UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	*	
	*	
SINKING OF THE CFV *EMMY ROSE* WITH LOSS OF LIFE, OFF THE COAST OF PROVINCETOWN, MASSACHUSETTS, ON NOVEMBER 23, 2020	*	Accident No.: DCA21FM007

Interview of: GARRETT NORTON
Naval Architect

Via telephone

Wednesday,
January 6, 2021

APPEARANCES:

CDR [redacted] [redacted]
U.S. Coast Guard

CWO [redacted]
U.S. Coast Guard

LT [redacted]
U.S. Coast Guard

[redacted], Investigator
U.S. Coast Guard

[redacted]
U.S. Coast Guard

BRIAN YOUNG, Accident Investigator
National Transportation Safety Board

I N D E X

I N T E R V I E W

CDR [redacted] Good afternoon again. This is Commander [redacted]. I'm the lead investigating officer for the marine casualty investigation into the *Emmy Rose*. Today, I'll be interviewing Mr. Garrett Norton.

Mr. Norton, if you can just introduce yourself and spell your last name.

MR. NORTON: Garrett Norton, the last name is N-o-r-t-o-n.

CDR [redacted] Great, thank you. All right. So I'll ask the first questions here, so a little bit of background, and then we'll get into some of your experiences with the *Emmy Rose*.

INTERVIEW OF GARRETT NORTON

BY CDR [redacted]

Q. So first is, can you briefly describe your experience as a naval architect?

A. Well, I've been doing this for coming up on 33 years. Went to a small graphic design program up in the Maine Maritime Academy and got a job right out of that working for (Indiscernible) Gilbert (ph.) Associates. Worked there for 12½ years, then worked for Ocean Tug and Barge for about a year, and then decided I wanted to start my own company.

And this was actually, if not -- this was one of the first boats we did a stability test on, so -- and we've been involved with the fishing fleet out here for many years. Like I said, I never counted, but we've probably inclined hundreds of boats, so

we have a lot of experience with the existing boats down here. But, again, we inclined that boat -- it's coming up on 19 years, so what I remember about it is not a whole lot.

Q. Okay. Well, we'll see what you do and ask some questions about it. So just what types of jobs do you do as an architect, as a survey -- surveying vessels, what's like your typical world of work, so to speak?

A. Basically we do everything. I mean, so we do new construction designs. We have two boats under construction right now, two scallopers -- well, one's a scalloper; one's a combination scallop/dragger. We just finished the construction of the *Frances Dawn* and the *Joey D*. We do a lot of stability work, so since Thanksgiving, I've inclined seven boats, including the passenger vessel *Kramer* and a tug, *Lucinda Smith*, you know, and I've inclined everything from a 45-foot (indiscernible) boat up to a 95-foot scalloper in that period of time.

So, you know, we go onboard; if there are no drawings, the boat -- you know, we try to locate drawings. If there are no drawings, then we'll typically take measurements -- have the boat hauled, take measurements, produce a set of lines, tank arrangements, wind profile, and then perform the inclining experiment and stability analysis.

The software we use currently is GHS, which is the standard in the industry; the Coast Guard uses it themselves. This boat was not done with that; we had just started in business and hadn't

purchased that program yet, so it was an in-house program that we did the stability with.

And then I also worked from 2000 -- yeah, from -- from 1991 until about 5 years ago as a tonnage admeasurer for ABS, which put me on a lot of fishing boats as well as other types of boats.

We do major conversions; we're involved in the conversions of the boats up in Colasta (ph.), the two big midwater trawlers. We took them -- they were originally 110-footers -- sponsoned them, widened them. Yeah, so we pretty much do anything that is required in the industry.

Q. Awesome, thanks. Moving on to another question, can you briefly explain your experience working with conversions of Gulf shrimpers, kind of similar to the *Emmy Rose*? Did you have any other experience with a vessel that had come up from the Gulf that was designed as a shrimper that got converted to a ground fisher and just, yeah, anything along those lines?

A. We've got a significant amount of -- oh, not damage, a significant amount of experience with Gulf Coast boats that come up to the East Coast and are converted for trawling and scalloping as well as midwater boats. Again, I'd have to go back through my files, but there are numerous boats, so we have a lot of experience with that -- basically, as that fishery went through a depression or whatever, big downturn, the boats became really inexpensive, and that's why you see so many of them up here.

Q. If you had to guess off the top of your head like how many

incline experiment/stability analysis you had to do for those -- some of those boats that came up from the Gulf, how many would you just say off the top of your head?

A. Off the top of my head, I'm just starting to think, you know, 30, 40.

Q. Okay.

A. So I've got -- I mean, you know, we've got the boats that kind of converted over and made into -- it's called the *Seafarer* now, which was originally the *Athena*; the *Hera* -- just on and on and on. I mean, the *Southern Crusader*; I think Blue Harvest still has one of the boats that's a trawler, the *Midnight Sun* -- so, again, these are just boats that, bang-bang-bang, pop into my head that are local, so --

Q. Great. The next question, just kind of background, just in your experience, is there usually stability concerns with fishing vessels in general?

A. Oh, absolutely. I mean, they -- it's just the concerns -- not concerns, but, I mean, basically we just try to, you know -- the concern is the lack of oversight, so there's no -- typically, we'll see a boat after the fact. It's unusual to be involved at the beginning of the process when they've -- more and more, we're seeing it, but typically, we'll just get the phone call, well, I have done all this work to the boat, and my insurance company is telling me I need to have a stability test.

Q. Okay. So they -- yeah, so you would -- essentially, that

would be the genesis of your involvement, if it wasn't new construction, is somebody would call you and say, hey, I need this because I can't get insured unless I have it.

A. Typically, that's -- it's -- you know, it has been the insurance companies to some extent that have driven this in this area, so -- you know, again, so for this side, the *Emmy Rose/Sasha Lee*, we're not involved in the conversion of the boat up until the stability test.

Q. Okay.

A. That was pretty standard operating practice for Carlos Rafael. I mean, he would not -- we would not get a call, I'm going to make these changes. We would get the call, I've made these changes, and I need a stability test.

Q. Yeah. Next question is just, with commercial fishing vessels, in your experience, any watertight integrity issues?

A. There were -- you know, it really comes down to a maintenance issue with the boat. How well are they being -- you know, are the watertight closures being maintained? So it's -- that's far more of the surveyors, the guys that -- safety inspection and the insurance surveys. But you do see dogs that don't -- that are hard to work, gaskets that are worn out, that kind of -- you do see those issues.

Q. Okay. Next question is, when you're doing your analysis, how do you -- actually, one second.

CDR [redacted] This is Commander [redacted] (indiscernible). Who

just checked in?

MR. YOUNG: Hey, this is Brian Young. I'm sorry I'm late. This is Brian Young with the NTSB.

CDR [redacted] All right, thanks, Brian. We've got the whole team here except for Mr. Braden and Mr. [redacted] We're talking right now with Mr. Norton, so I'm about halfway through the background questions.

BY CDR [redacted]

Q. Mr. Norton, next question is, when you're doing your stability analysis, how do you determine free surface effect? How do you make those calculations? What things are you considering when you're doing that?

A. We have -- it's the program, GHS, is calculating free surface. So free running, free surface, it calculates real time free surface as the boat heels through, it frames (ph.) the stability.

Q. Okay. And then different things, like do you consider is fish in the fish holds, melting ice turning into water, that type of stuff?

A. The fish in the fish hold, you know, again, the -- it's kept in pens. The ice is melting and being pumped overboard, so it is not part of the intact stability analysis to say, if this compartment had some free surface -- we look at the free surface of the tanks, you know. There are -- once you freed that, once you get into that situation, obviously it has a real implication

for the stability of the boat.
Q. Okay. Yeah, no, a hundred percent agreeing, just --
A. If a compartment has got -- whether intentionally or non-intentionally has been partially flooded, you know, the thing that comes to my mind is the champagne (ph.) system that some of these boats have been using where they partially flood the fish hold and then have an (indiscernible) system that sprays a chilled mist onto it. We've looked at a couple of those and recommended that they didn't do it, but I don't believe that that was the case with this boat.
Q. No, no, it wasn't equipped with that type of system. But just, when you guys are you doing your analysis, you said obviously typical intact -- not intact stability, but inclining, you just assume the tanks are, whatever, 75 percent full, and then --
A. Oh, no, we sound every --
Q. You do 100 percent?
A. -- all of the equipment.
Q. Okay.
A. Well, no, we -- we do -- we know what -- you know, we follow the ASTM standard, and --
Q. Okay.
A. -- with the fishing boats, there's no way, typically, to sound the water tank, and we either tell them the water tank -- we've been -- lately been, just because we can't -- we've been

doing procedures -- sending procedures ahead of time so the owners -- you know, saying the water tank either has to be completely full, blown out the vents, or it has to be completely empty.

Typically, fishing boats, you have sounding tubes in the engine room, and they run them down. They never -- you know, the sounding tubes are typically down from the deck. They don't want to fill the tanks completely, so we just -- we sound the tanks, and that's part of the -- and we take that into consideration in the inclining when we write it up. Free surface is part of -- you know, if there's a free surface, we -- it's part of the calculations.

Q. Okay. Understood.

A. Typically -- again, typically, you know, when we see the boats, they're typically in operating conditions, full -- not completely full, but 80 percent full tanks, water tank full, whatever --

(Simultaneous speaking.)

Q. Great. And that --

A. Go ahead.

Q. Yeah, no no no, yeah, lube oil, whatever, then you guys record that prior to conducting or making that calculation in the actual incline experiment.

A. We conduct our inclining experiments as if you guys were there observing it. We follow the exact same standards. There are three (indiscernible). We do our best to get 6 inches of

deflection. We make seven weight movements; three port, three starboard, and we zero the boat -- you know, we follow the ASTM standards.

Q. Okay. And then what do you guys use for weight?

A. Typically, we -- well, we use any number of things. There are the smaller boats, we typically use 55-gallon barrels full of salt-water, so basically we can -- something we can move quickly, so we'll fill the barrel and then dump the barrel, move it to the other side of the boat, and fill the barrel; that kind of thing. The bigger boats, typically we have one of the local companies show up -- crane companies show up with a certified cement block, about a 5,000-pound block.

Q. Roger. All right. Next question I had is just your experience doing stability analysis for fishing vessels and outriggers. How do you guys take the outriggers into consideration? What are some challenges or issues with fishing vessels and outriggers?

A. The challenge with the outrigger is just trying to figure out what they are, so -- and what we do with them is we'll -- you know, if they're -- we'll try and figure out what material -- so you've been on enough boats, you know that they like the light poles, you know, two light poles. So we know what those weigh, and they typically run between 30 and 50 feet, and we just -- you know.

And then, what we do is, as a weight -- in the condition feet

(ph.), we will remove the outrigger at its raised position and then add it back in, in the lower position, to account for the weight of it. What we did on this boat, I couldn't begin to tell you.

Q. No worries.

A. When I'm looking at the pictures, and it looks like we used cement blocks (indiscernible) this boat.

Q. For the outriggers?

A. No, to do -- for inclining --

Q. Oh, okay, for the incline -- to shift the weight, yeah. Okay. Roger. Next question --

(Simultaneous speaking.)

A. -- looked like -- she looks like she had light poles for outriggers.

Q. Okay.

A. Which is, you know, it's something that -- it sort of has migrated from the Gulf because, I mean, obviously the outriggers in the shrimping fleet are used for the nets, and I try to explain to the guys, you know, outriggers do not add to the stability of a fishing boat; they detract from the stability of a fishing boat. What they do is they -- because they're away (ph.) aloft, they are ride controlled; they're like a shock absorber. So you've got the outrigger lowered and the bird in the water, and it's -- the sole purpose is to slow the roll of the boat, to make the boat more comfortable and more workable.

Q. Okay. Roger. Thanks for that. Next question is, how do you guys calculate the fish doors or changes in the fish doors, just the weight at all -- just what are your thoughts and procedures for fish doors?

A. For doors?

Q. For the trawl -- yeah, trawl doors.

A. They're just, they're taken into account in the weight of the boat, and we typically don't -- we don't take the gear off the boat. We look at the boat as if the gear is sitting on the boat, not off the boat, because obviously, when the boat -- when the gear is in the water, it's not on the boat, so it's not affecting the intact stability of the boat. So all of our conditions are with -- are run with the nets on the net reel and the doors tucked into their pockets.

Q. Okay.

A. They're on the boat.

Q. And then, any concerns if, you know, new doors were added or lighter doors were added, heavier doors, that type of --

A. Fishing gear is taken into account in the light ship of the boat, so we --

(Simultaneous speaking.)

Q. Yeah.

A. -- and, you know, again, obviously our -- we have evolved in our thinking over the last however many years it's been, and basically we put a caveat in there that any changes to the gear

void the stability booklet. That said, the gear is constantly changing on these boats.

Q. Um-hum.

A. And what we've seen over the years is, as it's evolved, it's gotten -- it's not gotten lighter; it's gotten heavier and heavier. That is the thing that we've -- you know, they're putting a fairly good amount of weight on the stern of these boats, and with regard to these Gulf Coast shrimpers, they're not designed for that.

Q. Yeah.

A. They evolved for a different fishery. They don't have a lot of buoyancy if you look at the underbody, the backend. They weren't designed to carry weight back there.

Q. Yep. All right, moving on to your experience with the *Sasha Lee/Emmy Rose*. Tell us about your experience with that vessel.

A. Again, we inclined -- you know, based on our records; I have no -- I don't remember doing it. You know, this was, like I said, what was it, March of 2002?

Q. Yeah.

A. So, I mean, I don't remember it being -- and, again, I don't really remember the tasks. Like, you know, it was a standard -- I believe both [redacted] and I were there. I'm looking at a picture of Carlos now; he was there. And we did a standard test; ASTM standard, three (indiscernible), and then did a standard -- you do a standard operating condition and compare the boat to the current

intact stability criteria.

I mean, there's no other way we can do it. I mean, we have to get the boat -- we typically either -- if the boat does not pass the criteria, we either come up with operating restrictions or a ballasting scheme to get it to pass the operating -- you know, to the criteria in the FR. And every -- and this boat, at the time -- you know, again, we're looking at a snapshot 18½ years ago -- passed that criteria.

Q. Yep. And where did you guys conduct the survey?

A. Right at the dock. What did they used to call that? Carlos Rafael's Shipyard, right there in New Bedford.

Q. In New Bedford, yep. And I think you already said this, but --

(Simultaneous speaking.)

A. All of Carlos' boats are -- well, used to be lined up, I guess. What did they say? I was talking to one of the guys from Blue Harvest, they had evacuation day; they had to move all of his boats out of there.

(Simultaneous speaking.)

Q. Sorry, next question. I think you already answered this, but who requested the survey?

A. Carlos.

Q. Yeah. Okay. And then next is, any unique characteristics of design of the vessel or things of note? If you can recall.

A. Boat is a standard, southern-built shrimper that has been

converted over. What they do when they bring them up here is they will build up -- you know, if you look at the photos of the boat, they built up the sides, they built up the bulwarks, increasing the wind-heel profile of the boat. A lot of times, they'll move the winches. It appears that that was not the case; the winches are on the main deck, which that really does affect the stability of the boat when they move all that weight up.

And these boats, they -- when they're in the Gulf, they're just -- they have a bulwark that runs from bow to stern, and what the guys up here do is they build that bulwark up. So, if you look at the *Sasha Lee* and *Emmy Rose*, the space -- the walk space between the house and the side is enclosed to the deck house. But all of these are standard features you would see on a boat that was converted over. So the outrigger's sitting on the corner of the house, the extend -- you know, it's got a little bit more upper deck. And the boat, when we did it, it had a single vanging boom on it.

Q. And then, the best that you can recall, do you remember the layout? So like where the staterooms were, the galley, engine room, machinery space, anything like that?

A. Oh, absolutely. Standard Gulf Coast shrimper, so you walk in and you're into the house, and you've got -- you'll have staterooms ahead. Typically the companion way down to the engine room is right there almost as soon as you walk into the house, and then you'll walk forward and you'll be -- just aft of the

wheelhouse, you'll have the galley/mess area; there'll be a galley typically on the starboard side, the mess on the port side. Then you'll step up, maybe 3 feet, and you're in the wheelhouse. You've got some small windows looking aft, and there's a radius front (ph.) wheelhouse.

Typically, some of these boats, they'll have a store -- you know, you'll have a forepeak water tank. You may or may not have water -- I don't know; again, I'm not looking at the drawings of this boat. You may or may not have water underneath the storeroom. Typically, forward of the engine room there's a storeroom, and there may or may not be a water tank under that.

These boats have wing tanks, so they have full-height -- typically, the shrimpers have full-height tanks, fuel tanks, in the engine rooms, so port/starboard of the engine, you know. It varies. I'm not sure what the distance between those. Then you'll get back into the fish hold (indiscernible) and -- just give me a second, I can open up the boat's drawings.

Q. Yeah.

A. So, you know, you have a fish hold, and you may -- these boats -- this boat does not appear to have tanks back aft, but -- and it does look like we have a water tank under there, so -- and some of these boats have fuel tanks back aft; some of them don't. But yeah, pretty standard (indiscernible) I recall. I don't know who built her. Do we know what shipyard built her?

Q. Yeah, the -- it was the Young Shipyard in New Iberia.

A. Oh.
Q. They don't exist anymore, right?
A. That is --
(Simultaneous speaking.)
A. -- if they don't exist, they don't have any drawings, you know. They lost --
Q. Yeah.
A. -- them all in the hurricane, trying to find drawings for any of these boats.
Q. Yeah. And then next question, you kind of already mentioned this, but any issues with conversion of the vessels, Gulf shrimpers to ground fishers -- or scallopers?
A. The difference --
(Simultaneous speaking.)
A. -- shrimp boat and a North Sea trawler is really the fo'c'sle deck, so -- and obviously our fishery has evolved from the Eastern Rigs (ph.) boats that there're very few of left, but the shrimpers typically have really good initial stability. They got great GM. They're very stiff. What they don't have is a tremendous amount of reserve buoyancy, so as a standard North Sea trawler starts to roll through its range of stability, the fo'c'sle deck comes into play. And so they typically -- the raised fo'c'sle deck have a greater range of stability.
And another thing, depending on the weight of the gear that's carried on the boat -- I mean, again, the shrimpers, they weren't

designed to carry nets on their sterns like these -- you know, with the net reels and all that. So, sometimes, we end up seeing that we have some trim issues. And, again, this boat didn't at the time, so -- but it's not unusual.

Some of these boats that we've looked at for Kyle Osis (ph.), quite a few of his boats we ended up adding ballast under that -- in that forward compartment ahead of the engine room to try and offset the trim -- the stern trim of the boats. Because, again, as you put the stern down and you roll the boat, obviously you start to get the -- you put the deck underwater quick -- more quickly if the boat has stern trim. And, once you get the deck underwater, your water plane goes away and your stability goes away.

Q. Yep. All right, I'm --

A. You know, those are the concerns that we typically -- and, again, we also have a fleet of old boats. They're being -- my opinion, we got a fleet of old boats that are being asked to do things that they were never intended to do.

Q. Great. Thank you. The next question might be hard to recall, but your general -- the general, overall condition of the vessel at the time you guys did the survey.

A. Well, (indiscernible) the pictures, the boat was still under construction, so there was some debris on it, but pretty much in good shape. I believe he had just got the boat. It looks like he's -- so overall condition 18, 19 years ago was pretty good.

Q. Okay. Next question, you kind of mentioned this, but fixed ballasts, I believe -- did this vessel have any fixed ballasts on it, are you aware?
A. Not that I am aware of.
Q. Okay.
A. I don't -- you know, we didn't recommend ballast.
Q. Okay.
A. From our records, you know, there's no indication that there was any ballast on the boat.
Q. And next question I had was just weight creep, so just a comment here, so weight creep, just changes. And I know you've looked at a couple pictures and everything since this casualty. Do you see any weight creep or changes since you guys conducted that survey that -- you know, any comments or anything on that?
A. (Indiscernible) see, comparing the boat to when it happened that the net reels have -- the diameter has been increased pretty dramatically, and she's gotten a second boom. Those are the things that I can see just from the pictures.
Q. Yeah.
A. I mean, if you look at the pictures, it looks like they may have added as much as 4 feet to the diameter, which means they're carrying bigger gear. Again, I don't -- just looking at the photographs, that jumps out at us.
Q. Yep.
A. I couldn't tell you when those changes were made to the boat.

Q. Yep. Next question is -- this gets kind of into your procedures and your operating instructions for the *Sasha Lee/Emmy Rose*. So you said your operating instructions for the stability analysis mandates that the outriggers be down at all times when outside the harbor. Can you just explain why that was recommended or mandated?

A. Typically, they don't pass stability if they're up, so it's a pretty standard -- pretty standard that we put that in our stability booklets. You get a lot of weight hanging up in the air, so it's pretty standard. And, again, you're asking -- I haven't really reviewed what we did back then. But no, you'll find that most of our stability booklets will say that they've got to lower those things. You've got something 30, 40 feet in the air that weighs -- you know, so you take the center of gravity, above the baseline -- that's 40 feet above the baseline of the boat that weighs about a ton and a half, you know.

Q. Yeah.

A. The moment (ph.) of those things. Again, they are -- again, it's an (indiscernible) it's just -- they're ride controlled. They do not enhance the stability of the boat. They are just there as shock absorbers. They just make the boat roll less when they're deployed.

Q. Okay. Next question, the stability -- this is from your stability analysis. The stability analysis mandates cross connections be closed at all times while underway. How does this

apply to fuel transfers between tanks?
A. Well, typically, that's -- you know, we do boilerplate -- I think you'll see every stability booklet you ever look at will say. So how does it -- you know, they have got to -- how are -- it depends on, again, how are they -- so they're drawing -- you know, typically, these boats don't have a day tank, so they're drawing fuel off of one tank.
And are they -- how are they -- so are they drawing and then putting in -- you know, there are returns, so they're not using -- all the fuel that pulls into the engine does not -- it doesn't get used; it gets returned. So, sometimes, they do have to open those to -- even if they end up getting heel of the boat, you know. But, typically, they'll pull off the one tank and return to the other tank.
These guys, they use their tanks to deal with heel a lot. You'll see a lot of times these boats will run with one tank at a different level than the other tank. I guess you guys have --
(Simultaneous speaking.)
Q. Yeah.
A. -- with the West Coast boats. Fishing boats always have something off center that's creating a heel. It's a constant thing; it's a constant battle.
Q. Roger. The next question, again, with the stability analysis, you provide a number of seasonal scenarios under which various conditions of trim and load -- so one, you use two

variables, like a 100-percent catch and a 40-percent catch. Can you talk about why you use those two variables?

A. We use a standard -- I believe we adopted the ABS, so basically, we'll say our operating conditions will be ready for sea: full of fuel, full of water, with a full shot of ice in the hold. Okay. Then you get out, and we'll -- some boats, we'll do -- I don't -- again, I'm not looking at this boat, but we'll do an arrival at the grounds, so we've burned off 40 -- we've burned off 20 percent fuel; and we'll do a half-trip, so half consumables, half load; and then we'll do depart grounds, and she may -- again, it's just an operational thing.

We're trying to get her to run her through a full set of consumables, so bring her in with 10 or 20 percent of her fuel and water and bring her in with a full catch and bring her in with a bad trip. So, typically, you'll find these boats are worse if they've had a bad trip. So when they -- they're designed -- their fuel and water is balanced, and they're designed to replace that with catch, so --

Q. Yeah.

A. So what you're seeing there, then you add -- so you take that standard set, so it should be arrival with the -- you know, ready for sea, arrival at grounds, half trip, depart grounds, and then arrival in port. And then we will mirror those with winter ice.

Q. Okay. So, for seasonal, that accounts for some winter season, spring, summer, different weather conditions.

A. November 15th to April 15th. Unless you're operating below Cape Cod, you have to look at winter ice. But we don't look at the full shot of it. We're low enough, latitude-wise -- longitude, latitude? Anyway, we're below, so we look at half -- you know, we look at half the winter ice. Again, this boat probably has 5 tons of winter ice on it, and I think you'll see in the operating instructions that we say all efforts must be made to prevent it from happening.

Q. Yep. All right, next question. So, under righting arm characteristics, the angle to downflood is 59 degrees at 100 percent catch and 67 degrees at 40 percent catch. Just asking, what's your opinion on what would provide an angle of sudden downflooding in this situation where the weather conditions weren't too bad?

A. What would -- I mean, again, it would -- I mean, I'm not looking at the boat. You know, we just use the standard, so for fishing boats, it's either 50 or 60 degrees.

Q. Yeah.

A. You know, and this boat, unless somebody left the cabin door open, it's the engine room air intake, which is on the centerline of the boat, 4 or 5 feet up from the deck. So it would take the boat -- to get water into the engine room would take a significant roll to get that. So pretty much everything on the boat -- these boats is on the centerline, so the air intake is on centerline, the fish hold (indiscernible) is on the centerline; you'd have to

lay the boat on its side.
Q. Yep. No, totally understand. All right, I have one more question for you, and then I'll --
(Simultaneous speaking.)
A. Well, unless there was a -- you know, again, the only other option would be if -- again, and I don't imagine that there -- you know, if a door was open, it would just -- I have no idea what happened, but still, you're talking about a significant roll to get water ingressing into one of these boats.
Q. Yep. Thank you. I had -- you kind of already answered the question, but I had one more question for you. Just wanted to get your thoughts on this sinking, this incident in general, just total hypothetical, but just your thoughts in general.
A. Well, I mean, again, it comes down to, I really don't have any firsthand knowledge, but do we have any idea what the boat had on it for fish? I mean, it's -- my -- our thoughts are, was she overloaded? We know she -- from the photographs that she was carrying gear, and what effect would it have to have that heavier gear on her stern? What did she have in her hold? And then what happened?
So there's -- you've got some scenario with the condition of the boat, and then -- and these boats run all the time on -- you know, so something happened. There was some event that took place. Did something happen that they did, without realizing it, start to flood the boat? You know, but without knowing it was

happening. Did they end up with some free surface? That's the only -- short of something -- the boat, that's all we can think would've happened.

So you get the boat -- you got the heavier gear on the boat, you've reduced the stability slightly, and then you lose the rudder seal or you lose the shaft seal, and the boat starts to slowly take on water and, you know, you've got a free -- now you throw a free surface into it. Does that make sense?

Q. Okay. It does, yeah, no, 100 percent. So totally understand.

A. Boats don't just disappear without something happening. There was a catastrophic event that caused this boat to capsize, and --

Q. Is that your opinion? You think it capsized?

A. What's that?

Q. You just mentioned the word capsize. Is that your opinion? You think it capsized?

A. Oh, yeah, I absolutely think this boat capsized. Boats don't disappear without a mayday and with records (ph.) and a life raft if they didn't flip over.

Q. Um-hum.

A. I mean, I -- you know, and what led up to that is the question. I mean, again, unless -- and I think everybody I've talked to said that (indiscernible) did not happen, but unless she was rundown, something caused her to flip.

CDR [redacted]: Yep. No, he -- that concludes the formal questions that I had for you. I just wanted to thank you for your time and everything. I also wanted to open it up to the board if they had any other follow-on questions, so just working through the list here, I'll start with [redacted] if she had anything additional.

[redacted], the floor is yours.

CWO [redacted]: Thank you, Commander. I actually don't have any questions.

CDR [redacted]: Okay. Roger that.

Moving on to [redacted], do you have anything additional? Over.

MR. [redacted]: No, sir. I have no questions at this time.

CDR [redacted]: Thank you.

Moving on to Mr. Young, did you have any additional questions? Over.

MR. YOUNG: Yes. Thanks, Commander.

BY MR. YOUNG:

Q. Thank you, Mr. Norton, for your time today. I'm sorry I was late showing up; I was on another call. (Indiscernible) got the important part and a lot of knowledge from a naval architect point of view on these types of vessels, and one of the things you were talking a lot about were the outriggers and how they are used down in the shrimping industry. Is there any reason or any use for them up here other than to give a better ride?

A. It's -- again, it's ride. The sole reason that these

outriggers -- these boats have adopted this, and it slowly happened over time, is it gives the boat a much nicer ride. It slows the roll down. And, again, these boats are -- this type of boat, these Gulf Coasters, are very flat-bottom, hard-chine boats, so it has good initial stability. So it does -- these boats would give you a snappy ride. They want to come back from any outside force inducing a roll, so that's -- the outriggers are to make the boat workable, and it's gotten to the point where it's so ingrained in these guys, they just -- everybody's got them.

Now, we've started to use a Canadian invention called a wing stabilizer, which is -- the new boats have all got them where we get rid of the outriggers and we have these 10-by-4 solid steel wings that are attached to the chine of the boat and -- as a ride control, but the weight is significantly lower on the boat, obviously; it's hanging off the chine, so they're (indiscernible). And they -- some of the guys seem to be adopting them.

Q. They would eliminate the use of the above-structure units and put these stabilizers down below instead?

A. There is structure, support structure, for them. They raise and lower. Obviously, they need to be up when they're in port, but yes. The rigging is significantly less, and the weight is concentrated below the deck; the significant weight of those is below the deck --

Q. Right, right.

A. -- above the chine.

Q. Yep.
A. But, again, I mean, I used to work for Jack Gilbert (ph.), who designed -- who was, at the time, was probably the foremost fishing vessel designer in the country, and he hated outriggers. Hated them.
Q. And, if the boat was being used as a shrimp boat, would those outriggers actually be used to --
A. They would be --
Q. -- control their nets?
A. Correct. If you look at a picture of a shrimper rigged to go shrimping, the nets are attached to the tip of the outriggers.
Q. Okay.
A. They literally trawl with them. They don't -- the nets are not pulled off the back of the boat.
Q. Okay. Understood. And, in your vast experience looking at several different fishing boats, if you think about the lazarette area, seems to be, with other fishing boats that I have dealt with have a hatchback on the stern, and a lot of fishermen, if you will, and people we've talked to have told us that a lot of these hatch covers don't have any securing mechanisms. Is that something that you have seen where the hatch covers are just gravity-held onto the top of the (indiscernible)?
A. I've seen everything from dogged down hatch and a raised hatch to, yeah, you'll see -- typically, you'll see them in a raised hatch situation, but you can see just an aluminum cover or

a steel cover sitting on there.
Q. And you've seen some that don't even have any closing devices, right?
A. Yeah. I mean, there's no -- it's not unusual to see a situation where there's -- it's not a dogged hatch; it's not a dogged, watertight hatch.
Q. Understood.
A. I don't know on this boat. Don't recall --
Q. That's something we're trying to establish, to see if that is a possibility, like you're talking about, with additional weight on the stern, you know, it --
(Simultaneous speaking.)
A. I've got --
Q. -- a possibility.
A. -- of the stern, but I don't see the hatch, so -- she may have had a flush hatch. Sometimes you'll see a flush hatch, you know, a Bomar or something, with a lock.
Q. Um-hum.
A. Like between the net reels. Sometimes you'll see something like that.
Q. Right.
A. There's no standard, that's for sure.
Q. Okay, okay.
(Pause.)
MR. YOUNG: Thank you. Those were the only two questions,

but thank you very much for a very informative discussion.

MR. NORTON: No problem.

CDR [redacted]: Great. Thank you, Mr. Young.

Moving on to Lieutenant [redacted], any questions?

LT [redacted]: Thank you, Commander.

BY LT [redacted]:

Q. Mr. Norton, you talked about fishermen and fishing vessels using their fuel levels in their wing tanks to kind of control a list. Is there a situation in which, if the day tank was running low and was then filled from the service -- or from the storage tank, is there a way or a point, if it were overfilled and -- is there a way that could create a stronger list to the starboard or whatever side that it's on?

A. Well, I mean, I do not believe this boat had a day tank, but certainly you could -- again, any situation where you (audio skip) careful about it (audio skip) list in the boat, so --

Q. And by the term day, I apologize, I mean more like a service and then a storage, so the one that's actually feeding the engine.

A. So, you know, you could, if you were not paying attention, pull all the fuel out of one tank by running the engine. So you're pulling fuel from one tank and typically putting it back into the other, so you could certainly induce a heel in the boat if you got the two tanks way out of sync with each other.

Q. Okay.

A. But, again, so you'll see, like I said, it's not unusual,

these boats will have multiple generators and a winch engine, they'll have an inherent heel, so you'll see -- you'll say, well, you're going (indiscernible), but we don't use that tank, we just keep it full to offset the heel, so --

Q. Roger.

A. And, again, it's part and parcel of these boats, of how they're loaded.

Q. Okay, thanks.

(Pause.)

LT [redacted]: Thank you. That was all -- the only question I had.

CDR [redacted]: All right. Thanks, Lieutenant [redacted].

Moving on to Mr. [redacted].

BY MR. [redacted]:

Q. Good afternoon, Mr. Norton. Thanks for the information. Just to follow-on to what [redacted] just was talking about, there has been implied with prior interviews that the vessel was almost up to the gunnels, I guess, on a fuel transfer, and it had -- on the way back to port, and combine that with, if you were not allowed to pump out or restrict the pump out of melting ice in the fish hold at --

A. I -- oh, sorry.

Q. Go ahead, no. You can probably see where I'm going, so --

A. Yeah, I mean, so you're basically -- if you got the boat heeled almost to the rail, it's not going to -- it's going to have

no range of stability in that direction; it's going to want to roll that way. And then, if you throw free surface into the mix, and you've got that fluid moving over, then you can certainly get the boat into trouble.

Q. It could -- so that would be, with a combination of the two, would be enough to obviously trim the boat, turtle or capsize the boat?

A. Again, hypothetically, it --

Q. In your opinion.

A. Yeah. I mean, if you got all that fuel on one side and then, depending on the amount of free surface you have in the fish hold, you know, it could -- and then you induce some type of outside factor, a wave or a gust of wind, the boat could certainly go. I mean, I don't have a way to analyze this boat quickly to say, well, if we put all the fuel on it and then threw some water in the fish hold -- but I'm sure that, when they get it down into MSC, they will take a look at that.

MR. [redacted]: Yeah. Thanks for your opinion.

MR. NORTON: No problem.

CDR [redacted]: Any additional question?

MR. [redacted]: That's all right.

CDR [redacted]: All right, Mr. Norton, this concludes the formal portion of the interview.

[redacted], if you want to stop recording, we will --

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	SINKING OF THE CFV *EMMY ROSE* WITH LOSS OF LIFE, OFF THE COAST OF PROVINCETOWN, MASSACHUSETTS, ON NOVEMBER 23, 2020 Interview of Garrett Norton
ACCIDENT NO.:	DCA21FM007
PLACE:	Via telephone
DATE:	January 6, 2021

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

[redacted]

Autumn Weslow
Transcriber