank you both. I'm
20 now going to turn it over to Mr. Keith Fawcett.
21 Mr. Fawcett?
22 EXAMINATION OF JERRY DZUGAN AND KAREN CONRAD
23 MR. FAWCETT: Thank you, Captain.
24 Thank you, Ms. Conrad, for being here in person, and
25 Mr. Dzugan, for being here virtually. Just a clarification. You

1 had mentioned the Coast Guard credential you held. That was for
2 smaller, uninspected passenger vessels that carry six or less
3 passengers. Would that be correct?
4 MR. DZUGAN: That's a correct clarification, yes.
5 MR. FAWCETT: And so we're only going to show a couple of
6 exhibits, and we'll invariably put it up in front of you, and the
7 Recorder, Lieutenant McPhillips will either zoom it in for you, or
8 manipulate it to help you really see it, and take your time and
9 look at it. And if you will now have him slide the image around
10 so we can see things better, that'd be great. With that, I will
11 first talk to Ms. Conrad.
12 So, Ms. Conrad, if you could, talk about why your training
13 facility was created. What is the need, and what do you hope to
14 accomplish at this school that you are director at?
15 MS. CONRAD: So, NPFVOA was started in 1961, and it was
16 created by fishermen to have a group that could support for
17 lobbyists and to keep up on governmental affairs. And then in the
18 late 80s, around 1984, the Americans were phasing out the foreign
19 fleet and there were more factory trawlers were being created.
20 They were starting to fish pollack, and the company was changed to
21 a safety program at that time, a nonprofit safety program.
22 It was mostly driven by insurance, that there were so many
23 accidents and injuries occurring on the fishing fleet, that a lot
24 of the brokers and insurance companies were not going to insure
25 that group anymore with P&I insurance. So this was a way for the

1 fishermen to get together, the owners to get together and create a
2 safety program, and of course at that time it's all voluntary, but
3 to start promoting safety on the vessels. And that was the key
4 reason it became NPFVOA, the Vessel Safety Program.
5 MR. FAWCETT: So have you always had a mission to provide
6 training to the smaller commercial fishing vessels under 200 tons?
7 MS. CONRAD: We do all fishing vessels. We do the small
8 boats. We do the factory trawlers that hold 200 people. Because
9 I've been in the fishing industry for so long, I've been there for
10 15 years now, and my main emphasis has always been what will make
11 it easier for the fishing crews and the owners to come in and get
12 trained on what they need to be trained on.
13 And so I can look at things like HAZWOPERs, and that needs to
14 be done, and we can do that virtually. And we just try to make it
15 as easy as possible to get training to the crews, whether that
16 means we go to their boat, and do it on their boat, whether we fly
17 to Dutch Harbor and do it in Dutch Harbor, or Hawaii, or whether
18 we -- you know, every week we have the same classes given, month
19 after month.
20 And I can have -- we're also membership-based, so we have
21 that, fishing vessels that are members. And with that, they get
22 extra perks. And one of the perks is, they can call me up, and
23 you have one guy that needs a drill class, and he's leaving
24 tomorrow. And we have him come in at 8 o'clock at night and we
25 train him for the eight hours, and he's off to go. So we are

very, very flexible, because you have to be when you're working with fishermen.

MR. FAWCETT: So, I probably should have thought of this, and I didn't, but if you could (indiscernible) the scope for both of your two vessels like the *Scandies Rose*, (indiscernible) the times, because as an operator to the certain kind of hazard or wilderness training doesn't apply to that size and class vessel. So it'll help us a little bit, and I should have said that at the onset, but (indiscernible) to the *Scandies Rose*, if I was going to be prospective crew member for that size vessel, the smaller commercial fishing vessel, what training could I get there?

And I don't mean -- I mean, if I looked at the course catalogue, what would I find in terms of the different type of training that's available?

MS. CONRAD: So for that sized vessel, we would make a recommendation first that they have a drill instructor workshop. That way they understand some of the fishing regulations to getting in the immersion suit to running through all the drills that are required. We also have a collision avoidance navigation course that caters towards that size vessel.

We have a stability course that caters towards that size vessel. And we can also put, like me taking that size vessel and take, go on a boat and run drills. And they have to get in the immersion suit. Then we pop a life raft. They have to jump overboard. They get into the life raft and do a survival part

1 that's hands on, in the water.
2 MR. FAWCETT: Would that be described as a basic safety
3 course, or something similar?
4 MS. CONRAD: No. We just call it two hours in the water.
5 And it's just, we go down to the boat, or they come out to our
6 dock, and we run a scenario of drills, and one of them is man
7 overboard, and then another one is abandoning ship. And
8 abandoning ship, we actually pop a life raft, and they climb in
9 the raft after they jump in the water.
10 MR. FAWCETT: So leading up to the accident time frame, just
11 before December of 2019, how well attended, just -- and you don't
12 have to give specific numbers, but were each of those type of
13 courses, in terms of first the drill conductor course? Did you
14 have a lot of attendance for that?
15 MS. CONRAD: For the size of the vessel for the *Scandies*
16 *Rose*?
17 MR. FAWCETT: Yeah, uh-huh.
18 MS. CONRAD: Okay. So, we've had approximately 50 people off
19 that size vessel take a drill instructor class every year. So, it
20 averages about 50 people a year, for the drill instructor.
21 Stability, the stability we've had 31 people in the last three
22 years take the stability class, but eight of those were Coast
23 Guard examiners, and the rest were off of the same size boat as
24 the *Scandies Rose*.
25 I've only had one person take the collision avoidance

1 navigation course. And to put people in the water, I think we've
2 done approximately 25 a year for that size of vessel.
3 MR. FAWCETT: So the stability class, do you know
4 approximately what the cost is for that? And can you elaborate on
5 the stability class?
6 MS. CONRAD: So, the stability class is a four-hour class.
7 It's $200. And we have mainly our architect come in and teach it.
8 And we have the tank with the boat, so we can do everything hands
9 on in the afternoon. And they bring in their stability books, if
10 they have them or can find them. Most of the time it's people
11 from the same company.
12 So for the Mariner boats, we had every captain off the
13 Mariner boat come in last fall and take the course. And they came
14 in as a group.
15 MR. FAWCETT: So, how much of that training in that stability
16 class would focus on pot loading, pot weight or icing? Do you
17 know that?
18 MS. CONRAD: I do not know exactly the amount of time.
19 MR. FAWCETT: So, would it be fair to say that you're an
20 approved facility for those courses by the Coast Guard?
21 MS. CONRAD: Yes, but not all those courses that we do are
22 approved courses. If it's not a Coast Guard approved course, we
23 can do pretty much anything anywhere, where the Coast Guard
24 approved course, you have to do it at an approved site, and you
25 have to follow the syllabus that you submitted.

1 MR. FAWCETT: So have you chose a syllabus since the loss of
2 the *Destination*, to include more information that would be helpful
3 related to stability or icing?
4 MS. CONRAD: Of course, yes.
5 MR. FAWCETT: So you generate a lot of resources, I noticed
6 on your website. We asked you for this one, which is not an
7 exhibit, but this is a DVD that's called "The Vessel Safety
8 Manual." Do you provide that to students in the class?
9 MS. CONRAD: The Safety Vessel Manual is for sale. It's
10 $100. We do not provide it in the class. We have other handouts
11 that we've created specifically for that class.
12 MR. FAWCETT: So, Lieutenant McPhillips, if you could pull up
13 Coast Guard 46, which is a safety alert on stability.
14 It'll appear on your screen here. Do you pass anything like
15 this out to your students, which is one of the safety alerts that
16 came out in late 2017? There's a whole bunch of other ones
17 related to mission operations here. Would I be able to be handed
18 one or have access to one, if I came --
19 MS. CONRAD: Yes. Yes, we have a packet that we put together
20 for a stability class. And anything that's come up, and anything
21 new that in the future, like there would be the investigation
22 report finished for the *Scandies Rose*, we will have it in the
23 packet. This kind of stuff we actually laminate and put it in the
24 packet, and then tell them, you know, they can always post it on
25 their vessel.

1 MR. FAWCETT: So will you take that down, Lieutenant?
2 So how long is the drill conductor class?
3 MS. CONRAD: We have an eight-hour drill conductor class, and
4 then when the 2010 Authorization Act came out and I was working on
5 the objectives for those requirements, we also have a two-day
6 drill instructor class that covers survival, damage control and
7 drill instructor.
8 MR. FAWCETT: So you mentioned that 2010 Authorization Act.
9 One of the things that, recommended was some kind of a competency
10 card or certificate, simple certificate that would be issued to a
11 mariner in a commercial fishing trade that would document a
12 competency. Have you begun working to develop something similar
13 to this so that when that event actually occurs, we'll have a
14 course or some training that you can provide?
15 MS. CONRAD: So I was on the Fish SAC, and when I -- I can't
16 remember the date, but I've been on there for two or three terms
17 now. When we got there, they had created the objectives for each
18 of the competencies. And so, one of the things in our committee,
19 what we did was, we created -- we tidied up the objectives, and we
20 also came up with time zones, like you know, should the class be
21 four hours, or how do you get all these ten classes in a period of
22 time where you can capture the fishermen to take the class?
23 So, we came up with a day by day, it's a five-day course.
24 And these were our recommendations to the Coast Guard at the end
25 of all this. So it's a five-day course and it covers all ten

1 competencies. And the fisherman doesn't have to take all five
2 days at one time. They could come in and take one day. And then
3 when you get back in a month or two they can take another day.
4 They have five years to complete all five, and then they do a
5 refresher every five years. And not a lot had happened creating
6 these courses, so I talked to Jack Kemerer, and he suggested I
7 write the syllabuses for these courses. So I have a written a
8 syllabus for every one of these competency courses, and for the
9 time that we allowed.
10 Ane then after that, I've written the two-day drill
11 instructor to combine two days, and then I've also done stability
12 from the objectives and I'm working on navigation right now. And
13 these are courses that if this gets passed into a regulation, I'm
14 ready to give the class.
15 MR. FAWCETT: Okay. So let's just -- you know, here's a good
16 timeline. The Authorization Act was in 2010.
17 MS. CONRAD: Correct.
18 MR. FAWCETT: You provided guidance and input on
19 recommendations for the course as a approved training facility,
20 with some considerable experience. At the time it was called the
21 Commercial Fishing Safety Advisory Council, which is a federally
22 mandated committee. Do you know approximately when you did that?
23 MS. CONRAD: Jerry may know. I think it was around 2016,
24 2017, maybe even as early as 2015. It was the meeting we had in
25 Savannah, Georgia.

1 MR. FAWCETT: Okay. And for the record, Mr. Kramer, or
2 Kemerer, I believe, used to be the chief of the Office of
3 Commercial Vessel Safety. Is that correct?
4 MS. CONRAD: That's correct.
5 MR. FAWCETT: So, I did want to revisit, just for a moment,
6 this Vessel Safety Manual. And it does have a couple of areas in
7 it. One is stability. If I were to open the manual, could you
8 just give a rough idea on how much of that document would be
9 devoted to stability?
10 MS. CONRAD: I don't know.
11 MR. FAWCETT: Okay. And also, (indiscernible) vessel safety
12 concerns, I'm just wondering if that would include certain things
13 like icing and pot loading, or pot loads in the safety concerns
14 segment.
15 MS. CONRAD: I don't remember.
16 MR. FAWCETT: Okay. We can pull that off the -- the issue
17 was that, for me anyways, the manual is the style that the
18 information is incorporated. It's not easy for me, as an
19 investigator, just to extract. But it would be easy for a student
20 that was using the manual to go through all the pages. So, I
21 thank you for that. Do you know when that manual was last
22 updated?
23 MS. CONRAD: It was last updated 13 years ago.
24 MR. FAWCETT: So, you did testify in the *Destination* case,
25 didn't you, as a member of the -- as a witness for the Marine

1 Board?
2 MS. CONRAD: I did.
3 MR. FAWCETT: So I read some of those transcripts in
4 preparation for this accident, and one of the areas that you were
5 asked about is the stability classes. And at the time, you said
6 normally you were able to get one or two people to attend that
7 course. Since the loss of the *Destination* -- and that was really,
8 your testimony is close to the time of the loss of the *Destination*
9 in August, shortly after the vessel sank. Earlier (indiscernible)
10 have more people expressed interest in attending your stability
11 courses?
12 MS. CONRAD: No. I will say that there are some owners that
13 have stepped up and had their captains -- I've had two owners come
14 in since, have sent their captains to one class and seven to
15 another class. But other than that, it's -- I mean, that was,
16 that's 13 people. I had a total of 31. Eight of them are Coast
17 Guard and 13 of them came from two companies. So, that's the rest
18 that have trickled in, and it's not very many.
19 MR. FAWCETT: Well, (indiscernible) would you recommend that
20 more emphasis be placed on commercial fishermen attending this
21 type of training, the stability training? You know, like perhaps
22 it ought to be expanded, in terms of scope?
23 MS. CONRAD: Absolutely.
24 MR. FAWCETT: So, before we go over to our next witness and
25 ask him a few questions, I'll return Ms. Conrad, again I'll talk

1 to both of you, but do you have any other recommendations to
2 enhance and improve safety operations related to the loss of the
3 *Scandies Rose* or the *Destination* that you'd like to share with us?
4 MS. CONRAD: I would like to go back to the 2010
5 Authorization Act. In 1988, for the Safety Act, when the drills
6 had to be done on a monthly basis, and had to have a drill
7 instructor run those, and that drill instructor had to be trained,
8 there was never an expiration date. So, in the 2010 Authorization
9 Act, they created a five-year expiration date. And to this day,
10 since there's no regulation to support that law, people don't have
11 to still come in and take a refresher course.
12 And I have people that call that took drill instructor, and
13 the only class they've ever taken as a fisherman in 1992, and they
14 aren't going to come back into my classroom until they're required
15 to take it again. And so I would really like to see the drill
16 card expiration given to a regulation and then also the ten
17 competency courses, those were very thought out. It's very hands
18 on. There's no testing. It's catered towards fishermen. And I
19 really would like to see those created into a regulation so we
20 could get those up and running
21 MR. FAWCETT: So when you say no testing, just to be clear,
22 if we were going to do something like talk about a survival suit,
23 you would ask me to demonstrate either a skill, or a full
24 understanding of how to don that. You wouldn't ask me to do a A,
25 B and C, or fill in the blank or something like that?

1 MS. CONRAD: That's correct.
2 MR. FAWCETT: One of the things we've been talking about here
3 is a personal locator beacon. And would you say that one of the
4 purposes of having a expiration date on a training certificate
5 like a drill instructor course is because technology changes, and
6 we want to update fishermen on new technology that they use in the
7 workplace?
8 MS. CONRAD: Yeah, absolutely.
9 MR. FAWCETT: So thank you very much.
10 Mr. Dzugan, could you elaborate a little bit more on -- you
11 know, Dr. Lincoln sort of stole your thunder. She talked a little
12 bit in her testimony about the fact that you travel to Alaska, and
13 so does Ms. Conrad, but could you elaborate a little bit more
14 about the mission of your organization and how you conduct your
15 operations?
16 MR. DZUGAN: The mission we have is to reduce the state --
17 reduce the loss of life injuries in the maritime environment.
18 It's a pretty broad mission. It really -- I have to go back into
19 the history again. It really started in the Kodiak Coast Guard
20 search and rescue air station in the mid to late 1970s, when the
21 Coast Guard -- and Alaska was experiencing one of our first big
22 bubbles in fatalities due to the, really the ton of crab fisheries
23 that took off there, the new fishery, and a lot of people put a
24 lot of capital into it, maybe with not a lot of experience, and
25 all the fatalities were happening.

1 And the Coast Guard helicopter pilots were picking up bodies
2 and survivors. And they'd pick up the survivors, and they --
3 first thing they'd do is give them dry set of clothing. And they
4 took them out to eat, and they'd ask them what happened, just to
5 let them talk. Then they've invite them back to another meal a
6 week later and they'd ask them more detailed information about
7 what helped them survive, what didn't. And out of that came a
8 curriculum.
9 And some of the Coast Guard pilots, one in particular, hooked
10 up with a Sea Grant agent there in Pendleton, who was a Alaska Sea
11 Grant agent and a good instructor, and they did road shows. The
12 Coast Guard had the helicopter, the transportation and the Sea
13 Grant agent had the gift of talk. And they did voluntary talks
14 with the helicopter to villages and fishing ports around Alaska.
15 They delivered the training to them.
16 So, those two people in the early 80s got together and formed
17 a grass roots organization called AMSEA, Alaska Marine Safety
18 Education Association. And by 1985, I think, we officially got
19 our name, got incorporated. And the whole basis of it was to
20 create Alaska-based cold water curriculum that would -- and train
21 instructors to teach in their home ports, who lead a fishery, who
22 often were participants in the fishery, to be like an in-port
23 resource for training, because there wasn't much money for
24 training in those days at all.
25 And so they'd be more sustainable, and able to get training

1 based on this curriculum that had come out of the Coast Guard.
2 So, fishing vessel safety has always been a core part of our
3 mission, because of the high fatality rates. And I'm looking here
4 over my shoulder. We're talking about, in Alaska, 29 fishermen a
5 year, 48 a year, 28, 41, 47, 48, 37. This is in the early 80s.
6 It's extremely high.
7 And so we focused on that group, and supplying those
8 instructors with support, and curriculum, and funding to do
9 training. But we also realized that it's hard to attract a,
10 someone who's been fishing for 30 or 50 years to take training, as
11 Ms. Conrad pointed out, in stability courses and (indiscernible)
12 also. So we needed to get into the schools as well.
13 So we started doing training in the schools, because in the
14 school are going to be the future fishermen, especially in Alaska.
15 So by 1985, '86, we had done our first instructor courses, and we
16 found out that there was a lot of interest outside of Alaska for
17 this as well, especially for those fishing ports, many
18 (indiscernible) the country are remote. And there's no central
19 access point to go to, and there's not much funding available for
20 travel.
21 So the whole mission has really been about making training
22 available that's relevant to those fisheries, because different
23 fisheries have different issues in safety, small boat, big boat,
24 seiners, (indiscernible), trawlers. Credibility that instructors
25 speaking to the fisheries in recent, the people who train have, is

1 accessible, so they can find it in their own home port and not
2 have to travel 2,000 miles to get it at a maritime academy, and
3 affordable, basically, so there's not barriers.
4 We have seen barriers in the past when we have had to charge
5 for courses. So, a roundabout way to explain it, but it's, that's
6 the mission, and that's how we've approached accomplishing our
7 objectives in that.
8 MR. FAWCETT: So did you also support creation of a set of
9 standards for certification, basic certification involving the
10 2010 Authorization Act? Did you create your own set of
11 suggestions or recommendations?
12 MR. DZUGAN: I was on the Commercial Fishing Safety Advisory
13 Committee in 1990 when it first formed, the 1988 Act was passed.
14 And we were very interested in seeing training requirements in
15 that act. And I was on it again in 2010, as the chairperson, and
16 I chaired the training subcommittee. And that was the one which
17 created the objectives for those courses that were delineated in
18 the 2010 Act.
19 And then I think Karen explained pretty well what happened,
20 you know, after the objectives and how an outline was developed by
21 a group of the members of that committee, that subcommittee on
22 training within the Fish -- we call it the Fish SAC committee,
23 Commercial Fishing Safety Advisory Committee, around the course
24 of, during the mid double aughts to just a few years ago until we
25 finalized it, and Karen did her work.

1 MR. FAWCETT: This is a question for either of you. Since
2 you've been involved with the Fishing Safety Advisory Committee,
3 what is the most frequently that you've seen that committee meet
4 during the years of your involvement? First I'll go to you,
5 Mr. Dzugan. How many times a year?
6 MR. DZUGAN: Well at least since I've been involved, since
7 1990, I've been on the committee about 22 of those years. I had
8 about a five-year hiatus in the middle, and I've only been on it
9 for the last few years. In the beginning there was a lot of work
10 to do with the 1988 Act, and we had meetings once or twice a year,
11 at first at least once a year.
12 I think it was a requirement under their charter to meet at
13 least once a year, and I guess at some times, twice a year. The
14 1988 Act was passed in 1988, and by 1991, three years later, there
15 were regulations out. And for training, there was a three-year
16 window to get that training. That ended in September of 1984. So
17 it was a pretty quick effort to go from act to federal code to
18 CFR, Code of Federal Regulations.
19 We had annual meetings through the 80s and 90s, considering
20 the emphasis, I think in the last five years. And again, in the
21 last five years I've only been on the committee for two of those.
22 The meetings have been less, or they have been -- of course last
23 year, they were virtual. But they've gone down in number, in my
24 experience, when I was on the committee. They have been less
25 frequent.

1 MR. FAWCETT: So, Ms. Conrad, have you -- do you differ for
2 that, or is that like the same perspective, based on your
3 experience?
4 MS. CONRAD: It's the same perspective.
5 MR. FAWCETT: Have either of you ever heard the issue of
6 stability or icing discussed in those Commercial Fishing Safety
7 Advisory council meeting -- Committee meeting?
8 MR. DZUGAN: Having attended about 30 of those meetings,
9 maybe, almost every meeting I can think of, we've always had a
10 naval architect or an engineer as a member of the committee.
11 We've always listened to them, and sometimes when there had been
12 another architect or engineer in the room, we've heard discussions
13 between the two of them, about standards, disagreements, trying to
14 come to some common understanding of them.
15 So, the short answer is yes, almost every meeting, it's been
16 a topic of conversation.
17 MR. FAWCETT: Has it resulted in any formalized set of
18 recommendations to the Coast Guard that have been generated by
19 that committee?
20 MR. DZUGAN: I have to go back through 30 years of my notes
21 on that. I knew you'd ask that question. That's been a really
22 difficult thing to come up with, because of the lack of agreeing
23 on what's a good standard for fishing vessels. So I know that
24 our -- often, is it 586, the NVIC 586, do I have that one right,
25 587? I think it's a NVIC that was voluntary standards for fishing

1 vessels that came out in '87, I think.
2 That has suggestions. Those, that NVIC, those NVIC guidances
3 were quite often considered out of date or inadequate by naval
4 architects in the 80s. I think I remember the term outdated quite
5 a bit, or needed updating. So, specific recommendations from that
6 committee seemed to be difficult on that, because of that,
7 difficulty of coming up with a standard.
8 I can't remember right off the top any specific
9 recommendations that were made, but there were certainly a lot of
10 discussions.
11 MR. FAWCETT: Returning to the training, if I'm a commercial
12 fisherman on a vessel such as the *Scandies Rose*, under 200 tons,
13 what training can I get from you in addition to the drill
14 conductor training that you provide?
15 MR. DZUGAN: Well we would offer or would suggest the
16 stability training that we do. We've been doing stability
17 training for, at least since -- either workshops or accepted
18 courses since 2009. But further, the damage control has been a
19 regular part of our drill conductor courses since they were
20 approved in the early 90s. So you've always gotten that if you're
21 a drill conductor. And we've trained about 23,000 drill
22 conductors, so they've gotten that part of it.
23 We would also suggest, we do short workshops that are not
24 Coast Guard approved. They're just an hour or too long, on
25 ergonomics. We've trained thousands of fishermen in ergonomics,

1 because that's the number one leading cause of injuries in
2 fishing, musculoskeletal disorders is what I'm talking about,
3 tendonitis, carpal tunnel, things like that.
4 I would also recommend, we do a workshop in risk theory and
5 risk management. The subtitle of it is, "Why Smart People do Dumb
6 Things." It has to do with what, the conversation that was going
7 on early with Dr. Lincoln and Ms. Case, about decision-making.
8 And we also do workshops on sleep deprivation. So I would suggest
9 those workshops.
10 And depending on the type of fishery they're in and that type
11 of vessel, that the *Scandies Rose* and *Destination* were, I'd
12 recommend that they take specialty courses through NPFVOA, who
13 offer different varieties of courses more specific to operations
14 of that nature.
15 MR. FAWCETT: So if I attended the drill conductor course,
16 and the facilities and the infrastructure was available, would I
17 get wet? Would I get in the water? Would I get in a raft? Would
18 I put on an immersion suit?
19 MR. DZUGAN: So, like Ms. Conrad said, our trainings are
20 pretty skills based. They're -- again, no written test. We don't
21 want to have to -- a lot of the people who take our courses are
22 Vietnamese, and Spanish speakers, you know, Gulf of Mexico, and
23 they don't write English or read English, and sometimes they're
24 not even -- they can't even read in their own language of
25 Vietnamese sometimes.

1 So, it's a skills-based course, and 16 out of 18 skills have
2 to be done. And one of the skills is going in the water. They
3 operate a dewatering pump, demonstrating how to plug flooding on a
4 vessel, whether we're using pipes or a damage control trainer,
5 testing an anchor, giving a mayday. I have the list here. We
6 have a skill check off list that comes with every class.
7 Everything our Coast Guard approval and acceptance is testing
8 (indiscernible) inspect and stow PFD, or immersion suit, don an
9 immersion suit in 60 seconds, demonstrate help and huddle
10 positions, which are for cold weather survival, right and enter a
11 life raft, extinguish a fire, don a fireman's outfit if so
12 equipped, and that type of (indiscernible).
13 So, review your orientation requirements, explain the
14 instructions in 28.265, (indiscernible) station drill, fight a
15 fire, get flotations on the boat, abandon (indiscernible) drills.
16 Those are the skills that they have to check off on.
17 MR. FAWCETT: Ms. Conrad, is it similar for you -- I mean, if
18 I attended your drill conductor course under the same
19 circumstances, could I go in the water to demonstrate the skill,
20 if the facilities were available?
21 MS. CONRAD: Yes.
22 MR. FAWCETT: So, Mr. Dzugan, this is a book called -- and
23 it's going to be mirrored, unfortunately, but it's called "Beating
24 the Odds," and you're one of the authors. Is that distributed to
25 people that take the course, or do they have to purchase that?

1 MR. DZUGAN: They are given that as part of the course, yes.
2 So, basically we've trained 23,000 people. There's 23,000 copies
3 of it floating around the ports. Yes.
4 MR. FAWCETT: So there's a section in there on icing and what
5 you can do if you're a vessel operator to avoid icing. And it
6 talks about reduce the spray, run downwind to reduce the spray and
7 seek shelter. Has that been updated, or is there a thought of
8 updating that, based on the loss of the *Destination* and what we
9 might have learned from that?
10 MR. DZUGAN: Yes. And already the lessons from the
11 *Destination* have been included and revised in some of the
12 activities we do in the stability class. This was last updated, I
13 think, in 2018, 2019. We try to update the manuals every -- the
14 instructor manual and that book every few years. Matter of fact,
15 what's interesting about this is I started updating that, I think,
16 in early 2018 or '19. And it took about nine months to update it,
17 with all the other work. And then by the time I had finished
18 updating it, the technology had changed, so I had to change some
19 of the stuff I had written nine months ago.
20 So, there -- especially EPIRBS and the electronic
21 communications, AIS and things like that. So the technology
22 changes faster and faster, as I think all of us know.
23 MR. FAWCETT: So, it's obvious from both your -- pardon me,
24 both of your training manuals that getting training or having this
25 type of information available, both manuals have a wealth of

1 illustrations and diagrams and so forth. So, Mr. Dzugan, do you
2 pass out safety information bulletins from the Coast Guard, or
3 marine safety alerts to the students that attend, I mean, so they
4 can physically get their hands on them?
5 MR. DZUGAN: Some of them we do, as a useful handout, and
6 some -- all of them, we put on our website, and we make reference
7 to the website. We have a very active, an information total
8 resource on our AMSEA website.
9 MR. FAWCETT: So, in the testimony that you gave in the
10 *Destination*, you were asked about the drills that take place on
11 commercial fishing vessels. In your area for this hearing I found
12 your testimony disturbing. In your testimony, and I'll just
13 paraphrase it, you said you found that despite the fishing vessel
14 captain's reputation, they can be pretty brute honest and brutally
15 honest. And when they say if they do and sometimes do not, in
16 terms of a query about do they conduct drills, I know you said
17 that -- and they had two people out of 60 people that had monthly
18 drills, or they had done drills.
19 When I dug further, I found that the drills they were doing
20 was at the beginning of the season, and they put the suit on, and
21 that was it. And then in further talk about the percentages of
22 the fish observer -- observer program that Ms. Conrad talked
23 about, she was a part of it. And so, in working with the fish
24 observers, they said that approximately 29 percent of fishing
25 vessel crews are barely given an opportunity to practice emergency

1 drills.
2 Since your testimony there, have you had the opportunity to
3 examine or elaborate or modify what you testified about? Have you
4 seen more crews participate in drills, from talking to them that
5 come into the, where people pull you aside and talk about what
6 they actually do in conducting training?
7 MR. DZUGAN: Anecdotally, from what I've observed since the
8 *Destination*, half of which includes last year, in which I didn't
9 see much people on vessels at all, because I couldn't go on them,
10 and training was greatly reduced for obvious reasons, but really,
11 since 1991 I have seen an incremental increase in the acceptance
12 and the conduction of drills. I can't quantify that.
13 But I know when we did a survey in -- 13 years ago, this is
14 what I based that 2 out of 60 people on, I see people doing drills
15 more at harbors, as I go around the state and country. But I
16 can't quantify it. It's certainly a lot more acceptable now.
17 When I first went looking for a job on a fishing vessel in 1980,
18 you didn't go on some boats and talk and ask about the safety
19 equipment. They'd just send you right off the boat.
20 They didn't have emergencies on the boat. Drills, if a drill
21 was done it was just a, you'd sit around the galley table and talk
22 about it. And there has been an evolution, I think, in the
23 industry about the acceptance of drills, and doing them more
24 often. And it's been incrementally growing. That's what I've
25 seen in the long history I've been involved.

1 Now, what is the quality of those drills? I think the
2 quality's been better. But I can't quantify that through any kind
3 of study we've done. That would be hard to do, in a practical
4 sense. But yeah, there's been an incremental increase in that, I
5 just can't quantify it with a percentage.
6 MR. FAWCETT: So, Lieutenant McPhillips, if you'll pull up
7 Exhibit 126. And this is a screen capture of one of the pages
8 from your website. And if you'll notice, down in your fishing
9 stability video, I actually thought about downloading that, and
10 asking your permission to incorporate it as part of an exhibit for
11 this. But you're able to provide those at zero cost. I could
12 click on it and see that. Is that correct?
13 MR. DZUGAN: There is a cost for it, a minimal cost of $20
14 just to reproduce it, but we make it available for free on our
15 website, that video and about eight or ten other videos, yes. So
16 either way, you can grab it off the website or you can pay a small
17 amount for it.
18 MR. FAWCETT: And if I paid a small amount, I would have it,
19 correct, and I could use it for whatever purposes I desire. Is
20 that correct?
21 MR. DZUGAN: That's correct.
22 MR. FAWCETT: You can take that down, sir.
23 So, do either of you receive funding support from the federal
24 government to advance your missions of providing safety training
25 for fishermen?

1 MS. CONRAD: I do not.
2 MR. DZUGAN: I -- we do.
3 MR. FAWCETT: And could you elaborate? The reason I -- I
4 think, you know, starting with prevention strategy early by
5 providing public education, like schools, with some kind of safety
6 training, geared to members of the population are going to go out
7 and work on the water, is that funded by either the State of
8 Alaska or the federal government in any way?
9 MR. DZUGAN: We have funding from a number of different
10 sources. The State of Alaska provides some funding, and they have
11 for about the last 20 years. That's going -- that's decreasing
12 now. We have been supported by NIOSH since about 1992, or 93,
13 continuously, in one form or another. They have been our longest
14 term support of funding.
15 The Coast Guard has supported us since about the mid 1990s,
16 to varying degrees. We lost the last year or two out of a five-
17 year contract we had with them. But then that was replaced by a
18 collaboration of funding between the Coast Guard that goes to
19 NIOSH, that goes to fishing vessel training programs around the
20 country that apply for it.
21 We have memberships. Like NPFVOA, we're a membership
22 organization. We have contributions. We get small, we have small
23 contracts with agencies. Yeah, so it's from a number of sources,
24 but federal sources have been an important source for us, largely
25 because of the travel that's involved, servicing Alaska and other

1 rural ports around the country.
2 MR. FAWCETT: So this is my final topic area. And Lieutenant
3 McPhillips, if you'll pull up Exhibit 079. The Coast Guard Marine
4 Board reached out to both of you and asked you to examine your
5 records to determine if any of the accident crew -- pardon me, on
6 the *Scandies Rose* had attended training at your facilities. And I
7 will confess, I was over-eager in redacting personal information.
8 It makes it a little difficult to read.
9 So if you have at your disposal, first I'll take you,
10 Mr. Dzugan, Ms. Conrad, and ask you if any of the *Scandies Rose*
11 crew attended your classes?
12 MS. CONRAD: Seth attended a first aid, firefighting and
13 drill instructor when he was working on the clipper, *Epic*. And
14 that was back in 2013 and 2015.
15 And then, I think the drill instructor, for 1994, '96 and
16 '06 was actually Dean's -- Gribble, Jr.'s father that took the
17 classes, looking into it. It wasn't Dean. Dean took -- he was
18 working for Alaska Boat Company. We went down to the boat and did
19 abandon ship drills, so they had to -- they jumped in the water,
20 they deployed a life raft, they did all that, and he was one of
21 the crew members that participated in that.
22 MR. FAWCETT: And so, and so that's your (indiscernible)
23 class that you talked about where you get wet?
24 MS. CONRAD: Yes, correct. And then no one else on the list
25 have taken any classes.

1 MR. FAWCETT: And just to be sure that nobody took the
2 stability course, is that correct?
3 MS. CONRAD: That's correct.
4 MR. FAWCETT: And for the record, we'll redact this in
5 compliance with accepted standards as soon as we get the
6 opportunity.
7 So, Mr. Dzugan, can you look down that list and tell us about
8 any of the accident crew that took classes at the Alaskan marine
9 training facility?
10 MR. DZUGAN: Well, I was --
11 MR. FAWCETT: (Indiscernible).
12 MR. DZUGAN: Well, are you talking specific to the *Scandies*
13 *Rose*, correct?
14 MR. FAWCETT: Yeah, the list of names that you see at the
15 bottom of the document.
16 MR. DZUGAN: The only one we could find in our database is
17 Gary Cobban, Jr. He was trained in Kodiak in our 12-hour -- we
18 have two drill classes, a 10-hour and 18-hour. He took 12 hours
19 of our 10-hour course in Kodiak in February 26 of 2009. We had
20 trained his father a couple of years before that in Kodiak,
21 Senior. It took us a little while to separate the father from the
22 son, but I can say with certainty that Gary Cobban, Jr. had taken
23 our drill conductor course in February of 2009. That's, that was
24 the only person we could find in our database.
25 MR. FAWCETT: Okay, thank you very much.

1 Lieutenant, will you pull that down?
2 So I did ask Ms. Conrad, and this is my final question to
3 answer, what are your recommendations that you'd like to share
4 that would promote and enhance the safety of commercial fishermen?
5 I'm looking at an isolate of the *Scandies Rose*, but I won't narrow
6 that down.
7 MR. DZUGAN: Well I would just second what Ms. Conrad said
8 about putting some of the training law from the 2010 Act into
9 regulations. And a really important one is refresher training
10 every five years. NIOSH has shown repeatedly that there is a
11 protective effect for training in casualty if you've had training
12 within five years.
13 And outside of that five-year window, the protective effect
14 of the training goes down. So, that's really important.
15 Having -- and this is for the drill class. It's also important to
16 get stability training required. We have offered 65 stability
17 workshops, approved or unapproved workshops, from one to eight
18 hours in length, in the last 11 years. Forty-five of them were
19 held. We have a 30 percent cancellation rate.
20 Coincidentally, two months ago we scheduled a stability class
21 in Sitka tomorrow. We just cancelled it today because there were
22 no signups. We'll try to re-give it. It's kind of like it was in
23 the early days before drill conductor training was required in
24 that you only got notice of the fire coming. The people are
25 already motivated towards safety, and didn't have -- their own

1 egos sometimes get in the way of going to class.
2 The other thing that the 2010 Act did in this, other topics
3 like navigation and weather are still not required. It's been
4 over ten years now. I don't know how many people would have been
5 helped with that training, but there's also statistics showing
6 that there is a protective effect of training, and that should --
7 it's almost, it's unethical that that law has not been made into a
8 requirement, for over ten years now.
9 There should be also, from the 2010 law be parity, for both
10 documented and non-documented fishing vessels, who fish side by
11 side with the same gear, who have the same risks, from the same
12 environment, but one is not required to have training because
13 they're outside the boundary line.
14 Our boundary line issue makes no survivability sense
15 whatsoever. It just goes from headland to headland. It
16 eliminates all of Cook Inlet all the way out to the Barren
17 Islands. You don't have to have training. But when you go to
18 Western Alaska, you step in the ocean, beyond low, low water,
19 you're beyond the boundary line. It makes no sense. The 2010 Act
20 says 3 miles and beyond, whether you're documented or not.
21 There's no reason why that shouldn't be a regulation. So,
22 those are the things that I think are really important that I
23 would urge be looked at. I find it difficult to understand why
24 that hasn't been done.
25 MR. FAWCETT: So sir, just to clarify something you said, I

1 think you, when you said required related to stability, are you
2 saying there should be a requirement for stability training as
3 opposed to maybe some miscommunication where people might think
4 that stability training is required?
5 MR. DZUGAN: That's one of the things that's very unclear
6 right now, to a fisherman, who -- if there's a Coast Guard
7 dockside exam, they ask about training, they'll ask for their
8 drill conductor card, and check it off on their list. And then if
9 the fisherman says, well what about stability, the Coast Guard
10 person will say, well we recommend that but it's not required. So
11 the fisherman thinks, well it's not required.
12 However, in a civil case, a lawsuit, counsels are going to go
13 to the law, which is the 2010 law. And because it's not required
14 and it's not advertised as required, because -- little to not by
15 the Coast Guard and others, we have to tell them the same thing,
16 they think they don't have to do it. But for their own legal
17 protection, they really need to do that. And that is a little
18 bit -- well it's very unfair to fishermen.
19 MR. FAWCETT: So thank you both very much.
20 I'm done with my questions, Captain. Thank you, sir.
21 Thank you, Ms. Conrad.
22 CAPT CALLAGHAN: Thank you, Mr. Fawcett.
23 And Ms. Conrad and Mr. Dzugan, I'm now going to pass it over
24 to our colleagues with the National Transportation Safety Board.
25 Mr. Barnum?

1 MR. BARNUM: Thank you, Captain, and thank you, Mr. Dzugan
2 and Ms. Conrad. Appreciate your testimony and a lot of great
3 information. I do not have any questions at this time. Thank
4 you.
5 CAPT CALLAGHAN: Thank you, Mr. Barnum.
6 And now I'm going to go to our parties. Start with counsel
7 for the two survivors, Mr. Stacey.
8 MR. STACEY: Thank you very much for your testimony. I have
9 no questions for you.
10 CAPT CALLAGHAN: Thank you, Mr. Stacey.
11 Over to counsel representing the vessel owners, Mr. Barcott.
12 MR. BARCOTT: Mr. Dzugan, Mike Barcott representing the
13 *Scandies Rose*. It's clear you are passionate about what you do
14 and we appreciate that.
15 And Ms. Conrad, we've known each others for years, more than
16 either of us would like to count, I'm sure. And your classes are
17 well known on the waterfront here. Fishermen appreciate it. They
18 appreciate the practical nature of them. I've participated in
19 some of them, so thank you so much.
20 No questions.
21 CAPT CALLAGHAN: So I'll take the opportunity to thank both
22 of you for participating this morning. Sharing, you know, what
23 you do and what you offer is really important to us here, so we
24 can get a better understanding, and we can share with the general
25 public and the fishing industry, you know, the services that you

1 provide.
2 Again, thank you. You know, we ran a little late this
3 morning. I want to thank you both for your patience and time in
4 bearing with us and sticking with us through that delay. So thank
5 you both very much.
6 At this time, you are now both released as witnesses from
7 this formal hearing. Thank you for your testimony and
8 cooperation. If at a later time we determine that this Board
9 needs additional information from you, we'll contact you directly.
10 If you have any questions about the investigation, you may contact
11 a member of the Board or Investigation Recorder Lieutenant Ian
12 McPhillips.
13 Thank you both very much for your time today.
14 (Witnesses excused.)
15 CAPT CALLAGHAN: The time is now 1143. This hearing will now
16 go into recess and resume as scheduled at 1300.
17 (Off the record at 11:43 a.m.)
18 (On the record at 1:07 p.m.)
19 CAPT CALLAGHAN: Okay. The time is now 1307. This hearing's
20 now back in session. We will now hear from Mr. Bruce Culver.
21 Mr. Culver, Lieutenant McPhillips will now administer the
22 oath and ask you a few brief questions.
23 MR. CULVER: All right.
24 (Whereupon,
25 BRUCE CULVER

1 was called as a witness and, after being first duly sworn, was
2 examined and testified as follows:)
3 LT McPHILLIPS: Please state your full name and spell your
4 last name, sir.
5 THE WITNESS: My name is Bruce Culver. Last name is spelled
6 C-u-l-v-e-r.
7 LT McPHILLIPS: Please identify counsel or representative if
8 present.
9 THE WITNESS: There's nobody.
10 LT McPHILLIPS: Please tell us what is your current
11 employment and position?
12 THE WITNESS: I am more or less retired.
13 LT McPHILLIPS: Thank you, sir. Captain Callaghan will now
14 have follow-up questions for you.
15 CAPT CALLAGHAN: Thank you, Lieutenant.
16 EXAMINATION OF BRUCE CULVER
17 BY CAPT CALLAGHAN:
18 Q. Mr. Culver, again thank you for joining us this afternoon.
19 Thanks for attending this hearing virtually. If at any point we
20 ask a question that you do not understand or can't hear, please do
21 not hesitate to say so, and we can repeat the question or rephrase
22 it for you. If at any point you need a break, just let us know
23 and we can take a short recess for you.
24 Using this platform, we have the ability to share exhibits.
25 And if we do so, the exhibit will come up on the screen in front

1 of you. And if there's anything that you'd like to point to or
2 highlight, you can let us know, and we can have the person in the
3 room here zoom in on that area for you.
4 First off, sir, I do want to thank you. I know you've
5 provided a lot of information to us over the past year, and I
6 certainly want to thank you for your cooperation and for
7 supporting the investigation by providing all of your files
8 regarding the *Scandies Rose*, so we thank you for that.
9 Sir, are you a practicing professional engineer?
10 A. Yes.
11 Q. And what state are you a licensed professional engineer in,
12 sir?
13 A. Washington.
14 Q. And as a practicing professional engineer, did you regularly
15 conduct stability exams and provide stability instructions for
16 vessels?
17 A. Yes.
18 Q. Do you remember about how many stability instructions you
19 created for vessels throughout your career?
20 A. Well, I've been doing it on my own for maybe 30 years or so.
21 It would be probably at least 200.
22 Q. And are you a person who created stability instructions for
23 the *Scandies Rose* in both 1988 and 2019?
24 A. Yes, the 1988 one I think's been misinterpreted. It was only
25 meant to be kind of a rough check. They had had a fire on the

1 boat in the shipyard where they worked on it, had put a new
2 interior in the cabin. They didn't have enough weight to do a
3 real stability test, so we were only able to view a very small
4 amount. But we -- that's what they had before putting floats on
5 it, and they decided to -- it's intended to use the instructions
6 they already had. But I don't know who prepared those.
7 Q. So, if I understand you correctly, then the stability book
8 that you created in 1988 was created potentially using incomplete
9 information for the incline?
10 A. Yes. We just wanted to kind of verify that we weren't too
11 far off from what they already had. And we were pretty close.
12 They didn't try to do another formal inclining.
13 Q. Okay.
14 A. And I had a different, oh a different software package in
15 those days.
16 Q. Okay. I'll get into that in a minute here. Looking back to
17 your 1988 stability test, can you walk us through how you created
18 that, those original stability instructions in 1988?
19 A. Well, we used the little bit of weight that we had, and got
20 some heel. And we, well we had the freeboard, so we're probably
21 fairly close on the displacement. And it turned out on
22 (indiscernible) we weren't much different than what was already
23 there. So, I went through the, what was in the C.F.R. anyway.
24 But they never used that as their official stability book.
25 Q. Okay. And are you -- okay. So, I'm going to move on to 2019

1 then. And so, in 2019, can you walk us how you created this new
2 stability instructions in 2019?
3 A. We did an incline on the boat in Seattle. We got information
4 from the owner of the boat and one of the crew that was there on
5 where (indiscernible) fresh water and so on were in the boat.
6 Most of these, it's impossible to sound the tank, so you have to
7 depend on what they tell you is in them. And then we had some
8 what they call ecology blocks to use for weights. We had -- and
9 it had been weighed on a certified scale. We had to
10 (indiscernible) near the center of the boat. We went along in the
11 well part of the boat and they heard the freeboards.
12 On the one side, there's a real high rail. But that side was
13 against the dock. So on that side, we ran the freeboards from the
14 dock, because the rail is like 6 feet high or something. On the
15 other side, they have about a, roughly a 4-foot rail. We went
16 along and tried to get measurements in the same location. And we
17 deducted the rail height.
18 So we had freeboards taken five places. We didn't try to do
19 anything outside the well deck area because it would have been --
20 it was either too far away from the dock or too hard to get at.
21 But we did have five readings in the well deck area. And when I
22 plotted them out, they were a reasonably straight line. So, we
23 used that to come up with the displacement.
24 Q. Okay. You say reasonably straight line, would you normally
25 expect that when you plotted out for it to be a straight line?

1 A. It's never going to be absolutely perfect, because you're
2 probably off a little bit on your freeboard readings, because the
3 boat's moving around and there's little waves. You can't get it
4 down to the nearest quarter of an inch. And the boat itself
5 probably varies somewhat from the lines drawing quite a bit.
6 Q. And when you evaluated it in 2019, had you compared it to the
7 lines drawing?
8 A. Yeah. We did the -- yes, we did. I had the lines drawing,
9 and I plotted the freeboards out on the lines drawing. But what I
10 actually used, I had the offset from the baseline at the spots
11 where we took the freeboards. And I just subtracted the freeboard
12 from the offset to the deck to get the draft.
13 And then we (indiscernible) -- we laid it out on the lines
14 drawing. And I think what I did was, after I drew a line through,
15 I used the draft at the bow, I think it was station 0, and the
16 draft at the stern.
17 Q. Okay. And you mentioned something important about the 1988
18 stability instructions that you created. Did you utilize those at
19 all, or any of that information at all for your 2019 instructions?
20 A. No.
21 Q. Okay, so you didn't use any of the information from the, from
22 your earlier work?
23 A. No. I didn't take that one very seriously. I probably
24 should have thrown it away a long time ago.
25 Q. Were you -- did you have any communication with the vessel

1 operators in regards to how they were using that 1988 stability
2 instruction?
3 A. Oh, they didn't have it. That -- at the time that that was
4 done, the owner of the boat was a man named Leith Nordbo (ph.).
5 And as I say, he used the instructions he already had. I think
6 later on, I think in 1998 and in 2006, I did another incline on
7 it, but I think I gave all that information to another naval
8 architect several years ago and I don't have it.
9 Q. Okay, so --
10 A. But that -- they did not -- the present owner didn't have the
11 1988 data and they didn't use it.
12 Q. Okay. And you're certain of that?
13 A. Yes.
14 Q. Okay. And attached to the front of your 2019 instructions,
15 you included a letter to the owner, stating that the weight of the
16 vessel was higher than you previously weighed. Was there a
17 significant weight change that concerned you?
18 A. Well, whatever it is, it is. It did seem a little bit
19 heavier than I had expected before we started. But again, I no
20 longer had my 1998 and 2006 information. I had done something on
21 a sister ship, on the *Patricia Lee*, and I had some data on it. It
22 was a little bit lighter, maybe 20 tons or so.
23 Q. Okay. And when you did the 2019 measurements, did you
24 remeasure the light ship weight?
25 A. We came up with the light ship weight by going into the

1 computer with the draft. Had some help with the displacement. We
2 flooded the apex and the (indiscernible) tanks, and someone had
3 something in them. We took into account the inclining weights
4 that were on the deck, and we made a small allowance for the
5 personnel that were on the boat, and calculated the light ship
6 using the GHS program.
7 Q. Okay. And then, do you remember how you calculated the angle
8 of downflooding in 2019?
9 A. I asked the owner about the air intake for the engine room.
10 That's normally where the downflooding point would be. He told me
11 that it was up high, right behind the steps from the pilot house.
12 I think it's in the side of the stack. It's real high, and maybe
13 2 or 3 feet off the fender line, so I didn't feel like it would be
14 a factor and I didn't put it into the computer model.
15 Q. Okay. Did -- when you were out there, did you verify where
16 those downflooding points were?
17 A. No, I didn't go up there. Since then, I went and -- because
18 there was an issue about it, I went and visited the other sister
19 ship, the *Westwood Wind*, and went up on it. And the opening was
20 where I thought it would be. It's possible that there's some
21 other kind of opening. I don't think they could have had the
22 engine room intake down any lower.
23 Q. So, and you said about 2 feet off the centerline. Are you
24 aware that the engine room air intake ventilation's underneath the
25 ladder wells that go up to the bridge, so that essentially more

1 outboard and towards the side of each, on both the port and
2 starboard side?
3 A. I didn't go up and look at where they actually are. I think
4 where they would go down into the trunk would be almost right on
5 the centerline.
6 Q. Okay. But that's not something you verified while you were
7 out there?
8 A. No.
9 Q. Okay. And how do you calculate, or account for the icing
10 conditions in your stability instructions?
11 A. I tried to figure out -- I think I used the windage heel
12 thing for the side area. And you get 3.07 pounds per square foot.
13 It's kind of hard sometimes to figure out exactly where that would
14 be for the DGH and the LCG. I just kind of did that as best I
15 could. On the horizontal surfaces, we have the forecastle deck,
16 the well deck, the poop deck and then there was a cabin above
17 that, and a pilot house above that. We tried to figure that area
18 as best we could. And there you have 6.14 pounds a square foot.
19 I put in the larger numbers, and I came up with around 12 pounds,
20 but I used my 16 tons to kind of be sure I had enough.
21 Q. Okay. And are sir, are you -- do you reference the icing
22 requirements in, from 28 C.F.R. regarding how to calculate icing
23 conditions?
24 A. Yes.
25 Q. Do you happen to recall what those are, for the vertical and

1 the horizontal surfaces?
2 A. For the vertical surfaces, it's 3.07 pounds a square foot.
3 For the horizontal surfaces, it's twice that, 6.14.
4 Q. Do you happen to remember what that was in terms of allowance
5 for inches of ice accumulation?
6 A. That, I think I looked at that before the vertical thing. I
7 think it works out to be like about 5/8 of an inch. And it would
8 be again twice that for the horizontal. They could certainly get
9 a lot more ice than that, but that's what's in the C.F.R.
10 Q. Okay. And when you -- you said you rely on some input from
11 the owners when you're conducting your stability evaluations.
12 What kind of input do you rely on from the owners?
13 A. Well I need to find out from them the weight of their crab
14 pots. That can vary somewhat. And when I asked the owner about
15 that, I think he told me 825 pounds, if I remember. And he said
16 they based that on having weighed a number of their pots up in
17 Dutch Harbor. And I know he had carried both 8 foot by 8 foot and
18 7 foot by 7 foot pots. And I believe the weight that he gave me
19 was meant to be for the heavier ones. And I used that for all of
20 them. I imagine some of them were a little bit less.
21 Q. Okay. And you mentioned software earlier on, transitioning
22 to different software throughout your career. What software
23 programs do you use currently to make your stability calculations?
24 A. Oh, GHS.
25 Q. Okay. Do you happen to recall what version of that software

1 that you --
2 A. Oh, I (indiscernible), it's a fairly old one but it has
3 everything I need.
4 Q. And do you happen to recall when you started using that?
5 A. Oh, sometime in the 1990s. I don't remember the exact date.
6 Q. And did you say it was the GHS software?
7 A. Yes.
8 Q. Okay, thank you. And so, have you done any of the updates,
9 or are you aware of any updates to that software over time?
10 A. They have given -- when there are updates, it would -- you'd
11 have to pay to get -- they gave me some, earlier on, free. But I
12 don't have any of the recent updates or upgrades.
13 Q. And sir, you've been provided with the Coast Guard Marine
14 Safety Center's report, that analyzed your stability instructions
15 for the *Scandies Rose*?
16 A. Yes.
17 Q. Did you have a chance to go through that, sir?
18 A. I did.
19 Q. And do you have any explanation for any of the differences in
20 those calculations, sir?
21 A. Well, there's quite a few things. I think the most important
22 thing would be the location of the downflooding point. But they
23 had -- they thought that the forecastle was longer than I had it.
24 I'm pretty certain that what I have is right. They were going off
25 a photograph, and you can't really tell from that where the

1 bulkhead is. The forecastle deck goes back several feet past
2 where the bulkhead is. So the main part of the forecastle, I'm
3 sure is right.
4 They were right that I had the aft superstructure a little
5 bit too long. It's -- there's a poop deck that's just a foot
6 high, that starts where I had it starting, but the actual deck
7 house is maybe 3 feet farther back. I changed that on my GHS
8 model after I saw that. It doesn't make an awful lot of
9 difference when I reran it.
10 Q. And what would you say would -- is the one factor -- so you
11 mentioned the one factor is probably the downflooding points?
12 A. Yes.
13 Q. The biggest difference?
14 A. Yes.
15 Q. And so did you happen to see where they put their
16 downflooding points? Did you happen to get a chance?
17 A. I don't remember the exact number. I did go to the -- the
18 only thing I do was go look at that one boat that I had access to.
19 I think all three of them had the same kind of trunk going down
20 into the engine room. And the air intake was in the corner of the
21 exhaust trunk, and there's a fan going into it. Really, the point
22 where you -- even if there had docks farther out, the point where
23 you could downflood would really be where that trunk starts. And
24 that's pretty close to the centerline.
25 Q. Okay, sir. Were you able to review the diagrams where they

1 pointed out the downflooding points being on the outboard side,
2 underneath those ladder wells?
3 A. I looked at that, and I still think that the actual
4 downflooding points there are very close to the center.
5 Q. Okay. And sir, did you perform any stability work on the
6 vessel, the *Sea Venture*?
7 A. Yes.
8 Q. Do you happen to recall an investigation regarding your work
9 on the *Sea Venture* from the Washington Board of Professional
10 Engineers?
11 A. Yes.
12 Q. And can you briefly tell us what the outcome of that was?
13 A. It was turned down. The way that started, someone said that
14 we did not meet a condition where you went out and caught a whole
15 bunch of fish all at once, had your hold almost full, and still
16 had almost all your fuel. On this particular boat, that would be
17 impossible. What he did, he goes out and catches fish and he
18 freezes them. It can take him almost several hours to freeze
19 them.
20 It would be impossible for him to -- he would have had to
21 stop fishing because he wouldn't have the capacity to keep
22 freezing them. So he would never have had a situation where he
23 had a whole full load of fish and a full load of fuel. And we
24 told them that, and I think that was a part of the reason why the
25 thing was turned down.

1 There was also something about the structure of an enclosure
2 that they didn't like. The issue I had on that, I don't remember
3 the exact detail, but to do a little better job on it, it would
4 have interfering with a tonnage opening. He would have had to
5 have something in front of the tonnage opening that would make it
6 not valid. And it's critical for them to be under 200 tons. So,
7 we did the best we could, and it's always worked.
8 Q. Okay. And did you perform any stability on the motor vessel,
9 *Pacific 1*?
10 A. I don't remember that offhand. I may have.
11 Q. Okay. And how about *Arctic Rose*? Did you happen to perform
12 stability work on that vessel?
13 A. The *Arctic Rose*, I did work on when it had a different name.
14 It was called the *Sea Power*. And I did work for the first owner.
15 In fact, I did the original behind to convert it from a shrimp
16 boat to a scalloper, actually to being a trawler. And I did a
17 stability test on it then. I did it in Pascagoula, Mississippi.
18 And that owner eventually sold it.
19 The owner that had it when it was the *Arctic Rose* had a
20 stability test done by another naval architect. And it had been
21 modified somewhat. I gave the information I had to that naval
22 architect before he -- I had some information on the shape of the
23 hull and the tanks and so on. But no, I didn't do the stability
24 on the *Arctic Rose*.
25 Q. Okay. I want to go back to your 2019 stability letter and

1 the initial contact that you made with the owner regarding the
2 weight changes. Do you recall ever having any follow-up with the
3 owners about that weight change that you brought to light in that
4 letter?
5 A. I just -- just in case there had been, was something on the
6 boat that I didn't know about. And I don't think there was
7 anything. We didn't get to -- we didn't actually get back on it.
8 I think he would have told me if he found something in the boat
9 that we didn't take into account. They wouldn't ordinarily have
10 any water in the hold or anything. They normally have that all
11 dry. So I'm really sure there was no other weight.
12 Q. Okay. Are you doing okay, sir?
13 A. Oh, I'm fine.
14 Q. All right. And so, also on your stability instructions, how
15 did you -- how do you message to your clients how you apply the
16 icing conditions in your calculations, to both the vessel and the
17 pots?
18 A. I apply the vertical icing to the side of the stack of pots.
19 And I just, I don't try to make up my own icing load. There --
20 certainly there could be more ice. But I just put in what's in
21 the C.F.R. They understand that there could be more icing than
22 that. Where possible, you would try to break the ice off. I
23 think that what happened to them in this case, all the icing
24 probably was up in the bow, because they were bucking into a head
25 sea. It would have probably been pretty dangerous to go up there

1 and try to break it off. So I don't think they tried to do that,
2 but I don't know. Probably nobody knows.
3 Q. Okay. Do you recall, in those instructions and those
4 calculations that you did in 2019, did you account at all for the
5 sorting table to be on top of the stack?
6 A. No.
7 Q. And why -- do you remember why that is? Is that something
8 you would have relied on them for information? Or --
9 A. I would have relied on them. But the sorting table would be,
10 they're made out of aluminum usually, and they're not very heavy.
11 It wouldn't have made much difference. I didn't know that they
12 did that, but again, as I say, it wouldn't have made much
13 difference because it probably only weighed a couple of hundred
14 pounds.
15 I think that they had a little bit of a change in plans
16 because of being able to pick up some crews that were going to fly
17 up. I'm not sure about this, but I think they hadn't originally
18 intended to go to Kodiak. And the pots they actually picked up
19 there may not be the same ones that he gave me the weight on. But
20 again, I don't know that for certain. And they probably wouldn't
21 be radically different.
22 Q. Sure.
23 CAPT CALLAGHAN: Sir, I want to provide my colleagues with
24 the National Transportation Safety Board an opportunity to ask
25 some questions as well as the other parties in interest. So at

1 this point, I'm going to pass it over to Mr. Bart Barnum at the
2 National Transportation Safety Board, and he's going to have some
3 questions for you, sir.
4 THE WITNESS: All right.
5 MR. BARNUM: Thank you, Captain.
6 BY MR. BARNUM:
7 Q. And good afternoon, Mr. Culver. Bart Barnum, NTSB. How are
8 you, sir? I do have some follow-up questions for you. I'm going
9 to ask Lieutenant McPhillips to bring up Exhibit number 59,
10 please. This is actually the MSC, the Coast Guard assessment of
11 the *Scandies Rose*, page 9. And you touched on this earlier. You
12 mentioned that you had the opportunity to review this. And just
13 for the record, I am not a naval arc, so I might be asking some
14 obvious questions, but I assume most of the public is not either,
15 so we might get some use out of it. Can you see the screen, sir?
16 A. Yes. I can see it.
17 Q. Okay. This is the *Scandies Rose*. And you had mentioned that
18 you had a couple of comments about how the, after the Coast Guard
19 had looked at this picture. You said the poop deck, which is the
20 area in the aft of the vessel, the MSC, the Coast Guard estimated
21 is 3 feet longer than your estimates. And you said that was a
22 correct assumption. You agreed with that, correct?
23 A. Yeah. I'm off by about 3 feet on the poop deck length.
24 Yeah, I changed my computer model, and I still passed everything.
25 I guessed that right. As far as the conclusion that the

1 forecastle, that I think the location that I have in my model is
2 right. What they have here, the deck comes back past where the
3 bulkhead is. And you can't tell that in the photograph.
4 Q. Okay. But you said you recalculated using the corrections
5 here and you said that it didn't really affect the stability
6 characteristics that much, in your opinion?
7 A. Yes.
8 Q. Okay.
9 A. And as far as the slope on the back end, that would have so
10 little impact that I didn't really try to do anything with it.
11 Q. Okay. Lieutenant, take that down for now, please. Thank
12 you. And then just a comment on what you said earlier, sir, so
13 you said you completed an incline test on the vessel in '98 and
14 also 2006. Is that correct?
15 A. 1998, I think, and 2006, but I don't have those --
16 Q. Okay.
17 A. -- reports anymore.
18 Q. I think those would be in the -- because that information was
19 given to another naval arc. But then you did an incline test
20 again, a full incline test in 2019 for the most recent one?
21 A. Yes.
22 Q. Okay. All right. So, taking into account, you indicated
23 that the 1988 stability instructions that we've seen, that's
24 entered into an exhibit here, you indicated that was more of a, in
25 your words, additional information, or wasn't an official

1 stability instructions?
2 A. Yes. That owner didn't ever use it because he had a more
3 complete test. We just wanted to make sure that the repairs that
4 they'd had done hadn't been so much difference that it would
5 invalidate his other instructions. And we decided it did not.
6 Q. So, I've looked at both of them, and they both seem to be,
7 you know, similar in format and layout. Is that accurate?
8 A. Yes.
9 Q. Now, how old -- you know, I understand the vessel was
10 obviously sold, so how would the new owner, having -- looking at
11 the 1988 stability instructions, how would they determine or
12 understand or recognize that they were just an incomplete or not
13 official?
14 A. Because this owner didn't have that. I'm sure it was thrown
15 away years ago.
16 Q. Okay. Okay. So that original stability instructions, and
17 then the most recent ones, the 2019, the number of pots that the
18 vessel, that you calculated the vessel would carry, was reduced
19 from 220 to 208. Could you indicate why that was?
20 A. Well it's kind of hard sometimes to tell exactly how many
21 pots they can actually get on. What I did -- I don't remember the
22 220, but I took the 8-foot pots. Probably the 220, we were
23 looking at 6-1/2 or 7-foot pots instead of the 8-foot, so there
24 was a little more room. But I just took length of the dash and
25 the beam of the boat and figured how many pots that would be.

1 The first layer are on edge. And then above that, they lay
2 them flat. Normally they can't get as many on there as I said,
3 because there's a pot launcher and a crane, things like that in
4 the way. I understand that what they were actually able to get on
5 was 195, rather than then 208 that I said.
6 Q. Okay. So physically, they could only get 195, but --
7 A. Yes.
8 Q. -- your stability instructions calculated 208?
9 A. Yes. And I have kind of assumed that if I tell them a little
10 too much and they can't get that many on, we're fine.
11 Q. Okay. And earlier in this investigation, I think I remember
12 seeing an email where you calculated, and you had expressed that
13 the vessel, through your calculations could carry more than 208
14 but was restricted because of desk space. Is that accurate?
15 A. Well, no. It was restricted because of being able to see
16 over the top from the pilot house.
17 Q. Right.
18 A. This was a boat with the pilot house in the aft end of the
19 boat, and they wouldn't want to put the pots up so high that you
20 couldn't see over the top.
21 Q. Okay. You had mentioned freeboard earlier, how you measured
22 it while you're doing the light weight test. Do you recall what
23 the minimum freeboard that you calculated for on the *Scandies Rose*
24 was?
25 A. We don't really have a minimum freeboard. I think I put

1 something in there not to have less than 6 inches, but there's no
2 lub line or anything on these boats, and they just go by the --
3 the deepest load they would have would be with the hold flooded
4 and the pots on.
5 Q. Right. And you said that wasn't -- did I hear you correctly,
6 you said less than 6 inches?
7 A. That would not be less than 6 inches. They would have had
8 probably oh, maybe 15 inches or so.
9 Q. Okay. So if the hold's full, with a full deck of pots, you
10 calculated the freeboard would be 15 inches?
11 A. Yes. And again, I didn't really calculate the freeboard. We
12 just calculate the area, what's in the C.F.R. There's nothing in
13 the C.F.R. on these kind of boats saying what the minimum
14 freeboard is.
15 Q. You talked a little bit earlier about the downflooding points
16 and the importance of that, and the location, what you perceived
17 them, they were. What about water on deck? Can you explain to me
18 how important that is when calculating the stability for a vessel?
19 A. I did not do that. When I've done it in the past, it usually
20 wasn't a factor.
21 Q. Is that -- could that become a factor if somehow the freeing
22 ports were inoperable or clogged in some way?
23 A. It may be. Sometimes they have a problem with the freeing
24 ports freezing up. Normally what they don't want is to have them
25 open. They want some kind of flap or cover over them. Otherwise

1 water comes in through them rather than going out. What most of
2 them do is have a rubber, neoprene flap. And sometimes those
3 freeze, and then you can't get the water off. But I don't have
4 any control over that.
5 Q. Yeah, understood. And that's my understanding, you know, if
6 you're working on deck, you try to keep dry, so sometimes that
7 happens.
8 A. Yeah. The guys working on the deck would try to keep those
9 open. I think we always put in, in the instructions saying to try
10 to keep them open. It's possible sometimes they might not be able
11 to.
12 Q. Yeah. We've heard throughout this hearing a lot about icing,
13 and Captain Callaghan mentioned it already to you, sir, and how it
14 affects the stack of pots. And we've heard the term shoebox when
15 referring to how the regulations account for ice accumulation on
16 the stack. Is that kind of your understanding of how the
17 regulations require you to -- or allow you, or give you guidance
18 on how to calculate icing on the stack? Or how do you treat a pot
19 stack when we're applying icing?
20 A. I take the vertical surface and apply the 3.07 pounds per
21 square foot to it. It isn't really an awful lot. And again,
22 that's kind of what's in the C.F.R. It's possible they could get
23 more ice, maybe quite a lot more ice on there. And it's -- I
24 don't have any way of knowing what it would be. I just put down
25 what's in the regulations.

1 Q. Okay. I want to bring up another exhibit here, quickly.
2 Lieutenant McPhillips, can you bring up Exhibit 36, please? Just
3 go to page 5. Mr. Culver, this is the 2019 stability instructions
4 that you produced for the *Scandies Rose.* And we've talked about
5 icing accumulation and how, you know, the shoebox and how ice can
6 form on the pots, and talked about free, you know, minimum
7 freeboard, understanding that there's no -- you stated there's no
8 requirement for that.
9 And you said the vessel's -- also, water on deck how, you
10 know, it's the responsibility of the crew to understand the
11 freeing ports need to be kept clear. Is there anywhere in your
12 stability instructions where that knowledge could be passed to
13 them? Or is that a practice that you do, or do you expect them to
14 know it?
15 A. That they would break the ice off?
16 Q. Yeah. Well, could -- well let me rephrase the question,
17 please. Could you explain what these instructions to the master
18 are, in your stability instructions, the second page?
19 A. Well the most important thing is the number two. The rest of
20 it's just kind of things they probably would have done anyway. It
21 tells them how much they should -- they shouldn't go more than
22 that many crab pots.
23 Q. Okay. And I noticed that second sentence, the number two
24 says, "This applies in icing and non-icing conditions."
25 A. In this case I applied the icing, and I assumed that I

1 couldn't go any higher anyway because of the visibility. And I
2 applied only -- I only did the calculation with the ice taken into
3 account. I didn't do any with no ice.
4 Q. You mentioned earlier your theory on what happened to the
5 *Scandies Rose* and I believe you indicated probably some, you know,
6 icing on one side of the vessel, I think you said it. And
7 obviously, the regulations don't really account for that.
8 A. Right.
9 Q. Would this be a spot where you could, you know, potentially
10 identify that, so the master might be aware that icing is applied
11 evenly, not just on one side of the vessel?
12 A. No. I've never done that. I think they understand.
13 They've, they have practical experience doing this. And you can
14 get quite a lot of ice. They try to go out and break it off.
15 Q. Okay.
16 A. It says in the guidelines from the State of Alaska
17 recommendations and from the Coast Guard regulations to try to
18 break it off as best you can. But there may be situations where
19 it would be too dangerous to try to get out and try to break it
20 off. I don't know what their situation was on the boat.
21 Q. All right. Sir, did you know, or do you know if the *Scandies*
22 *Rose* had the bottom fuel tanks?
23 A. It had, but I think only the forward one was piped for fuel.
24 They didn't ordinarily use them.
25 Q. Okay. Were they filled with ballast? Were they filled with

1 water or just empty?
2 A. I had always been told that they just leave them empty. And
3 that's the way I did the calculations. I don't think they ever
4 put ballast in them. But if they had, then I wouldn't know about
5 it.
6 Q. Okay. I know, in the, in one of, in the condition evaluation
7 survey of the *Scandies* it indicates that the capacity in those
8 tanks -- this -- those tanks, I should say, but then on the
9 stability instructions of yours, I didn't see them. So that was
10 my question, is how would you treat a tank that wasn't used or was
11 there but -- and could potentially have liquid in it? Would --
12 should that be considered?
13 A. Yeah. I just put down what they told me was their normal
14 operating situation, that they only used the wing tanks. There
15 were also some tanks in the back end, in the stern. One of them
16 they used for a day tank. The other had -- I was told they never
17 used.
18 Q. Okay. So in your words, sir, can you briefly describe these
19 loading conditions? You know, what are they, and what's the
20 purpose of, you know, representing them here in your stability
21 instructions?
22 A. The most important thing is to give them a guideline on how
23 many pots they would dare put on the deck. And we tried to -- the
24 worst case is normally when they're leaving down with a full load
25 of fuel. Usually as you burn fuel off, you get better. There are

1 exceptions to that once in a while. Most of the time, as you burn
2 off your fuel, the stability is better.
3 Q. Okay. All right. I've just got, I guess, one more question,
4 and one more exhibit. Lieutenant McPhillips, can you please bring
5 back up number 59, and go down to page 92? And, Mr. Culver, like
6 I indicated, I'm not a naval arc and I'm just, I'm trying to
7 figure this out myself, and I appreciate your explanation here.
8 So this is the MSC's, the Coast Guard's analysis of the *Scandies*
9 *Rose* in comparison to the 2019 report. And this is a list of some
10 of the conclusions. And we're going down to number 4 here.
11 And here I'll read it: "MSC's analysis indicated that the
12 estimated casualty voyage conditions, while nearly meeting all
13 referenced stability instructions," which we were just looking at
14 your stability report, "failed to meet regulatory stability
15 requirements. This is the case for all combination of hydrostatic
16 modeling and light ship weight conditions." And so, I just want
17 to hear from you, your response to that, and if you have an
18 explanation why they would have come up with that.
19 A. I think the difference here, what they used for the
20 downflooding point. And I think that they had it at like 35
21 degree heel or something like that, and it started to downflood,
22 where I had the downflooding point, I thought what almost, almost
23 on the centerline and up pretty high. So, that's the difference.
24 Q. Thank you for that. And obviously, understanding that the
25 downflooding point is a serious item to consider when completing

1 these, MSC calculated it at a 35 percent heel angle. Do you
2 recall what you calculated it to be?
3 A. I didn't do anything with it at all, because I thought, you
4 can put a downflooding point into the computer model, and if it
5 was in an area where I thought it would make a difference I would
6 do that. In this case, I thought it would be right almost on the
7 centerline and up very high, so it wouldn't have any impact. I
8 didn't put any downflooding point into the computer model.
9 Q. Is that typical? Do you do that -- is that -- do a lot of
10 vessels not have downflooding points unless they're pretty high?
11 A. The people that designed the boat in the first place know
12 that's a potential problem, and they typically try to put it up
13 where it's not much likelihood of water getting down through that.
14 Q. Okay. All right. Mr. Culver, that is all the questions I
15 have right now. I really appreciate your explanation and your
16 testimony. Thank you very much.
17 MR. BARNUM: Captain Callaghan.
18 CAPT CALLAGHAN: Thank you, Mr. Barnum.
19 Mr. Culver, I'm now going to go to the other parties in
20 interest. And I will start with the counsel for the two
21 survivors.
22 Mr. Stacey?
23 MR. STACEY: Thank you very much, Captain.
24 BY MR. STACEY:
25 Q. Mr. Culver, can you hear me okay, sir?

1 A. Yeah.
2 Q. Perfect. I ever I am -- you can't hear me clearly, please
3 let me know. I only have a couple of questions for you, sir. You
4 said that you were retired. When did you retire, sir?
5 A. Oh, I've continued to do work when people call me, but I gave
6 up having an office maybe five or six years ago. And I don't run
7 ads or solicit work or anything. But I'll sometimes do jobs when
8 people call me.
9 Q. Okay. And you discussed how you had done, if I heard you
10 correctly, maybe 200 stability booklets, and did I hear you
11 correctly, sir?
12 A. Yeah. I don't know the exact number, but I've been doing it
13 a long time. I've done a lot of them.
14 Q. Okay. How many have you done within the last ten years?
15 A. Oh, I probably typically maybe do eight or ten a year, so I
16 suppose I 80 to 100.
17 Q. Do you keep records as to which vessels you have created
18 stability reports for?
19 A. Yes, I do.
20 Q. All right. We went through and we looked. You discussed a
21 couple of differences between your report, for example, the deck
22 you had extended out a little bit farther than was in reality.
23 For those maybe 80 to 100 that you've done in the last ten years,
24 have you gone back and looked to see if you made similar
25 differences?

1 A. Oh, that would be an unusual situation there. Normally what
2 I get is whatever drawings from the builder that we could get.
3 And if we don't have anything, sometimes we go down and take
4 measurements right on the boat. But that situation with the deck
5 house from this boat was unusual. It wouldn't normally be a
6 factor.
7 Q. Were there any other factors of the exhibits that you saw at
8 this hearing that listed some differences between your analysis
9 and their analysis, would you ever go back and either double-check
10 your work after you've completed a stability analysis, or after a
11 casualty like *Scandies Rose* or *Destination*, go back to confirm
12 that everything was correct?
13 A. If there was some kind of a casualty, I'd certainly go back
14 and try to confirm everything. I haven't ever had any issues like
15 this in the years that I've been doing this. I try to do it as
16 carefully as I can. And if I don't know for sure, I try to go on
17 the conservative side.
18 Q. For instances when you get either new regulation or new data,
19 you know, for example if the assumed buildup of ice on both
20 vertical and horizontal aspects of a crab pot changes, how do
21 you -- what would you do with your future but then also your past
22 stability reports to account for those changes, sir?
23 A. If it would make a change, say they were to change the C.F.R.
24 and increase the ice loading that they want to use, it would be
25 hard to go back over all of these things. I guess I would

1 probably try to notify the people that that change had been made.
2 They may want to go back and redo the calculations, or they may
3 want to redo the whole stability test.
4 I think, in my case, I'm probably not going to do many of
5 these anymore. I'm getting a little too old for it. But we
6 wouldn't -- they would all be aware of it if that change came up.
7 And I think if anyone called and asked me, I'd be glad to
8 recalculate it for them.
9 Q. And so if a change were to be made, you'd support -- even if
10 it's not you doing it, someone going through, you know, all of
11 your old stability reports to ensure that it still, you know,
12 meets the standard, meets the regulation, is safe for people going
13 out, you'd support someone going back and checking with the new
14 data?
15 A. I don't know how they would handle that, if they were to
16 change the rules, whether they go by the rules that were in effect
17 at the time we did the test. I think the only way otherwise would
18 be just to do a new test.
19 Q. Okay. Thank you very much for your testimony, sir. That's
20 all the questions I have for you.
21 MR. STACEY: Thank you, Captain.
22 CAPT CALLAGHAN: Thank you, Mr. Stacey.
23 And, sir, now I'm going to go shift over to counsel for the
24 vessel owners, Mr. Barcott?
25 MR. BARCOTT: Yeah, Captain, good morning. Could we take a

1 two-minute recess before I begin?
2 CAPT CALLAGHAN: Yeah. Mr. Culver, are you okay if we
3 take -- let's do this. Let's take a five-minute recess. Are you
4 okay with that, Mr. Culver?
5 THE WITNESS: Yes, that's fine.
6 CAPT CALLAGHAN: Okay. Let's take a five-minute recess.
7 We'll resume at 1411.
8 (Off the record at 2:06 p.m.)
9 (On the record at 2:12 p.m.)
10 CAPT CALLAGHAN: Okay, the time is 1412, and this hearing is
11 now back in session.
12 Mr. Culver, as I said, I'm going to pass it over to counsel
13 for vessel owners, Mr. Barcott.
14 BY MR. BARCOTT:
15 Q. Good afternoon, Mr. Culver. I just have a couple of
16 questions for you. For the application of the C.F.R.s regarding
17 icing, do those C.F.R.s make any provision for the accumulation of
18 ice inside the pots?
19 A. No, that's not mentioned.
20 Q. Okay. Do those C.F.R.s make any accommodation for the fact
21 that ice in the real world accumulates on one side of a boat more
22 than on the other?
23 A. No.
24 Q. Okay. So I know the answer to this question, but some people
25 who are watching may not. You used 208 pots, both in icing and

1 non-icing conditions. And I think everyone thinks that's unusual.
2 Could you explain why the same number of pots were used for icing
3 and non-icing?
4 A. I only did the calculations using icing. And I assumed that
5 I had -- that we were going to interfere with visibility out of
6 the pilot house if we put more pots on in a non-icing condition.
7 So that was the reason that I worded that that way.
8 Q. And that's what I understood. So is another way of saying
9 that, if there had been a higher pilot house so you could have
10 seen over the stack, this boat could have carried more than 208
11 pots in non-icing conditions? Have I got that right?
12 A. Yes.
13 Q. Okay.
14 MR. BARCOTT: Thank you, sir. That's all I have.
15 THE WITNESS: Okay.
16 CAPT CALLAGHAN: Thank you, Mr. Barcott.
17 And, sir, we've got just some follow-on questions here from
18 Lieutenant Commander Comerford. He's going to have some follow-on
19 questions for you.
20 THE WITNESS: All right.
21 BY LCDR COMERFORD:
22 Q. Good afternoon, Mr. Culver. Can you hear me? I'm having
23 some technical difficulties, so let me get myself set up here.
24 (Indiscernible). All right, so can you hear me now?
25 A. Yeah. You're not quite the loudest.

1 Q. All right. Let me make sure my microphone's as close as
2 possible.
3 A. All right. I think that was okay.
4 Q. Okay, thank you. All right, sir. Again, thank you for your
5 time this afternoon. My first question for follow-up is, when you
6 went to go do the incline experiment in 2019, do you remember
7 sending instructions to the owner or the captain for preparing for
8 the inclining experiment?
9 A. I told them about how much weight I would need to be able to
10 heel the boat, and they, I think they found -- I think we had
11 concrete ecology blocks. And they weigh -- they vary quite a bit,
12 but we had actual certified weight on them. They're typically
13 about 3,500 pounds a piece.
14 Q. This was 3,500 pounds a piece and it was two or three
15 weights?
16 A. I don't really remember offhand. I may have -- probably I
17 may have something here that tells how many I used.
18 Q. It's okay, sir. We can --
19 A. All right.
20 Q. Yeah, we don't need it right now. Just if you remembered.
21 The actual inclining experiment, do you follow a set of standards
22 for conducting your inclining experiments?
23 A. The ASTM standard. And that's what we try to go by.
24 Q. Okay. And does that standard have a certain number of
25 freeboards you're expressing right here?

1 A. They might say five. And ideally you'd make them kind of
2 evenly spaced along the length of the boat. Sometimes you have to
3 make variations in that because you can't get adequate spots to --
4 but you want to have some or all of them so that you can have,
5 draw a line to it and be reasonably confident that you have the
6 right line.
7 Q. And earlier, and correct me if I heard you wrong, you said
8 you did a little over three, or three to five freeboard marks?
9 A. We did five.
10 Q. Five? You got five on both sides, or --
11 A. Yes.
12 Q. Okay. Thank you. Now, let me make sure I have my -- before
13 we come back, I'm going to skip to the downflooding we were
14 talking about earlier. And this is just so we have a complete
15 understanding. Lieutenant McPhillips, could you pull up Exhibit
16 004? I believe it's page 13. When you have it up on the screen,
17 let me know. Okay. Down on the bottom picture, Lieutenant
18 McPhillips, can you focus on the bottom right photo?
19 A. All right.
20 Q. Mr. Culver, is -- to the right of the vent stack, there's the
21 life ring and --
22 A. Right.
23 Q. Is that the downflooding point you were referring to earlier,
24 near center ship?
25 A. I think what actually starts to downflood would be at the top

1 of that pump that's on the inside. And the hold -- the tote might
2 be about 4 feet square, so I don't know the exact dimensions of
3 it. I went and looked at it the other day on the other boat, the
4 *Westward Wind*, and this had something pretty similar to this.
5 Q. Okay. All right. Can you -- Lieutenant McPhillips, can you
6 go down to page 18? There's another photo we're going to pull up,
7 showing mid deck level. Can you go all the way down to the bottom
8 of the page? Yeah, so right there. The far right photo on the
9 top of that. Can you zoom in on that photo? A little to the
10 right. Yeah, just so -- Mr. Culver, this is -- the burdening area
11 is there to the left. Access to the burdening area is to the
12 left. And there's the walkway to the ladder well, to the pilot
13 house. Underneath that ladder well, there's a vent. Is that a
14 potential downflooding point?
15 A. Well, I can't really see it very well. I don't know what's
16 behind it.
17 Q. Okay. All right. And then, Lieutenant McPhillips, can you
18 shift to the Exhibit 006, page 4? Now, back in 1988, were there
19 -- there were some modifications to the *Scandies Rose.* Did you
20 help do the design for the modifications for the *Scandies Rose?*
21 A. I didn't -- I did a lot of different things on it over the
22 years, a lot of things. And the previous owner, Mr. Nordbo, had
23 me do -- this one I think he actually did. That was done by
24 someone else. That's Will Nickum (ph.).
25 Q. Will Nickum.

1 A. I think that was done just before we did that 1988 thing.
2 And it was to repair some damage from a fire.
3 Q. All right. Okay.
4 A. They had rearranged some of the interior. I haven't talked
5 to Will Nickum in years. I don't know if he's still around the
6 area.
7 Q. You had said you visited the *Westward Wind* or a sister
8 vessel. A couple of questions. You mentioned, I think the number
9 was like 20 tons for the *Patricia Lee,* that the *Patricia Lee* was a
10 little, was about 20 tons lighter, or something in that
11 neighborhood. What were the -- what is the difference between the
12 *Scandies Rose* and the *Patricia Lee* for this deck structure?
13 A. I -- well fairly (indiscernible). *Patricia Lee,* when I did
14 it was a little bit lighter and had a lower CG. I do have
15 somewhere here the numbers from the *Westward Wind*. Someone else
16 did that, but they gave me the figures. But it had been
17 lengthened, and it would be expected to be somewhat more weight.
18 Q. So the *Scandies Rose* was lengthened?
19 A. Yeah. For the *Westward Wind*, and this was done by a naval
20 architect named Yasely Olafson (ph.). He had 571 tons, light
21 ship, the LCG 5-1/2 forward. I don't really know what that's
22 referenced from. And the DCG was 12.84 above the baseline, which
23 is lower than what we had on the *Scandies Rose.* But the *Westward*
24 *Wind,* they had put a new section in the middle many years ago when
25 it was still fairly new. And so it's different than the other two

1 boats.
2 Q. So the *Westward* was a little bit longer. So I think I had
3 misunderstood you on that. All right. The -- if we -- Lieutenant
4 McPhillips, if we could just bring that exhibit up one more time
5 real quick. I just wanted to -- right there in the middle, just
6 forward of the (indiscernible), it says "exhaust." So I was just
7 wondering if you knew what that was -- if you could explain if
8 that was the exhaust going up to that ladder well on the outside.
9 That's -- I wanted to know if you were -- could give insight to
10 that.
11 A. Well, I didn't do this drawing. It may be that's how, when
12 he had (indiscernible) above there was a little bit off, off
13 center. That would be my guess. Again, I didn't do this. I know
14 that that port goes all the way through. It pretty much has to.
15 Q. Lieutenant McPhillips, you can take down the exhibit. Just
16 in general terms, Mr. Culver, for your stability instructions you
17 produced in 2019, did -- how did you communicate your -- how the
18 pots were to be loaded on the vessel in your instruction?
19 A. Well, we didn't. But the only -- what the only thing we did
20 say was that the first layer was on edge, which is the way they
21 always do it anyway, and the rest of them flat. What I did was
22 take the length of the well deck and the beam, and figure out how
23 many -- I know the pots were 8 foot by 34 inches, figured out how
24 many I could get on there. I think I came up with 88 on the first
25 layer, and 40 on each layer flat above that.

1 And they can't really get quite that many on there because of
2 the crane and the pot launcher and things like that. But I
3 figured if they end up having a little bit less, it can't hurt
4 anything. I think they were able to get 195 pots on, instead of
5 the 208.
6 Q. Okay. Lieutenant McPhillips, could you pull up Exhibit 36,
7 page 6? And this -- I'm just trying to -- hope you can maybe help
8 me understand a little bit here. In your diagram, I can see how
9 when the (indiscernible) is vertical, because it's wider, and it
10 shows three tiers of pots above that, was that your intention, to
11 only have four tiers of pots in your calculations?
12 A. Yes.
13 Q. Okay. So, if I heard you correct, it was 38 for the first
14 layer, or more than that, but 40, 40 and 40.
15 A. Eighty-eight in the first layer, and the 40 in the ones above
16 that.
17 Q. Oh, thanks. That makes a little more sense. Okay. Now, I
18 was doing the calculation here, and it looks like 32 pots per row,
19 like on the vertical. So, I was wanting to get a better picture
20 of how you calculated that.
21 A. The height of them?
22 Q. Oh, just like this two-dimensional picture, I counted 32 pots
23 just straight --
24 A. The only ice I used on the pots was with the side elevation.
25 Q. Okay. If -- was there anything in the instructions that

1 would help the master understand that they shouldn't go above a
2 certain tier of pots?
3 A. I didn't quite hear that. Can we turn the volume up a little
4 here?
5 Q. Yeah. Is that better? Sometimes my microphone gets hot.
6 A. If you could turn the volume up here too.
7 Q. All right.
8 A. Go ahead.
9 Q. So, for your instructions, is there any way the instructions
10 that tells the operator specifically the maximum number of tiers
11 to stack?
12 A. No. I guess we just put down the total number of pots, and
13 then we have that picture. He can't really do it much of any
14 other way. And we said that you can't stack them up so high that
15 they obscure the vision. So really, there wouldn't be much else
16 they could do. They always stack the first layer on edge, I'm not
17 quite sure why, and above that, flat. And then they use chains
18 and chain minders to secure that, so that it won't shift on them.
19 Q. Do you account for the weight of the chains in your
20 calculations?
21 A. Oh no, but it's probably not even 200 pounds. It would be
22 insignificant.
23 Q. Okay. And when you've calculated the -- I'm not a naval
24 architect, so I'm trying to visualize it. When you put the pots
25 in the model, the electronic model, you called it GHS, did it go

1 in as a, essentially like a points weight, like they take the
2 center out of what a --
3 A. So you put in the (indiscernible) the weight first, and
4 usually we use long tons. You could use other units if you want.
5 But then we add the coordinates, X, Y and Z, X being the ones
6 that's in the location. And Y is usually right on the centerline,
7 so that would be zero. And then Z is the height off the baseline
8 that we're calculating everything from.
9 So what we put in is just the weight and the three
10 coordinates.
11 Q. So if you added another layer of pots, a fifth layer of pots,
12 would that change that point weight?
13 A. Yes.
14 Q. And would the captain of the fishing vessel understand from
15 the instructions that difference?
16 A. I would assume they would. In this case, we were thinking we
17 couldn't go any higher anyway because of the visibility. But
18 there's a difference in the different captains and how seriously
19 they take all this, and how much they go into it.
20 Q. And this is my last question before I give it back to Captain
21 Callaghan, because this has been really helpful. I really
22 appreciate it, Mr. Culver. When you said you had calculated
23 your -- I'm trying to get this right, your vertical ice, and you
24 said you applied it as a wind course, is that what you said?
25 A. Well, the easiest way to come up with an area for the side

1 elevation, there's a factor in the (indiscernible) program, what
2 we use for the severe wind and (indiscernible), where you can --
3 it will show you the surface area in square feet. And that's much
4 easier to use that than for me to try to figure out all the
5 pieces.
6 Q. Okay.
7 A. And that's what I used.
8 Q. And did you apply wind heel to the pots after icing
9 condition?
10 A. Well the ice was -- the C.F.R. ice was considered in all of
11 these conditions.
12 Q. Was that a --
13 A. It wouldn't affect -- well yeah, it does affect the wind
14 heel. Yes, the ice was taken into account in all of it.
15 Q. So your calculations would have a condition that had the
16 weight of the ice and the wind heel, including the surface area of
17 the pots?
18 A. Yes.
19 Q. Okay. Thank you very much.
20 LCDR COMERFORD: That's all the questions I have, Mr. Culver.
21 THE WITNESS: All right.
22 CAPT CALLAGHAN: Sir, we've got one more follow-on question
23 from NTSB.
24 Mr. Barnum?
25 BY MR. BARNUM:

1 Q. Mr. Culver, I know we've been going for some time, so I
2 appreciate this, but I do have one follow-up. Back to the
3 downflooding points, I know we've been talking a lot about it, so
4 you mentioned that a lot of -- some skippers or some owners, some
5 take it more seriously than others for the stability. When you
6 come on a boat to conduct your incline tests and get your
7 measurements and numbers needed to calculate, how much interaction
8 do you say you have with the owner or the skipper?
9 A. It varies. I would like to be able to talk to the boat
10 captain, and usually that happens. Usually they are interested in
11 this too. So, ideally we talk to the captain and also to the boat
12 owner. But the captain's usually the one that decides how to load
13 the crab pots and whether he has too many, or whether he may be
14 (indiscernible) the day before he goes out. That's kind of his
15 decision.
16 Q. Generally, how do you find their knowledge of naval
17 architecture?
18 A. They know enough that they understand pretty much what the
19 problems are. And I always put in a little piece in the back of
20 the report, kind of explaining some of it. And I know some people
21 read that (indiscernible) and others probably ignore it. But I
22 always put in that little three-page explanation from the naval
23 architect standpoint.
24 Q. Would you expect them to know what an incline test or
25 downflooding point is? Would you expect them to know that?

1 A. No.
2 Q. So when you configured the stability inclining test on the
3 *Scandies Rose*, you indicated that the owner had told you where the
4 downflooding point was. How -- you just indicated that you
5 wouldn't expect them to know what that is, so how would you know
6 if that is accurate?
7 A. Well, he is familiar with the boat. And also, I had done the
8 other boat that's very similar to it, and figured that they were
9 probably pretty close to the same, but I wanted to be sure.
10 Q. Okay. So just -- and to confirm that you or your assistant,
11 no one actually walked around the vessel to verify the location of
12 the downflooding point?
13 A. No, but I think we see it in your photograph anyway.
14 Q. Yeah.
15 A. I think the real downflooding point is really inside at the
16 edge of that trunk.
17 Q. Okay, yeah. Just -- Lieutenant McPhillips, Exhibit 59,
18 please, page 21. Scroll -- yeah. And this is the downflooding
19 point that the MSC is indicating below -- up behind the power
20 house stairs. You see that, sir?
21 A. Yeah. I see that.
22 Q. All right, and that -- in your words, that -- would that be a
23 potential downflooding point?
24 A. Yes, but I think they can't really start going down until the
25 water gets over to the edge of that trunk, and the air goes down

1 through that roughly 4 foot by 4 foot trunk. But only a corner of
2 it is where the air goes. The rest of it's the exhaust pipes from
3 the engines and the generators.
4 Q. Okay. And how do you know that? Did you remove the grating
5 here, or how do -- is that -- is it something you see on a
6 drawing?
7 A. Well, there can't be any trunk going straight down from here.
8 There's nothing that goes down through the accommodation area.
9 All of the air goes down through that trunk on the centerline.
10 Q. Okay. All right. Thank you for answering those follow-up
11 questions, Mr. Culver. I appreciate it.
12 MR. BARNUM: And that's all the questions I have.
13 CAPT CALLAGHAN: Thank you, Mr. Barnum.
14 BY CAPT CALLAGHAN:
15 Q. Mr. Culver, just a couple of quick questions for you. I
16 greatly appreciate your patience with us. So just wanted to go
17 back quickly, for the software that you currently use, do you
18 happen to remember when the last roundabout year it was that you
19 got last update on that software?
20 A. Well, I've never bought an upgraded version. The only real
21 update is just that it works with more modern tenders and things
22 like that. But it gives you the same answers.
23 Q. Okay, sir. And with regards to the downflooding points, once
24 you reviewed the report, did you go back and run that at all with
25 the new information on where those downflooding points would be?

1 A. No, I didn't.
2 Q. No? Okay. And sir, as far as the stability instructions
3 that you issued, on a couple of occasions you mentioned you
4 believe that they just understand what you're, what's written
5 here, and that the inherent dangers of going beyond, you know,
6 that ice might build up beyond that point, who are you referring
7 to as they would understand?
8 A. The boat captains.
9 Q. And how do you think that they would understand that those
10 dangers were -- how to interpret that information?
11 A. They know that there's more weight there. They have to keep
12 the ice off as much as they possibly can. But sometimes it
13 probably gets out of their control. They usually are pretty
14 experienced at this, and it's pretty commonplace to get much
15 thicker ice than what's in the C.F.R. And they know that.
16 Q. Okay. And I think we've kind of established that through
17 some of the hearing, you know, that those, the C.F.R. is a general
18 number to start the calculations, and that the real life scenarios
19 may be much worse than that. But do you have any indication
20 whether or not those masters have stability training?
21 A. They would not have any formal stability training.
22 Q. Okay.
23 A. Not normally. They may have had some kind of a quick
24 description of it. And again, I put that little explanation in
25 with all the reports, and it probably tells them what they need to

1 know.
2 Q. And so you mentioned that you, that since you've gone into
3 the retirement you're not actively seeking work, but are you
4 currently working on any projects regarding stability?
5 A. I have one person that called about maybe doing something
6 later on in the year. And I have one that's up in Dillingham,
7 Alaska. And they had given me the lines drawings and things, and
8 I made the computer model. They wanted to do that in May. I
9 think after I do those, I probably won't, probably not do too many
10 more of these.
11 And I have one where they want me to help with a simplified
12 stability test on a passenger boat. And that one would be in
13 Cordoba, Alaska. And that's (indiscernible) different thing.
14 There's no computer or anything. It's just the windage on the
15 side of the boat. And someone from the Coast Guard would be
16 there, and they and I would agree on what that windage is. It
17 would be a relatively simple thing to do.
18 Q. Yes, sir. And so the last thing, I wanted to provide you an
19 opportunity, so is there anything that you think that we should --
20 that we may not have covered in our questions today that you think
21 would be important for us to consider as part of the
22 investigation?
23 A. Well, it's awful hard to tell what really happened in
24 something like this. But the survivors were in a hurry to get off
25 the boat. They weren't looking around. One thing that I notice

1 in the information that I got, they said they started to heel to
2 starboard, I think they said about 7:15, but not an awful lot, so
3 they weren't terribly concerned about it. But nothing to indicate
4 that they ever heeled to port.
5 And then after, it looked to me like maybe about three hours,
6 then they quickly heeled very sharply over to starboard. And it
7 looked like everything went really bad from there on out. I would
8 think that the fact that they heeled to starboard and not to port,
9 that something else happened. Maybe a load shifted, or maybe
10 there was some flooding that was happening somewhere that they
11 didn't know about, that was on one side.
12 One thing that I think could be kind of an Achilles' heel on
13 these boats, there's a void above the (indiscernible) that's maybe
14 3 feet or something, maybe 4. And it runs the whole length from
15 the -- through the whole length of the fish holds. And I think
16 it's open at the forward end. And there's a door that you can
17 open at the aft end in the engine room.
18 If water ever got in there on the (indiscernible), that would
19 have a real bad impact on them real fast. These boats can't stand
20 much of any unintended flooding. They're about (indiscernible)
21 anyway because their holds are full of water. And if there's any
22 unintended flooding anywhere even in a fairly small area, they
23 could get into big trouble in a hurry.
24 Q. Yes, sir.
25 CAPT CALLAGHAN: Sir, thank you very much for your time and

1 your attention today. I know you've had to travel to get to where
2 you're at, and we appreciate you taking the time out to speak to
3 us today.
4 Well, sir, at this point, I'm now going to release you as a
5 witness at the formal hearing, and we thank you for your testimony
6 and cooperation. And if at a later time I determine that we need
7 additional information from you, we will contact you directly.
8 And if you have any questions about the investigations you may
9 contact us, any one of the board members, for further information.
10 THE WITNESS: All right, thank you.
11 CAPT CALLAGHAN: Thank you very much for your time, sir.
12 THE WITNESS: Okay.
13 (Witness excused.)
14 CAPT CALLAGHAN: Time is now 1446. Our next witness is
15 currently scheduled to begin testimony at 1530. If we're able to
16 begin sooner, we'll update the time displayed on livestream.
17 Until then, this hearing will now go into recess.
18 (Off the record at 2:46 p.m.)
19 (On the record at 3:02 p.m.)
20 CAPT CALLAGHAN: The time is now 1502. The hearing's now
21 back in session. We will now have Captain Dan Mattsen.
22 Captain Mattsen, before we get started, just want to remind
23 you that you remain under oath from your original testimony last
24 Monday. Do you have any questions with that, sir?
25 MR. MATTSEN: No, sir.

1 CAPT CALLAGHAN: Okay, Mr. Mattsen. I'm going to turn it
2 over to Commander Karen Denny.
3 Commander Denny?
4 (Whereupon,
5 DAN MATTSEN
6 was called as a witness and, having been previously sworn, was
7 examined and testified as follows:)
8 EXAMINATION OF DAN MATTSEN
9 BY CDR DENNY:
10 Q. Mr. Mattsen, (indiscernible). Some technical difficulties on
11 our end. Thank you again for joining us this afternoon. We have
12 just some follow-up questions for you, sir, so I'll just get right
13 into it. I'm going into a few different kind of areas that we
14 just need some clarification information on. And the first one is
15 some follow-up questions on the responsibilities of owners.
16 So my first question, sir, is from your position as one of
17 the *Scandies Rose* owners, who is ultimately responsible for the
18 safety of the *Scandies Rose* and her crew?
19 A. Well, all the owners are responsible, but the captain has the
20 primary responsibility.
21 Q. Okay. Lieutenant McPhillips, could you please pull up
22 Exhibit 23, page 7? And sir, while he's pulling that up, that is
23 the AIS track data that we were able to get, and it's just to
24 help, for context, showing the *Scandies Rose*. So looking at the
25 accident wedge, and it's not coming up from what I can see, so

1 sir, looking at the accident wedge, were you in a position to be
2 fully connected in terms of phone, radio, email and internet?
3 A. No. When Gary got through Whale Pass, which is up there at
4 the upper right-hand corner, and came around the corner here at
5 the gap in Shelikof Strait, that's when I believe we had our first
6 conversation. I had not talked to him when he was in Kodiak, and
7 I was out a couple of days ahead of him on the *Amatuli*, basically
8 just running my own boat and dealing with the weather conditions
9 we had.
10 Q. Yes, sir. So while you were under way on the *Amatuli*, were
11 you fully connected in terms of the sat phone, radio, email and
12 internet?
13 A. The sat phone, I made sure I could call Gelia, so I called
14 Gelia several times, and just let her know what our progress was.
15 We have text messaging via -- I think we just had an inReach at
16 that point. And I didn't have -- I never had very good luck with
17 it. So generally one of the crew members would hail with that, so
18 they had coverage, because my phone, for some reason, didn't like
19 the inReach. And we had radio. And we had radio too, the
20 sideband radio.
21 So I was receiving, but I wasn't really talking to anybody on
22 the way down. I was mainly just listening, and listened to
23 weather, listened to the normal traffic that goes over the
24 airwaves. Certainly had VHF, no internet. I do have a --
25 (indiscernible) the fleet when I have a fairly limited email

1 program that I can use, but it's, it doesn't give you all the
2 attachments, and it's actually fairly primitive.
3 But they've made a lot of improvements just over the last
4 couple of years, so I don't want to slam them now. I mean, it's a
5 pretty good service now, but at that time I wasn't having much
6 luck with that.
7 Q. So, is it fair to say, and I just want to make sure I'm not
8 putting words in your mouth, but is it fair to say that somebody
9 on your crew had inReach capability? Were there any texts or even
10 emails without attachments that would constitute communication
11 with Captain Cobban?
12 A. No, absolutely not.
13 Q. Okay. And as the *Scandies Rose* departed, you just mentioned
14 that you did not have any communications with him until he passed
15 Whale Pass. But were you aware when the vessel got under way?
16 A. No.
17 Q. So --
18 A. Well, when he called me, you know, and said hey, we're out,
19 you know, we're on our way, just everything's fine, so that's it.
20 Q. And just to refresh my memory because I did not capture it in
21 my notes from the first time we spoke, did he mention to you, did
22 Captain Cobban mention to you the number of pots that they had
23 onboard?
24 A. No, he didn't. The number I got, which is 192, was from just
25 conversation when he decided to bring the boat to Kodiak, which

1 was not normal. We would normally, after king crab, park the boat
2 in Dutch Harbor. But with the disrupted air travel into Dutch
3 Harbor, we said well, you know, we can get a crew into Kodiak a
4 lot easier. And he said yeah, I want to go through these pots.
5 Lance from Dungeness Gill Works said that the spacing in the
6 tunnels wasn't quite right, so we should put a come-along on the
7 tunnels and get that, get this all dialed in before our next
8 season.
9 So I said okay, that makes sense. Go to Kodiak, and do your
10 gill work, and then -- at that time, the number that sticks in my
11 head was he told me 192. And I'm not going to dispute 195 or 198.
12 I mean, I don't know. It's almost impossible to tell down to the
13 pot how many pots are on the boat. You can get a pretty good
14 estimate, but you couldn't be assured, just looking at a stack and
15 saying oh yeah, that's 198, you know, so.
16 Q. Okay. Thank you. So, Lieutenant McPhillips, can you please
17 pull up Exhibit 030, bottom of page 2? And what I'm pulling up
18 right now is the thorough weather report that is put up that
19 sometimes you see. It's text, that forecasts the weather. And I
20 just have a little bit of delay on my end, so bottom of page 2,
21 please. That's for December 30th, as you can see, for the
22 Shelikof Strait. So, based on the transit, the AIS transit that
23 we saw just a few minutes ago, is it fair to say that in December
24 30th, this is the weather that Captain Cobban was going through,
25 the forecasted weather that he was going through?

1 A. Well, that's the forecast.
2 Q. Right.
3 A. But I do not think that that was the actual weather that he
4 was going through.
5 Q. Fair enough. So let me rephrase, and I apologize. Did
6 you -- you mentioned to us that you checked weather, and that you
7 were also dealing with whether yourself, inclement weather
8 yourself on the *Amatuli*. Were you aware of, considering the
9 weather that Captain Cobban and the *Scandies Rose* was experiencing
10 on its transit through the Shelikof Strait?
11 A. No, not really. I mean, Gary was a very good weather
12 captain, and I just assumed that he thought he had a weather
13 window, you know, to get -- you know, I mean, a voyage like that,
14 sometimes you do have to stop. I stopped that one night at Unimak
15 Bight because it just got too foul. I just, I thought it was
16 prudent to stop.
17 So, on a three or four-day voyage, a guy might say, you know
18 I got a weather window, I can get to the Shunigans, or I can get,
19 you know, I can get to Sutwik Island. I can hang out there if
20 things get bad. But I would just expect that Gary would have seen
21 a weather window that he was comfortable going in and then he took
22 advantage of it.
23 Q. Okay. So -- thanks for pulling that down, Lieutenant. So,
24 Mr. -- or Captain Mattsen, did you have any procedure, written or
25 otherwise, that you as an owner required a captain of any of your

1 vessels to call you and discuss a voyage plan, or if that captain
2 had any concerns?
3 A. Absolutely not, especially not with Gary. Gary was a 30
4 percent owner of the boat. I owned 50 percent, so I was
5 technically the majority owner, but Gary had much more experience
6 than I did as a captain, although I've been in the industry for 40
7 years. Gary was a front-line captain from the time he was, you
8 know, just a teenager. So I would never second guess Gary's
9 decision-making on that. I would just trust that he would do the
10 best for himself, for the boat and for the crew.
11 Q. So fair to say that, and not just in terms of the *Scandies*
12 *Rose*, because I understand what you're saying about Captain
13 Cobban, but so there was no -- for the company, there was no
14 written or verbal procedure or expectation to contact you?
15 A. No. It's just a -- I try to -- I would only hire a captain
16 who I -- judgment I trusted. I would not hire somebody who I
17 thought was a wild man, or going to make silly choices. And I'd
18 be looking at what their records were too. Obviously if they had
19 a history of making bad choices, I would pass on putting them in
20 my wheelhouse.
21 Q. Okay. So since the accident, have you considered or
22 implemented any procedures now, in that regard, as far as if the
23 (indiscernible) forecasted and with you as the owner, for any of
24 your captains?
25 A. No, I have not. But then I have, like Peter Wilson is a

1 personal friend. You know, he runs the *New Venture*, and we talk
2 all the time. He would probably, he would probably take it on
3 himself to call me and say yeah, I've got a weather window, I'm
4 going to do it, or else I've got to wait a couple of days. And
5 that's just because Peter has less experience as a captain than I
6 do, and he would probably lean on me a little bit more, something
7 that Captain, or that Gary wouldn't do.
8 Q. Okay. Leading up to the accident, did you have a means to
9 know where each of your vessels were, like physically where they
10 were or what their course and speed, if they were making -- if
11 they were under way?
12 A. Not on the boat. We got that from the beach. We can look it
13 up, and follow the vessel and get a track line and everything
14 else. And that's what Gelia would primarily do. She would, she
15 could keep track of the boats, and say oh, it looks like they're
16 going in, or it looks like they're making a delivery and that kind
17 of thing, and might pass that along to me. But we weren't at that
18 stage of the season, obviously.
19 Q. So just for clarification, you did have some -- I'm not
20 saying it was hard and fast, but some communication schedule with
21 Ms. Cooper where you got that status information on the vessels?
22 Is that a fair statement? Or correct me if it's not.
23 A. Well no, I never even inquired about -- well other than in
24 general terms, is Peter going -- is Peter out there? And yeah,
25 Peter's out there. He anchored up last night, that kind of thing.

1 But it wasn't even like I was calling, saying hey, can you give me
2 the position of the *New Venture*? Can you give me the position of
3 the -- there would be no need for that. And it would be silly to,
4 for me to log that when I'm on another boat.
5 When you're a captain of a boat, you've really got your --
6 your duty is clear. I mean, I can't be running three boats. And
7 I, you know, I run one boat at a time, and that's why I'm the
8 captain. And the reason I'm able to do that is because I have
9 competent people running the other vessels, and I've got support
10 from home, you know, with Gelia keeping track of the boats that
11 are coming in, of the position of the vessels, of the offload
12 schedules, making sure that we're getting, you know, checks or
13 whatever, you know, after we make a delivery and we get paid.
14 But that's what enabled me to take this gig on the *Amatuli*.
15 But I wasn't intending to stay on the *Amatuli* very long. I was
16 just intending to help the new captain get a good start, so he
17 didn't have any incidents getting started and I was more familiar
18 with the vessel, so.
19 Q. Okay. So, do you have support? You know, you mentioned
20 support. Did you have support monitoring the weather, or you
21 mentioned Gelia, who monitors the positions of the other vessels
22 because she's kind of, fair to say, like a dispatcher?
23 A. More of a vessel manager. You know, so --
24 Q. Vessel manager?
25 A. -- she handles all the, you know, the nitty gritty, the

1 details. And yeah, I have -- you know, via FleetOne, you have a,
2 you know, a pretty good weather app. So we can see the -- it's
3 kind of the same thing you'd see on a Windy app. But you can --
4 it's a satellite picture. And you can see air temperature, wind,
5 wave height, that kind of thing, so you get an idea of what's
6 happening. And I'm not even sure you can see wave height there,
7 but you pretty much know what the wind and the fetch involve, you
8 know, what kind of seas you'll see there.
9 Q. So to circle back to the part about positions, do you, to
10 your knowledge, know if Gelia Cooper was communicating with Gary
11 about his position and when he got under way?
12 A. I'm sure she was communicating with him because she -- he
13 made the two, or the last hires, and had to get -- you know, Gelia
14 also ensures that the paperwork, you know, which has gotten more
15 and more complicated, is followed through, you know, that the
16 health questionnaires, that the contracts are signed, that the,
17 you know, the direct deposit information for settlements and
18 draws, and all that gets to her before the vessel leaves.
19 So, she would be in communication with Gary to ensure that
20 that happens, and also just to take care of any last minute, oh I
21 need this or, you know, can you send this out to Dutch Harbor or,
22 you know, just parts and pieces that needed to be -- make it to
23 the boat.
24 Q. So was there any expectation for her to kind of just relay
25 the status, just as the owner? Even though you were double-

1 hatting it as --
2 A. Oh, in the case of something serious, of course she'd say,
3 you know, the starboard generator blew up. I would expect to be
4 informed of that. If they needed new cabinet latches, I would not
5 expect her, and I would actually be a little bit irritated if she
6 called me on the sat phone to tell me that the *Scandies Rose*
7 needed new cabinet latches. You know, it's such a -- it's
8 certainly a judgment call, but anything that was serious, she
9 would tell me about.
10 Q. So you mentioned FleetOne on the *Amatuli*, can you just remind
11 me, did *Scandies Rose* have FleetOne as well?
12 A. No. It had a full internet via KVH.
13 Q. Right.
14 A. So they could, you know, get on the internet easily.
15 Q. That's right. Okay, thank you. You know, you mentioned that
16 you had stopped to seek some shelter on the *Amatuli.* Would you
17 have expected for Gary to do the same, knowing that he was
18 probably going to go through that inclement weather as well?
19 A. Well it was a different situation. As soon as he made it
20 down to Unimak Bight, and -- it kind of depends. I mean, I did it
21 because I was tired, and being a tender, I mean the *Amatuli* has a
22 long history of being a great crab boat, but in recent years it's
23 been tendering salmon and chase boat for "The Deadliest Catch."
24 There's a different configuration of the sodium lights. So I
25 didn't have very good lighting on my starboard side.

1 And if I head through Unimak Pass, you've got to then turn to
2 the southwest, and I would have had the seas on my starboard side
3 the entire way. So, in my judgment, I said I'm tired, I haven't
4 got very good lighting, I'm not going to be able to see what's
5 going to hit me. I said, it's time to knock off and spend the
6 night here in the shelter of the island.
7 Gary wouldn't have that problem with the lighting. And it
8 would really depend upon his, whether he was fatigued or not. And
9 I would suspect, with a seven-person crew, that it wouldn't be the
10 same issue. I had a, you know, a four-person crew. And we
11 were -- you know, I didn't have that, I didn't have the person who
12 I was going to say hey, you take it down there, even though you
13 can't see very well on the starboard side either. I wouldn't hand
14 that over to anybody else.
15 And besides, my charter started on the 1st. So I just
16 calculated the time, and I had plenty of time to anchor up for the
17 night, get up in the morning and then get down to Dutch Harbor and
18 make my charter.
19 Q. So, to the best of your knowledge, there was no reason that
20 Captain Cobban and the *Scandies Rose* would have needed to get to
21 the fishing grounds by a certain point?
22 A. No, no. That wasn't part of our fishing plan.
23 Q. Okay. One witness that we've heard during testimony
24 throughout the hearing stated that they leave written notes for
25 their crew that stand watch, and evaluated new people to their

1 position in the watch schedule, in a way to mitigate risk, you
2 know, less experience, more experience, less experience, more
3 experience, to ensure the safe operation of the vessel.
4 Was there any written policy or procedure for your vessels in
5 the time frame leading up to the accident that's similar to that?
6 A. No. But that's actually my procedure. I think Bryce is the
7 one who said that. That -- Bryce learned that from me. That's
8 the way I always did it when Bryce worked for me for many, many
9 years. I would just do that, and I would always leave -- in the
10 logbook, I'd write down the watch schedule and who was going to do
11 it so that I would space out experienced and less experienced
12 people. And that, but that's just like a good practice, you know,
13 bridge resource management, you know. Just, that's learning how
14 to handle a crew, you know, and how you navigate safely from one
15 point to another.
16 Q. Okay. Would you say that that's the same tact or process
17 that Gary took when assigning watches?
18 A. I would say that it's obvious to everybody here that he
19 didn't do that. So, and I don't know why, and I don't know what
20 his reason was. I mean, there's all sorts of reasons why, you
21 know, maybe Art was busy with a project. You know, maybe Brock
22 was doing something for the deck. I mean, I have no idea there.
23 So there could be mitigating factors, you know, but clearly having
24 the two new people on the boat, back to back on the watch schedule
25 was, in retrospect, a questionable tactic.

1 Q. How about outside of the accident voyage, do you have
2 knowledge of how Gary, how Captain Cobban would assign watches?
3 A. No. But I -- the times that I went on the watch, the boat
4 with him, we didn't let anybody take a watch, because we had two
5 captains onboard. So if Gary needed a nap, or Gary was taking
6 some rack time, I would just take the watch, or pull pots, you
7 know, for that shift. And so we never had anybody else on watch.
8 Q. Okay. We're going to shift gears just a little bit.
9 Lieutenant McPhillips, could you please pull up Exhibit 047, page
10 1. And what we're pulling up, sir, is the 2017 Voluntary
11 Standards, Commercial Fishing Vessel Standards and Best Practices.
12 You mentioned during your initial testimony that after
13 *Destination*, you know, that that did play into you getting another
14 stability test for the *Scandies Rose*. Did you or other owners
15 discuss or implement any of the other voluntary safety initiatives
16 and good marine practices for commercial fishing industry vessels?
17 A. You'd have to show me what those voluntary practices are, and
18 good marine practices.
19 Q. I'd be happy to.
20 A. Yeah.
21 Q. Please go to page 8, to paragraph G. And that is for
22 material condition and surveys. And I'm not sure -- okay. So for
23 the surveys, I think it's sub F there, you know, point three,
24 where it says, "The following items should be examined to verify
25 their structural integrity and service condition," and then point

1 F talks about tanks, voids, (indiscernible) and cam rocker.
2 I know there's -- it's all shoulds. There's no shalls in
3 here. But is this an area that you had perhaps paid attention to,
4 or may have modified your instructions to your marine surveyor in
5 terms of expanding the areas that he or she would look at, in
6 terms of the follow-on surveys?
7 A. No. No. I mean, we always -- we survey every two years, all
8 the time. And of course, every time you haul out, which is every
9 two years, we would be inspecting chaff seals, sea valves, sea
10 chests, rudders, propellers, side shell, planking, et cetera. As
11 far as the tanks, of course we would look at all the tanks, the
12 void through it. We were in both sides of those voids, port and
13 starboard at least every year.
14 And if there was -- there used to be a crane that sat on top
15 of that starboard void. And so they had hydraulic lines running
16 through it, which I think one of the, I think Josh pointed that
17 out. They were hydraulic lines that were no longer hooked up.
18 But they used to be running through there. So occasionally you'd
19 get a -- a hose would break and you'd have a hydraulic leak in
20 there. So we'd have to crawl in and repair the hose, and muck out
21 the void.
22 So that's just -- so we were in there every year. I wouldn't
23 say that we put additional focus on it as a result of the
24 *Destination*.
25 Q. But no specific concern for your marine surveyor to document

1 the condition of those voids or to --
2 A. We would just point out to the marine surveyor if we had done
3 any work on it, or if -- when he'd go down in the engine room,
4 he -- if he would see an open manhole cover, I mean there are no
5 doors on the void. Culver was completely wrong. It's a --
6 there's a 15 by 24 standard manhole cover with studs, you know, on
7 each end of it that are bolted or, you know, weighted down so that
8 they're closed off.
9 Q. So you mentioned that you would talk to the marine surveyor
10 and you'd let them know if any work had been done in there. And
11 if I'm, if my memory serves, the survey was done in like the May,
12 June time frame, because the window was certain, multiple days.
13 But in April, you -- the Aztec Marine did work in that void are on
14 the chutes. So do you recall to the best of your knowledge, did
15 you let the marine surveyor know about the work that was done in
16 those areas?
17 A. I can't say for sure. You know, I'm a bit hazy on that, so I
18 can't say for absolute sure that I pointed out to Jake that we'd
19 had work done. I probably did, because I would go through -- I
20 mean, if you've seen Jake's surveys, he lists the major work that
21 was done each and every year. So you got a, you know, a list of
22 the projects that were accomplished, or the engines that were
23 replaced or whatever, but so I try to be as thorough as I can when
24 I talk to Jake there. But I can't remember the conversation that
25 clearly that I pointed that out to him in April of 2019.

1 Q. Sure. Okay. So actually, Lieutenant, if you could actually
2 pull that exhibit back up, and go to page 10, please. And
3 that's -- I'd like to look at paragraph A of page 10. And again,
4 these are the voluntary standards. And so these are -- have you
5 seen this document before? Like have you seen it before, or --
6 A. (Indiscernible) pass over my desk. Have I -- other than read
7 through it, and put it in a manilla file, I'm not sure that it's
8 been front of mind for me.
9 Q. Absolutely. Not a problem. So, in that page 10 there, and
10 that talks about the stability standards. So, the *Scandies Rose*
11 would have fallen into paragraph A, where it did have a stability
12 document. And from what I can tell, you specifically said in
13 earlier testimony that you -- the *Destination* and other things,
14 discussions that have come out from having talked to other
15 captains and other people in the industry, were some of the
16 reasons that you decided to get another stability report in 2019.
17 Is that an accurate statement?
18 A. I'd say it's, you can pinpoint it more specifically. When
19 the *Destination* rolled over, and I saw the press and everything
20 else, and I lost -- I knew Jeff Hathaway real well, I just said,
21 you know what, our stability report's old, I think it's time to do
22 stability reports, new stability reports on all the vessels. And
23 so I just said, I said that there was no reason to fly naval
24 architects all over the world, but I said when the boats come down
25 for shipyard, we'll just bring naval architects down and do the

1 reports for each one of the vessels. So.
2 Q. Thank you. So could we scroll down a little bit to paragraph
3 C, which talks about the owner, the operator of the vessel should
4 be provided basic training on stability, and the current loading
5 conditions and stability instructions of the vessel. So, Captain
6 Mattsen, did you provide any training or arrange for any training
7 on stability to the operator?
8 A. Well seeing as how the stability reports offered by Captain
9 Crawford has just had two sessions virtually and they were all
10 post incident, I'm going to say no, because there is no really
11 good venue to do that. Now, there is NPFVOA will have, they have
12 a small stability (indiscernible), and they'll try and explain
13 some things. And the Coast Guard was doing some work up in Dutch
14 Harbor prior to some other seasons, trying to explain things. But
15 Gary was well versed in stability.
16 In fact, when we did the, this report, when Mr. Culver did
17 this report, he went through it completely. And he asked for, I
18 think four different scenarios, you know, different tankages. You
19 know, how about if I have the number one tank down and, you know,
20 and because sometimes he'd like to have, just fish under different
21 circumstances. So he kept coming back with different loading
22 conditions and said, can you have him run the numbers on that?
23 And I said yeah, of course. And so I went back to Mr. Culver, and
24 Mr. Culver redid the -- or not redid, but added more loading
25 conditions.

1 Q. To the 2019 one?
2 A. The 2019 one.
3 Q. Do you recall which conditions those were? Were they the
4 later ones, or --
5 A. Yes.
6 Q. Okay.
7 A. Yeah, because we were -- I mean, if it got conditions one
8 through five --
9 Q. Sure.
10 A. -- it didn't make sense to reorder everything. I mean, he
11 just sent us conditions six, seven, eight, you know, that kind of
12 thing, so.
13 Q. So, to the best of your recollection, did you request that
14 the naval architect speak to Captain Cobban as the primary
15 operator of the *Scandies Rose*, to talk out the different stability
16 instruction information that he had?
17 A. No, it would have been difficult. Gary didn't come down. He
18 had fished. He fished the *New Venture* right up until -- and he
19 brought it to Kodiak. And then Peter Wilson drove the *Scandies*
20 *Rose* up that year. And then they just swapped boats, when they
21 got up to Kodiak, because Gary was involved in a major repair on
22 the *New Venture* out of Dutch Harbor. And then it just made sense
23 for him to bring the boat back to Kodiak and then get the
24 *Scandies*. But prior to -- this is prior to the salmon tendering.
25 Q. Okay. Lieutenant, would you pull that exhibit down? Thank

1 you. So, Captain Mattsen, I'm like to shift topics a little bit
2 to get in some clarification on the port engineer. He's been
3 mentioned by various personnel a couple of times but not by name.
4 And I think that I heard two different names. Perhaps one person
5 said Chip and one person said Jamie. Would you provide us some
6 clarity on the person who was designated to be the port engineer
7 for either Mattsen Management or Scandies Rose Fishing Company,
8 LLC?
9 A. It's really, it's all over -- the port engineer would have,
10 works on all the different boats as they come in the shipyard.
11 And it is now Jamie Griggs, who's a licensed chief engineer, and
12 trying not to spend a whole lot of time on the water, would like
13 to -- he likes to get a little bit of time in, but he wants to
14 work on the boats in shipyard. The previous engineer, from many,
15 many, many years, I worked with him for over 30 years, was Chip
16 Wilson. And Chip passed away, so (indiscernible), he was no
17 longer our port engineer.
18 Q. Now sir, could you tell us approximately when that occurred?
19 A. Well it seems like yesterday, but I think -- well, it had to
20 be late -- no, I don't know, spring 2019, very early, I think.
21 But it could have been 2018 too. Just, it all runs together now.
22 I'm just --
23 Q. So, for the benefit of the public, would you please just
24 generally describe what the overall duties and responsibilities of
25 the port engineer working in your company was?

1 A. Really, a port engineer is just somebody who understands
2 boats, who can act as a lead man or supervisor of the repairs that
3 are going on. And we -- it really is just a way to keep me from
4 having to be on the boat every day during the shipyard period.
5 So, we have, supervise the labor crew that's going on, and
6 interact with the shipyard or any vendors that are doing projects.
7 Q. And that was for all of the boats that you have partial
8 ownership in?
9 A. Yeah, yeah.
10 Q. Okay. And then, so depending on when he passed away, was
11 that position vacant? Or were there people in between that filled
12 that position? Because we heard that at one point Gelia Cooper
13 kind of assumed some of those responsibilities.
14 A. No. (Indiscernible) was completely wrong. Gelia has never
15 been the port engineer. She has always been a vessel manager,
16 well since she assumed that position. So Ed was calling her the
17 port engineer, but she was really just acting as the manager of
18 the vessels. That's why she was interacting with him.
19 Q. Okay. So, in the absence of the port engineer, when Mr.
20 Wilson passed away, how did you guys handle those
21 responsibilities? Who stepped in and did those during the --
22 A. I did. I was on the *Scandies Rose* every day during that
23 shipyard, and in part that was because Gary was -- he had a shaft
24 coupling break loose from the shaft of the *New Venture*. So he was
25 in Dutch Harbor, and he just took over there. We didn't send

1 anybody up, because Gary was perfectly competent to work with
2 Magone Marine, and -- or (indiscernible). I think it's now called
3 Resolve Marine. But he was perfectly competent to effect those
4 repairs without any interaction.
5 I mean, Gary would really just talk every few days and he
6 would tell me what was going on, but I didn't need to overlook
7 him. But I just took over the *Scandies Rose*, and worked on that
8 one.
9 Q. And so, Captain Mattsen, so if you took over that one, and if
10 Mr. Wilson passed away either in 2018 or in spring of 2019, were
11 you the one that accepted the work on Aztec Marine Welding in
12 April when they did the doubler plates?
13 A. Yeah. Unfortunately, I was. And -- but Jamie was still
14 working for us. Jamie was working on the *Amatuli*, primarily. We
15 had two boats down there, side by -- not side by side, but front
16 to back, and Jamie was working there. But I was the one who
17 ultimately said that, you know, let's hire Aztec.
18 Q. So you said, let's hire Aztec, but did you check the work?
19 Did you accept he work?
20 A. Well I'm not a -- you know, in retrospect, we should have --
21 you know, I don't know why they didn't have nondestructive testing
22 there. That was a, that was a mistake on my part. We certainly
23 should have had it. But then the boat went up, and I didn't hear
24 a thing about that void until Gary was coming in from king crab.
25 So, this is not a problem that manifested itself at all

1 immediately. But when we had the repair done by Cooper's company
2 up in Kodiak, we mandated, we will do, you know, some dye checks,
3 or nondestructive testing so that we can determine that the welds
4 are 100 percent. You know.
5 Q. So sir, if you were acting in the capacity of the port
6 engineer, which I recognize is not required for commercial fishing
7 vessels, but you were acting in that capacity to do the quality
8 assurance work, did you ask the person in charge at Aztec Marine
9 Welding for their welder certifications? Or did they --
10 A. No, we did not. And they have -- you know, that whole deal
11 was really a cluster, and we got -- we didn't get billed for
12 months. And when we finally got the bill, I looked at the -- I
13 asked for the job sheets, you know, just who worked on what, and I
14 suspected, you know, at that point we might have an issue, because
15 one of the welders was named Ratatouille, and one was named
16 Colorado.
17 And I thought that those were kind of odd names for, you
18 know, a Latin crew. It just seemed like that that would be a
19 little bit out there. So, I just told, you know, Gary about that.
20 And I said, I am going to withhold payment on this job for a
21 while. And he never mentioned it again until he was coming in to
22 Kodiak after king crab and asked that we have Cooper repair it
23 properly. And I said sure.
24 Q. So, those pictures that we saw, I think it was Exhibit 92, of
25 all that Splash Zone, can you confirm for me who put that Splash

1 Zone on there?
2 A. I have no idea.
3 Q. You don't know? So that was a --
4 A. Well, I'm sure it was part of the, you know, the crew, you
5 know, just a --
6 Q. I'm sorry. My question wasn't clear. My fault. Let me
7 rephrase that. It is my understanding that Captain Cobban sent
8 you those pictures.
9 A. Yeah.
10 Q. Via cell phone. So it was either Captain Cobban and/or
11 someone that, member or members of his crew.
12 A. Yes.
13 Q. And that was because they indicated to you that that work was
14 failing, and so they had to put it in on there --
15 A. They --
16 Q. -- as a stopgap measure.
17 A. Yeah.
18 Q. Okay.
19 A. Well he said that it had been put on -- you know, he said
20 I -- you know, Gary tended to be a little bit dramatic. And I
21 mean, this is drama now, you know, but tends to be a little bit
22 dramatic. And he says yeah, we had to put this Splash Zone on so
23 we avoided sinking during king crab. And so, to me that indicated
24 that that's when the problem manifested itself, that sometime
25 during king crab, he -- they noticed they were seeping through

1 those welds, and he had the crew go in there and put Splash Zone
2 on it. But I have no idea who did it.
3 But anybody who's been on a steel boat for any length of time
4 is very familiar with Splash Zone, as a quick epoxy repair, you
5 know, that can cure under water and, you know, get you back to
6 town till you can effect a real repair.
7 Q. So fair to say that it was Captain Cobban and/or his, one or
8 some of his crew during king crab?
9 A. Yeah.
10 Q. Got it.
11 A. Well, the -- I'm assuming during king crab, because that's
12 when he --
13 Q. Contacted you.
14 A. -- told me about that, at that point. But yes, it's fair to
15 assume that.
16 Q. And you said that Captain Cobban sometimes was a little
17 dramatic, but did you and Captain Cobban ever disagree on the
18 scope or extent of repairs of stuff?
19 A. Oh well, not so much on repairs. You know, I mean, if
20 something breaks, the basic rule is you got to either fix it or --
21 fix it, replace it or improve it, you know, put in something
22 better. But certainly we were, you know -- about changing the
23 whole fishing system, and that was a hard sell for Gary to make to
24 me. But we, you know, we did it eventually, but I forced him to
25 look a little bit harder, and we eventually found a good used

1 crane for a reasonable price, that kind of thing.
2 So we would go at loggerheads about the scope of our budget
3 versus what we wanted to do with the boat and everything else, but
4 repair, replace or improve, you know, just is the rule if
5 something breaks.
6 Q. Did you ever have -- did you ever get into a heated argument,
7 or argue about repairs for the *Scandies Rose*?
8 A. Not to my knowledge but, you know, Gary and I were, we
9 weren't buddies. I mean, I miss him, because he was a great
10 captain, and great fisherman there. But we weren't like
11 buddy-buddy there. We're two completely different personalities.
12 And that's why the partnership worked, because I'm a little more,
13 you know, business oriented. I do pay attention to the bottom
14 line. I recognize there are financial limits to what you can do
15 sometimes.
16 And, you know, Gary didn't recognize those limits. You know,
17 he wanted the world. He wanted the boat to be perfect. He wanted
18 the boat to be the *Pinnacle*, you know, which is one of the premier
19 boats, or the *Handler*, you know, Josh's boat there. But -- and it
20 was going -- you know, we were gradually improving the boat, but
21 we were still a 30-year-old boat, you know, 40-year-old boat, so.
22 Q. So fair to say that you did not -- I'm not trying to put
23 words in your mouth. I'm just trying to get a sense of, did you
24 have disagreements when it came to funding either repairs or
25 upgrades?

1 A. Well upgrades. I will agree with you that we definitely had
2 disagreements about upgrades.
3 Q. Could you give me some examples? You mentioned the --
4 A. (Indiscernible). When we bought the *Scandies Rose* we had a,
5 well it's colloquially called a cow catcher, and it picks the pot
6 up, sucks it up there, swings it over to the sorting table. You
7 open the door, crab -- then it goes back, and it drops down. And
8 it was a -- I'll probably get angry phone calls from Leith, the
9 previous owner, you know, about it, but I thought it was
10 tremendously inefficient. We could do better if we found a crane.
11 Well, new cranes cost, you know, $120,000 or so. And I said
12 well, you know, I'd love to do this, but we really should look for
13 an alternative. And Gary did that, and he found a great crane
14 that was not being used by -- it was actually (indiscernible)
15 again. And so we negotiated for it, bought it, had it completely
16 refurbished and installed it.
17 And yes, it took an extra year to make that change, but we
18 did it in a much more cost-effective way too. And, you know, so
19 things like that, yes, it might take a little bit longer but, you
20 know, if you go broke, you can end up getting into a death spiral,
21 where you -- okay, we haven't got any money, so we can't do those,
22 you know, any repairs.
23 So then you go out fishing, and things don't go nearly as
24 well. You don't make the money you want, so you've got even less
25 money next time for repairs. So you have to -- you know,

1 everything on a commercial fishing boat -- because this is a
2 commercial vessel. We can't go to Congress and say send us, you
3 know, another $40 million so I fish king crab. I have to
4 actually, if not turn a profit, at least pay all the bills, and
5 pay the crew, and make everybody, you know, reasonably happy with
6 their investments, you know, so we can continue on in this
7 venture. It is a commercial operation.
8 Q. Yes, sir. And thank you for that candid answer. So, we'll
9 shift topics again, because you mentioned the Aztec Marine folks,
10 and you specifically mentioned Ratatouille and Colorado. So,
11 Lieutenant McPhillips, could you please pull up Exhibit 089, and
12 that's the Aztec Marine Welding receipt. And if we could just
13 have it on page 1, and go to the part where it says Colorado. So,
14 Captain Mattsen, in 2019 before the accident, were there issues --
15 so before we go to this, were there issues with the gearbox on the
16 *Scandies Rose*?
17 A. Well, which gearbox? Main gear, I mean for the -- are you
18 talking about for a PTL?
19 Q. Which one had a problem?
20 A. No, I have no idea. I mean, to be honest, I can't recall.
21 We have -- you know, we have problems with machinery every year
22 that have to be addressed.
23 Q. Okay. So nothing, to the best of your recollection, that was
24 a significant, that was significant where it pops in mind that you
25 had a gearbox issue?

1 A. No, no, it's not -- it's just, like I said, we would have, we
2 would oftentimes have to pull out one of the PTL gearboxes. You
3 know, every time a boat came down you might take one of them out.
4 And I don't think we had to pull any of the gearboxes on the main
5 engines, but oftentimes had issues with the control mechanism, how
6 it goes into gear, how it activates the shaft brake or disengages
7 the shaft brake as it was going into gear. So that was kind of a
8 regular maintenance thing.
9 Q. Okay. So then, let's go ahead and talk about the starboard
10 chute and the work that Aztec Marine did. We have talked about
11 the starboard forward overboard sheeting quite a bit, and before I
12 move off of that, did you talk to and get consensus from Gary
13 Cobban about -- or anybody else, about choosing doublers as a
14 repair course of action, as opposed to replacement of that chute?
15 A. No.
16 Q. Is how that --
17 A. Gary was knee deep in the *New Venture* repair up in Dutch
18 Harbor. So now, we way have mentioned that, and you know, may
19 have said, you know, I decided to go with doublers instead, you
20 know, I think that will be fine, but I can't recall. I mean,
21 actually the *New Venture* repair was much more significant. I
22 mean, that was a major repair that had to be effected in Dutch
23 Harbor. We couldn't do -- the boat could not move without the
24 repair, so he was heavily involved in that, and I'm not sure that
25 I talked him about --

1 Q. Okay. So, would it be fair to say that Captain Cobban did
2 not know what type of repair had been done to that starboard
3 forward chute, but knew that it was repaired and you were
4 overseeing it?
5 A. Yeah.
6 Q. Okay. And so, so the document that we have up on the screen
7 and that we're sharing right now, it lists the doublers
8 (indiscernible) because it's a scrapper chute, you know, but do
9 you agree that that's referring to the forward starboard chute
10 that we've heard --
11 A. Yeah.
12 Q. -- referred to as a (indiscernible)? In other words -- okay.
13 So, we see Mr. Colorado did quite a bit of work on that. I did
14 some calculations, and so they did quite a bit of work on that.
15 And moving forward to talk about the old chute as well, they
16 referred to line items in there on different days about the old
17 chute, capping the old chute, logging doublers inside. Well,
18 that's a crab tank, but they referred to the old chute, and
19 putting in an insert.
20 Between Mr. Colorado and Mr. Ratatouille, they spent about
21 50-some-odd hours during the time that they did work onboard the
22 *Scandies Rose*, fitting in an insert on the old chute and capping
23 the old chute. Is that about right, to the best of your
24 recollection?
25 A. Well that's what I was billed for, but I thought it was a

1 little bit extreme for the number of hours they asserted. But I
2 have not -- I didn't pay this bill. I mean, I paid part of it.
3 But I subtracted -- I mean, like I said, they didn't bill me for
4 months, so they might have had issues. And I'm not -- you know,
5 this -- when they didn't -- when guys wait months to send you a
6 bill, it's kind of hard to think back, get in the wayback, you
7 know, machine and try and remember how many hours they were
8 actually down there.
9 So I ended up subtracting the total cost of Cooper's Highmark
10 Welding repair, the proper repair from this bill, and just said
11 paid in full. You know, contact a lawyer if you, you know, think
12 there's any more due, but we had to completely redo your job, you
13 know.
14 Q. So, this work was done in mid to late April, and the Highmark
15 Marine work was done in November time frame of 2019.
16 A. Yes.
17 Q. So, in order for you to, you know, paid in full, and subtract
18 the work from Highmark Marine, you were talking about almost six
19 months' worth of --
20 A. We didn't get billed for months. So, I mean -- and remember,
21 I was running a boat that summer also. So, I mean, when I got the
22 bill for 25-some-thousand dollars, I said just hold onto it here.
23 And I'm not sure if we made a partial payment at that time,
24 because oftentimes, you know, on these small vendors, they've
25 got -- especially if, the smaller the vendor, you want to at least

1 make sure that the guys get paid. So you pay, you might pay a
2 partial.
3 And then, but I wasn't about to give them any profit on this
4 deal, because I thought that the number of hours he put in were
5 way too high. So I waited till I got down, and then that was in
6 September, after I got done with my thing. I looked at the bill
7 and said wow, this is, you know, seems a bit high.
8 And then Gary went fishing in October, and at the end of
9 October he told me about the problem. And I said well, that's
10 going to solve that. We're not going to pay this bill until we
11 effect our repair, and then I'll make an adjustment.
12 Q. Were you aware of Aztec Marine's -- we you aware of any
13 reputation that they might have had, of Aztec Marine's reputation?
14 A. Well they had done some work for us on the *Amatuli* before.
15 And I don't think they'd ever worked on the *Scandies Rose.* I
16 couldn't find any record of it, but they had done some work on the
17 *Amatuli* that was perfectly fine. Now, it wasn't structural or
18 around the hull. It was just on a deck, they made some cradles
19 for the crane boom to, you know, sit in so that it doesn't move
20 back and forth when the vessel's underway.
21 Q. So, would Mr. Wilson, Mr. Chip Wilson have -- would he have
22 arranged for that work had he been --
23 A. Probably.
24 Q. Okay.
25 A. Yeah, probably.

1 Q. And he would have --
2 A. But Chip Wilson was also an expert welder. You know, in
3 addition to being a great hydraulics systems guy and good mechanic
4 and everything else, he was a fantastic welder. So, Chip could
5 hire -- he could hire me to weld, and by the end of the day I'd
6 have a perfectly good weld there. And if he was -- he was very
7 good at knowing, you know, what to do. So, and I don't have that
8 expertise. Very few people in the world have that level of
9 expertise.
10 Q. Okay. And so, but since he had already passed, since Mr.
11 Wilson had passed and you had, you had a vacancy, essentially, in
12 that skillset, you were filling that gap. And so, based on the
13 experience on the *Amatuli* with Aztec Marine, you hired them for
14 *Scandies Rose*?
15 A. Yeah.
16 Q. Understood. So actually, Lieutenant, could you pull that one
17 back up, because I wanted to look at some of the other line items
18 that are on there. They did quite a bit of other work for you as
19 well, Captain Mattsen, including some work on piping, cooling
20 pipes for generators in the engine room.
21 A. Yeah.
22 Q. And additional doublers within the crab tanks. To the best
23 or your recollection, and he can scroll through this document if
24 you'd like, if it helps refresh your memory, but were there any
25 other through-hulls or other hull welding that Aztec Marine did

1 for you?
2 A. No. No, but we wouldn't know. I mean, the crab tanks on the
3 *Scandies* always, they had a false -- they had the actual
4 structural tank, then they had foam, and then kind of a false
5 wall. And however they were constructed, we would often get
6 cracks in that false wall. And just, it was just covering up the
7 foam. So you'd put a quick doubler around there and, just to stop
8 the crack from spreading. It's just a, kind of a defect in the
9 design of the, either the design of the boat or the design of the
10 insulated crab tanks, the insulation in the tanks, you know, so.
11 Q. Okay. So we can go ahead and pull that down. Thanks,
12 Lieutenant. So, we talked a lot about the forward chute, like I
13 said, and we've talked a little bit about the after starboard
14 chute. When you realized, or when Gary contacted you and said,
15 when Gary Cobban contacted you and said, I thought we got this
16 fixed, and you replied, like I'm going to do this, did you at any
17 point develop concerns or direct anyone to check the repairs or
18 the sufficiency of the other work that was done, to include the
19 forward chute that was capped off, and that welding, or any of the
20 welding work for the cooling for the pipes of the generator?
21 A. I assume he would have, the engineer would have known of any
22 problems with the piping for the generators. And obviously there
23 was no problem, because the engineer never told Gary and Gary
24 never told me of any problem with it. So that repair was effected
25 more than adequately. So, and I didn't hear anything about the

1 crab tanks.
2 And generally, what you hear about the crab tanks -- and
3 that's kind of when the boat comes down, and we go through the
4 tanks and just look and see, you know, have we got any more of
5 these, you know, little cracks coming through. And it's not
6 something that's front of mind. It doesn't really affect
7 anything. It doesn't affect your tendering. It doesn't affect
8 your crab fishing. So it's generally when the boat comes down. I
9 don't know if there was any more problems.
10 Q. How about the main chute, though? Sorry.
11 A. Didn't hear anything about it. So again, you know, just the
12 first I heard about the problem was when Gary was coming back
13 after a successful king crab, was driving back and said he wanted
14 Cooper to look at that. And I said sure, you know, which was the,
15 basically my response for any kind of repair like that. If it was
16 inadequate, it would be repaired correctly.
17 Q. Did you direct Captain Cobban or anyone else to -- because
18 that work had been suspect and ended up having an issue, did you
19 direct them to look at other areas to make sure there weren't any
20 issues?
21 A. No, I didn't. Just whatever Gary asked me to do, I said go
22 ahead and do it.
23 Q. Okay. Okay, so we're going to go ahead and shift to a
24 different topic. Again, Captain Mattsen, I know I'm kind of like
25 (indiscernible).

1 A. (Indiscernible).
2 Q. Doing all right?
3 A. I grew up in a lawyer's household. I've been interrogated
4 before.
5 Q. Oh my. Okay. Okay, so I'd like to shift this to the survey
6 and stability reports, so get ourselves into that frame of mind.
7 Prior to the 2019 stability instructions on the *Scandies Rose*, do
8 you recall whether -- what stability instructions were being used
9 onboard the vessel?
10 A. Well, there was a Bruce Culver letter that's posted in the
11 wheelhouse, which had -- is basically the instructions to the
12 master, same thing that's on here. So a copy of that was posted
13 on the, in the wheelhouse. Now the, both Gary and I have looked
14 through the full stability report, and I'm not going to contradict
15 Mr. Culver. I'm not sure. He might not have done the full report
16 in whatever, whatever year he said. But the instructions to the
17 master were definitely a letter from Bruce Culver, and that's what
18 was posted.
19 But we had both looked -- when we bought the boat, we bought
20 the boat with a -- actually we got a bareback charter -- bareback
21 charter, bare boat charter, which was a, well we had for like
22 three years, while we actually ran the boat up to Dutch Harbor.
23 And we would -- so we were testing the main engines, we were
24 running al the generators, we were just taking a look around
25 because we were under a very tight time schedule about getting --

1 taking possession of the boat and getting it up Bristol Bay.
2 So, we actually had this charter that, you know, they could
3 have backed out. And so we went through every system on there,
4 and then read the stability report, make sure that it was going
5 to -- the boat was there to do what we, you know, wanted to do,
6 which was tender and fish crab. And they -- you know, so we
7 looked at it then, but I didn't note -- I didn't -- if some other
8 professional engineer or naval architect did that full report, I
9 couldn't say.
10 But I was just looking at the -- the thing that most
11 fishermen look at is just your basic, you know, that your
12 deckhands can look up there and go, oh I'm confused, we can carry
13 140 pots and we've got 300 on there. That doesn't seem right, you
14 know. You know, I always have those instructions posted up in the
15 wheelhouse. And that's what mainly you would look at.
16 Q. So sir, do you -- did you at any point know, or have any
17 indication that the 1988 stability instructions or calculations,
18 or the 1988 report might not have been complete?
19 A. No, no. None whatsoever.
20 Q. Okay.
21 A. But again, you know, when we do the new one, I mean, it
22 really doesn't matter what the old report said. Just, we assumed
23 that we can hire a professional engineer and get an accurate
24 representation of what the vessel stability was under different
25 loading conditions.

1 Q. Okay. So, I'd like to pull up -- Lieutenant, please pull up
2 Exhibit 036, page 4. And, Captain Mattsen, that's the front cover
3 page of the stability report. It gives the basic information of
4 the *Scandies Rose*, (indiscernible), et cetera. And please scroll
5 down, Lieutenant. A little bit more. So, what I'm trying to show
6 -- what -- that's good, right there -- is that, you know, for
7 timeline purposes, this, the 2019 incline test was done just
8 before the middle of April in 2019 in Seattle.
9 And so, sir, you testified that, you know, and we talked
10 about this, after the loss of the *Destination*, you commissioned a
11 survey report for all of your vessels. Did you consider at the
12 time that any errors in those reports might potentially be
13 overlooked by the same two people in terms of both the survey
14 report and also the stability report? I know I only have the
15 stability report up, but did you ever consider that potentially
16 errors may have been overlooked, by either the surveyor or the nav
17 arc?
18 A. No. No. And especially when the stability report came out
19 with near the same number of pots that were in there before, I
20 mean, it was like okay, well this kind of confirms that, you know,
21 we're okay. You know, so I just didn't -- I was happy that we
22 could carry 208 pots, but that's very difficult to carry on the
23 boat.
24 And I'll just -- it's really -- for example, my -- the boat
25 that I ran this winter, it's stable for 110 pots. You could not

1 put 110 pots on there. I mean, I just don't see how you can
2 actually fit them on there. So, I was very comfortable driving
3 around with my 75 pots or so, and was happy to have a cushion, you
4 know, in stability for the vessel.
5 But yeah, when it came out to be fairly close to what it was
6 last time -- because the boat still has the same basic
7 configuration. There is a new superstructure. After the fire,
8 they built a new wheelhouse on there, because that was what was
9 destroyed, and new crew quarters in there, but it's still the same
10 length, same width that it was before, so it -- and the tankage is
11 still the same.
12 So it has, you know, basically the same configuration. There
13 would just be a little bit more superstructure, and that's why he
14 did the little addendum that turned out to not be the complete
15 stability report that Mr. Culver was talking about, where he just,
16 he said the numbers look pretty much the same as the old one, so
17 he didn't do the full test.
18 Q. Okay. Lieutenant, could you bring us to page 1 of the same
19 exhibit, please? So, sir, what we're pulling up now is the letter
20 that we spoke to Mr. Culver about. And so, please zoom in just a
21 little bit.
22 So this was -- chronology sake, the report was done April
23 12th. This letter was written to you on the 17th of May, sir.
24 And we provided you with two copies of the stability book, to let
25 you know what could be carried, quote, without much difficulty.

1 Specifically though, he noted that --
2 Could you zoom in a little bit, Lieutenant, please? Thank
3 you. Thanks. That's much better for my eyes. Thank you.
4 -- that the light ship weight was heavier than he expected.
5 When you read that, what were your thoughts about that? Did that
6 concern you in any way about there potentially being weight, for
7 the light weight condition, that you didn't consider?
8 A. It didn't concern me at all. I mean, I -- but then again,
9 I'm not an engineer. It just is like oh, okay, I don't know. I'm
10 a little bit heavy. I'm not sure why. You know, just a -- but
11 again, we did the stability report, and the stability report
12 assumes the weight that he calculated. So, I'm not sure if he
13 realized the new wheelhouse that was put on there and at some time
14 before we bought it, that is certainly bigger than the *Patricia*
15 *Lee*'s wheelhouse. So it might be a half step higher.
16 So, I'm not sure if he -- if that was the source of the
17 weight or not, but the inclining should have, of course, taken
18 that into account, what the light ship was. So it didn't concern
19 me at all that we were a little bit heavier than the *Patricia Lee*
20 or heavier than he expected.
21 Q. Okay. So, at any point -- I know in this letter it just
22 says, "was a bit heavier," quote/unquote, but was there any
23 correspondence, whether verbal or written, email, where he, where
24 the PE indicated to you what a bit heavier was? Did he ever tell
25 you what, by how much heavier?

1 A. No, he did not, and I didn't ask.
2 Q. Okay. So, to the best of your recollection, sir, did you
3 have any further correspondence on any topic with Mr. Culver about
4 this letter, anything stemming from this letter?
5 A. Not anything stemming from this letter. As I said, I had
6 communicated with him after talking with Gary, after Gary saw the
7 report, and read it, and he wanted different scenarios, several
8 different -- of the loading, you know, character, loading
9 conditions redone, or done so that I communicated with Culver
10 about that, but that was the extent of it.
11 Q. Okay. So, is that why -- so I think I'd like to turn to the
12 instructions for the master. I believe that's page 5. And I
13 think at the bottom, it gives a date, if I'm not mistaken. It's
14 at the bottom. May 28th. Sir, is that why the date on this
15 instruction to the master is, let's say a week or so, ten days
16 past when Mr. Culver sent you that email? Is it because in that
17 time, Captain Cobban said, oh I'd like more conditions?
18 A. To be honest, I really hadn't taken note of that date, but it
19 probably is, because we did get sent new books, or new pages to
20 install in the book. But I'm not sure that he changed this page.
21 I mean, he did the -- when did he do the inclining?
22 Q. April 12th.
23 A. April 12th, yeah. It took about -- well, it took about a
24 month to a month and a half to get the report. I was trying to
25 get it -- in fact I remember I had to make several phone calls and

1 just said we'd really like to get it before the vessel starts
2 tendering, you know, because that was our next season, so how are
3 we doing? And then, you know, and he delivered it, you know,
4 before the vessel started tendering, so I had no complaints at
5 all.
6 Q. Sir, do you -- have you been to an approved stability
7 training, or have you completed one of the courses that we've
8 heard about, in prior testimony?
9 A. No.
10 Q. Did you still feel reasonably comfortable looking at the
11 technical details of the report that was submitted to you?
12 A. Well I looked at the conditions. I mean, it's fairly
13 straightforward to just -- you know, full of fuel, full of
14 consumables, half consumables, quarter consumables. I mean, I'm
15 certainly comfortable reading that kind of thing and saying, okay
16 we can load these pots here.
17 And, you know, the instructions are fairly truncated here
18 but, you know, you can't have -- it's pretty easy for any
19 competent captain to go okay, freeboard can't be less than 6
20 inches. You can't put pots up above the wheelhouse window so you
21 can see. And you should investigate any list. You should know
22 what the cause of the list is before you start taking corrective
23 actions. Those are things that any competent captain can realize.
24 And then when you look at the pots, it's like okay, 208 pots,
25 let me see, you know, and here's what they can -- here's how they

1 assume it's done. So you just -- you know, I mean, the bottom
2 line on the stability report is, you know, don't obstruct the --
3 you know, can you build up to your wheelhouse? And on a
4 (indiscernible) boat, that's really where I draw the line.
5 I mean, I've seen people go out, leave Dutch Harbor with pots
6 stacked up two layers of pots above the wheelhouse, and just a
7 narrow window that somebody can see out of. And I would never do
8 that, and I don't think Gary would either. So, you know, at that
9 level of expertise, they can certainly look at it. And I was very
10 comfortable. I had a boat for 15 years, the *Shaman* that had
11 issues.
12 I mean, it wasn't like the *Scandies Rose*. *Scandies Rose* was
13 very stable under a very wide range of conditions. The, some of
14 the house forward boats that I've run are a lot more
15 temperamental, and you've got to be a lot more careful and very
16 cognizant of icing. And with *Shaman*, you had to be. I mean, I'd
17 monitor my roll period even when I was sleeping. I would be going
18 back and forth, seven seconds, seven seconds.
19 You know, and if it started -- and I swear, I woke up many
20 times when it's like, wait a minute, we're taking too long to
21 roll. Get up there and it's like yeah, you know, we've got quite
22 a bit of ice. Let's get the crew up. You know, and we'd stop and
23 chip ice.
24 But *Scandies* had a lot more leeway that way. It was, you
25 know, stable under many different conditions, with a full load of

1 pots, empty of pots, full of fuel, empty of steel. It could still
2 carry a lot of gear.
3 Q. Would you say that Captain Cobban was the same, in terms of
4 kind of having that intuitive feel for stability?
5 A. I would hope so.
6 Q. Okay. Did you notice a difference in the tankage,
7 (indiscernible) tankage numbers between the 1988 and 2019
8 stability instructions?
9 A. Didn't even look.
10 Q. Okay.
11 A. Again, I'm relying upon the expertise of the engineer. And
12 if he's telling me that I can go this way with one tank down, or
13 with two tanks down, that's -- you know, and it generally aligned
14 with the other report, to the best of my knowledge, but it also
15 didn't contradict any of the ways that we would actually operate
16 the vessel.
17 You know, we would -- with a full load of gear, we would
18 invariably have one tank down, and that's it. You know, that's
19 just -- I was on the boat for king crabs, the starts of king crab
20 and the completion of king crab, and we would just have one tank
21 down when we would put on a full stack. So that's what I can
22 assume the vessel was, you know, acting under during it's final
23 voyage.
24 Q. So sir, prior to the accident date, were you aware of any
25 issues with the naval architect's quality of work, who conducted

1 the *Scandies Rose* stability report?
2 A. No, not -- it's like, *Artic Rose* and *Sea Venture*, I had no
3 idea of those issues. And as far as I was concerned, if he was a
4 licensed engineer, he was probably still competent to perform a
5 stability report. And I don't think you've proven that he's
6 incompetent either. I mean, at this point, it's not for me to
7 say. It's, you know, for other engineers to judge quality of the
8 work.
9 I'm not throwing Mr. Culver under the bus at this time. I'm
10 just -- I'm a fisherman. I'm a pretty damn smart fisherman. And
11 I can read the document without really going through the numbers
12 and understanding why he's got so many figures here. But I
13 understand about righting angle and center of gravity and all the
14 things that a competent crab captain should understand.
15 Q. Sir, would it have cost whoever, from Mattsen Management of
16 from the Scandies Rose Fishing Company, would it have cost them
17 more to have selected a brand new naval architect to conduct the
18 survey, because they were starting from zero?
19 A. Well, it would have -- because of the, you know, stability
20 incline test on the *Alaska Challenger* cost probably 70, 60
21 percent, 60 -- more than 2/3 more to do. But they went through
22 every space, every single space, you know, just and opened up
23 every manhole cover. And we had to move racks to get -- you know,
24 so they could actually, the architect could get in, you know, and
25 physically measure these spaces.

1 So, now I hadn't -- I had done -- not I had, I did not do it.
2 But I was the captain of the *Billikin* for quite a few years, and
3 we did a stability for it there after we did some major
4 reconfigurations. And I was in charge of it. I was the captain,
5 and so I helped move the ecology blocks around, and but really
6 didn't know what had been done in the background.
7 So when Mr. Culver came down to do the report he, you know,
8 asked myself and the engineer what tanks were flooded, you know,
9 where the fuel was, you know, the usual questions, but did not go
10 through spaces. And I assumed that that was because he had
11 background knowledge of the vessel itself so he understood what
12 the volumes were.
13 And until I had the, did the report on the *Alaska Challenger*,
14 I didn't realize just how much more could be done, you know, and
15 just how rigorous they were in terms of getting the exact volumes,
16 you know, of everything. It was just a, it was night and day.
17 Q. And when did that particular stability -- when did that
18 evolution take place for the *Alaska Challenger*?
19 A. When did the report take place?
20 Q. When did they do the work and the measuring, to make sure
21 that they had all the proper volumes?
22 A. I've got it right here. So --
23 Q. Even approximate, was it 2019 or --
24 A. No, no, no. No, it was just spring of 2020.
25 Q. Okay.

1 A. Yeah. I -- no, they didn't actually get the stability
2 booklet until October, but they did the incline test before the
3 boat left town and, to go -- spring. And then it just took them a
4 while to actually get the report.
5 Q. So the best of your recollection, how long did that process
6 take, from the measuring of the spaces, tanks, getting all the
7 data and information that they needed?
8 A. Well, it was on the boat three or four times.
9 Q. Okay.
10 A. I wasn't there every day. This was done up in Anacortes, and
11 so we kind of tag teamed it. You know, I would be up there for a
12 few days, and then Gelia would be up there. And so I wasn't there
13 all the time. And the actual inclining only takes a matter of,
14 you know, four or five hours, six hours. You know, just, you just
15 kind of move blocks around.
16 Q. But fair to say that, from what I just got from you is that
17 you saw that there was a significantly different amount of time
18 for prep?
19 A. Yes.
20 Q. Okay. Got it. All right, and then sir, last topic from me,
21 I want to shift a little bit to just a few last questions
22 regarding your medical, and where your role is in that, or where,
23 how the company kind of fits in. So, Ms. Cooper receives the
24 contracts, which contain the medical questionnaires, right? So
25 they also put in a waiver, the crew that signs on, that sign on,

1 they put in a waiver saying that they will allow the employer, the
2 company to release information, like that medical providers can
3 release information to the employer?
4 A. Yes
5 Q. Between all your personnel, how many times have you guys,
6 have you, your company taken the medical self assessment for the
7 crew, and then contacted a medical provider to get more
8 information if you saw something that kind of flagged? Do you
9 know?
10 A. I don't know. I mean, they -- I'm sure there have been times
11 when we've told Gary that, you know what, we can't have somebody
12 with epilepsy on the boat. You know, I mean, just it's silly.
13 Crab fishing is not the place for -- or if somebody has a chronic
14 condition where they're taking, you know, some Vicodin or
15 oxycodone on a regular basis, you know. We just can't, you know,
16 we can't do that. Even though it's medically prescribed, you
17 can't have that.
18 But as far as calling a doctor, no. It's generally going to
19 be pretty egregious. If somebody says they've only got one eye, I
20 can make that call. They're not going to be on my boat. Just,
21 I'm sorry, but you have to be able to, you know, see a whole scope
22 of things. I'm not going to take that kind of risk.
23 But -- and that would very rarely happen, because there's a
24 lot of self selection. Guys, you know, guys have got something
25 that's going to keep them from being a good crab fisherman

1 generally don't want to be a crab fisherman. You know, it'd be
2 kind of an odd mismatch if somebody wanted to be a crab fisherman
3 and they didn't have the abilities to be a crab fisherman.
4 So, you get occasionally, you know, that generally as a guy
5 gets older, you know, he might have some kind of chronic injury
6 that really, you know, necessitates medication and you'll just
7 say, you know, you really can't, you can't come on this boat.
8 Q. So prior to the accident, at what point did you become aware
9 that one of the crew was insulin dependent?
10 A. Did not. I did not become -- you know, if I would have
11 found -- known that, I probably wouldn't have -- I probably would
12 have put the kibosh on that. Yeah, at least I would have -- that
13 would have been one that necessitated a call to a doctor, because
14 I'm not that familiar with, you know, diabetes and the various
15 problems with insulin.
16 Q. Prior to the accident, at what point did you become aware or
17 hear about the hearing issues and heart murmur of the captain?
18 A. Not even aware of that, so. You know, Gary could hear just
19 fine. Yeah, he could hear just fine. I mean, he might have, you
20 know, may have a little ringing in the inner ears because we've
21 worked in a lot of engine rooms over the course of years but there
22 was never any problem. There was never any deafness on one side.
23 You know, and you would notice that, because sometimes I
24 would be to the right of Gary and sometimes I'd be to the left of
25 Gary, and there was never any of that, you know, what, what, you

1 know, just that kind of thing. So that's just a, that's a red
2 herring, if you're going down that road.
3 Q. Could you -- so you just explained it a little bit, but could
4 you explain what your guidance was to, not just Captain Cobban but
5 like other vessel captains, in terms of medical issues and signing
6 on a new crew, since they were the ones responsible to hire on a
7 new crew? Did the captain -- did you have any kind of threshold,
8 or did the captain have to call you if there was person X, but oh,
9 there's this medical condition because we're at Kodiak and I'm
10 having them sign the paperwork. I'm going to send it Gelia, but
11 oh, I see that this person has --
12 A. Mainly that's why we had everything sent to Gelia, so that
13 she could at least, you know, review things, and just look for
14 any, you know, red flags. Gary was pretty old school, and he felt
15 that he knew -- he could look at you and, you know, in 15 minutes
16 of work he can evaluate whether you were going to make it on the
17 crew or not. And it's not a fault there. He was pretty good at
18 it. But we would just make him -- I mean, and that was just a
19 management thing.
20 We enforced the whole, you've got to get the contracts to us.
21 You cannot carry them on the boat. You can't put them in the
22 mail. Figure out a way to get them down to us so that we can make
23 sure all of our Is are dotted and our Ts are crossed.
24 Q. And how about the crew drug test before joining, the
25 preemployment, if you will?

1 A. Well most of the time, you know, we try and do it days
2 before, because you don't want to fly somebody up there and then
3 have to fly them back. But a last-minute hire, you know, just we
4 can always carry drug tests on the boat, just portable ones that
5 you, you know, call the guy up, send him into your, send him into
6 your head, you know, just -- and just say hey, fill up the cup to
7 this line and then we'll take a look.
8 But that was almost just a -- that was for last-minute hires,
9 or post-incident, that if something happened, that when the Coast
10 Guard required drug testing, you know, you really have to do it
11 yourself, because if they get to the emergency room, the emergency
12 room doctors won't drug test.
13 So, if a guy gets injured, once he gets to the emergency room
14 he's out of our control. And we can't -- we've just been going
15 back and forth with some guy, you know, an injury on the *Amatuli*
16 this last, just about three weeks ago. And I've tried to drug
17 test, and the emergency room refused to do it.
18 Q. So prior to the accident, did you have any guidance for your
19 vessel captains about notifying either you or Ms. Cooper about any
20 irregularities when it came to the drug tests?
21 A. Oh yeah. Yeah. I mean, if a guy failed the drug test, he
22 could not go out fishing. You know, that was just, it was just
23 about why. But we did -- you know, we did -- because you cannot
24 find -- you can't -- if you pulled up seven people here and tried
25 to put them on a boat, you could -- in the state of Washington,

1 you could not find seven people who would pass for pot. That's
2 just a fact. In seven random people you would -- somebody would
3 fail.
4 So, if we've had one guy who we know really well, we would
5 send him up there and let him ride the boat up to Alaska, and say
6 we're going to test you as soon as you get there. And until you
7 get there, you can't take a watch. You can't -- you know, you can
8 clean up the galley and you can do that, but you can't run the
9 cranes or do any of the equipment. And we'll test you as soon as
10 you get there. And you better pass, or else we're going to be out
11 for a plane ride. And you're going to come right back.
12 And generally, a guy would either -- you know, at that point,
13 he would either say well, I'm pretty chronic, man. I'm not going
14 to pass in a week. Or else he'd say yeah, it was just a stupid
15 thing. I was at a party. There'll be no problem, I'll pass. You
16 know, and invariably they did.
17 Q. So were you notified before the *Scandies Rose* departed of any
18 issues of drug tests, like any irregularities for any of the drug
19 tests for any of the crew?
20 A. I was told by -- let me see, how did Gary say that? Not
21 before they departed. But when he got out, he told me -- because
22 frankly, I had questions about one of the crew members. I said,
23 he passed the drug test? And he goes yeah, he passed. It was
24 great. I wasn't really expecting it either. So I was like, okay.
25 You know, it just -- if he passed. And I'm not going to mention

his name unless you ask me to, so.

Q. All right. I have nothing. Thank you for your time, and your candid answers.

CDR DENNY: Captain Callaghan, I have no further questions at this time.

CAPT CALLAGHAN: Thank you, Mr. Mattsen. At this time, we've have you for an hour and a half straight. I'm going to ask, if you don't mind, we'll take a five-minute recess, and then we'll finish up from there, sir.

THE WITNESS: Okay.

CAPT CALLAGHAN: Okay. It's now 1630. We'll go into a five-minute recess and resume at 1635.

(Off the record at 4:30 p.m.)

(On the record at 4:35 p.m.)

CAPT CALLAGHAN: It's 1635. This hearing's now back in session.

Mr. Mattsen, thanks for your patience. We're now going to move to our colleagues at the National Transportation Safety Board for any follow-ups.

Mr. Barnum?

MR. BARNUM: Thank you, Captain.

And Mr. Mattsen, I echo Captain Callaghan's appreciation for your testimony and all your help thus far. I have no questions.

THE WITNESS: Thank you.

CAPT CALLAGHAN: Thank you, Mr. Barnum.

1 Sir, we're now going to go a party of interest,
2 representatives for the two survivors.
3 Mr. Stacey?
4 MR. STACEY: Thank you, Captain.
5 Thank you again for joining us, Mr. Mattsen. I have no
6 questions for you, sir. Thank you for your testimony.
7 THE WITNESS: You're welcome.
8 CAPT CALLAGHAN: Thank you, Mr. Stacey.
9 And now to Mr. Barcott.
10 MR. BARCOTT: No questions. Thank you, Captain.
11 CAPT CALLAGHAN: Thank you very much, sir.
12 BY CAPT CALLAGHAN:
13 Q. Sir, I just, I forgot a follow-up for you. I want to pull up
14 a photo, just -- you've operated the *Scandies Rose* a number of
15 times. I just want -- if you'd take a moment to picture the
16 bridge, specifically the port side of the bridge. Do you recall a
17 white phone located to the side of the windows on the port side?
18 A. Yes.
19 Q. Do you recall where that phone -- what that phone was used
20 for?
21 A. It could be used to call out. It was part of the KVH system.
22 We had two phones there that we had access to make phone calls to
23 and from the boat. And that -- we used -- the port side one was
24 kind of the crew one, and then the one next to the pilot station
25 was, you know, for boat business and for people to call Gary.

1 Q. Okay. Thank you, sir. And sir, one last question just had
2 to do with immersion suits. Any general -- 46 C.F.R. Part 28 has
3 a requirement for there to be proper size immersion suits for each
4 member of the crew. Are you aware of, internal to the company or
5 to each of your vessels, if there's a process to ensure that each
6 crew member has the proper size?
7 A. That's done just on a season by season basis. On the *Amatuli*
8 I've got three jumbos, four regulars, one intermediate and one
9 child. And I'm not sure why we have the child one, but somebody
10 must have brought a really small person onboard at some point in
11 the boat's history.
12 And we just make sure that whatever your crew is configured
13 of, that you have those immersion suits at the front of the pile,
14 you know, so that if you've got -- we oftentimes have a -- like
15 well my wife has been cooking for our tender season, and she's an
16 intermediate size. And the other two crew member wore regulars
17 and I wear the jumbo. You know, so we just make sure that those
18 are the ones that were in the front, and the other ones were
19 stowed in less handy places.
20 But that's not a written procedure. It's just a matter that
21 the captain has to make sure that he's got appropriate survival
22 suits for everybody onboard.
23 Q. Okay. Thank you for that sir. Sir, I don't have any further
24 questions for you. We'd like to offer you the chance -- so
25 certainly we've gone through quite a bit of questions with you.

1 We'd like to offer you a chance, if there's any question or any
2 topics that you think may benefit us here today as part of the
3 investigation --
4 A. No, I would just say, Gary is a, was a very good captain.
5 And he was doing his best to get the boat to a safe place. You
6 can say that probably there were some mistakes. You know, having
7 two people who weren't familiar with the vessel back to back on
8 the watch at that time was probably not best practice. But he
9 knew the area, and he was trying to get his crew (indiscernible)
10 so he could deal with the problem.
11 And, you know, I think that he was probably just, didn't have
12 enough time to process all the information that was coming at him.
13 And I think he had a lot of faith in the boat. He'd been through
14 a lot with it, and knew that it was a good ride. And, you know,
15 even the stability instructions say, you know, don't correct a
16 list until you know what's causing it. And I think he was making
17 sure that it was, you know, it was icing, you know, or he sent Art
18 down. And he ran downstairs immediately. And then he came back
19 up, according to the survivors.
20 And I am sure that when (indiscernible) send Art down in the
21 engine room quickly, just take a look, see what you see. And, you
22 know, because there could be ways that you could have a fuel valve
23 open on a manifold and, you know, you can start developing a list
24 if you've got a valve cracked. You could be transferring all the
25 fuel over to the starboard side or something. But I think Gary

1 was trying to get a handle on what was happing, and I think that
2 things got away from him. Things went south very quickly, once
3 the boat heeled over.
4 CAPT CALLAGHAN: Thank you for that, sir. And, you know,
5 again, I can't tell you enough how much we appreciate just your
6 time and, you know, with the amount that you've endured since the
7 accident occurred. So we greatly appreciate your time and your
8 testimony, and just your participation since the accident in
9 helping keep us informed and collecting evidence, so we can gather
10 the most information possible.
11 And, you know, sir, as a matter of practice, we've shared our
12 condolences, but this is a personal loss for you of friends and
13 part of your business, and for that we offer our condolences to
14 you for your loss.
15 THE WITNESS: Thank you.
16 CAPT CALLAGHAN: At this time, sir, you are now released as a
17 witness from this formal hearing. We thank you for your testimony
18 and cooperation. If at a later date we determine that this Board
19 needs additional information from you, we'll contact you through
20 counsel.
21 If you have any questions about the investigation, you may
22 contact the Investigation Recorder, Lieutenant McPhillips. And
23 that's all for today, and we thank you very much, sir.
24 THE WITNESS: Thank you.
25 (Witness excused.)

1 CAPT CALLAGHAN: I'd like to thank all of our witnesses for
2 their testimony today. It was very informative. For the record,
3 again, all exhibits presented today will be posted to our MBI
4 media website.
5 Tomorrow, we will hear from one representative from Coast
6 Guard Headquarters Office of Investigations and Analysis. And
7 then we will enter into closing remarks from our parties in
8 interest, from the National Transportation Safety Board, and then
9 from the Marine Board.
10 It is now 1643 on March 4th. The hearing will now adjourn
11 for today and resume at 0800 tomorrow, March 15th.
12 (Whereupon, at 4:43 p.m., the hearing was recessed.)
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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: Marine Board of Investigation
Into the Sinking of the *Scandies Rose*
On December 31, 2019

PLACE: Seattle, Washington

DATE: March 4, 2021

was held according to the record, and that this is the original, complete, true and accurate transcript which has been compared to the recording accomplished at the hearing.

[redacted]

Pamela Jacobson
Transcriber