UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	*	
	*	
CAPSIZING/SINKING OF THE *GOLDEN*	*	
RAY IN THE BRUNSWICK RIVER,	*	Accident No.: DCA19FM048
GEORGIA, ON SEPTEMBER 8, 2019	*	
	*	

Interview of: JONATHAN TENNANT
Pilot

Tuesday,
September 10, 2019

APPEARANCES:

DAVID FLAHERTY, Marine Accident Investigator
National Transportation Safety Board

CARRIE BELL, Marine Accident Investigator
National Transportation Safety Board

LEE WILLETT, Investigator
United States Coast Guard

LES LEDET, Investigator
United States Coast Guard

MARC DeJESUS, Investigator
United States Coast Guard

LCDR [redacted], Investigator
United States Coast Guard

TOM BREMER, Maritime Administrator
Marshall Islands Administration

JIM MOSELEY, Attorney
(On behalf of the *Golden Ray* and P&I Club)

JOHN CAMERON, Advisor
Brunswick Harbor Pilots Association

DAVID SIPPLE, Attorney
(On behalf of slot charterers)

RYAN GILSENAN, Attorney
(On behalf of Mr. Tennant and the Brunswick Pilots)

I N D E X

I N T E R V I E W

MR. FLAHERTY: All right. My name is David Flaherty. I'm with the NTSB. And today is September 10th, 2019, and we're here to discuss the events surrounding the capsizing, sinking of the *Golden Ray*. Sir, if -- is it -- please state your name.

MR. TENNANT: Jonathan Tennant.

MR. FLAHERTY: Is it --

MR. TENNANT: T E N N A N T.

MR. FLAHERTY: Sir, is it okay if we record this interview for the investigation?

MR. TENNANT: Yes.

MR. FLAHERTY: All right. Sir, I'll start over here, if could please state your name and spell your last name.

MR. GILSENAN: Ryan Gilsenan, G I L S E N A N. Counsel for Captain Tennant and for the Brunswick Pilots Association.

MR. WILLETT: Lee Willett, with the U.S. Coast Guard. Last name is W I L L E T T.

MR. LEDET: Les Ledet, U.S. Coast Guard. Last name is L E D, as in David, E T.

MS. BELL: Carrie Bell, NTSB. Last name B E L L.

MR. DeJESUS: Marc DeJesus, U.S. Coast Guard. Last name D E J E S U S.

MR. BREMER: Tom Bremer, Republic of the Marshall Islands maritime administrator. Last name B R E M, as in Mike, E R.

MR. SIPPLE: David Sipple.

MR. FLAHERTY: If you could spell it, please.

MR. SIPPLE: Attorney, Slot Charters.

MR. FLAHERTY: Could you spell your last name, sir?

MR. SIPPLE: Yes. S I P, as in Paul, another P as in Paul, L E.

MR. FLAHERTY: Thank you, sir.

LCDR [redacted]: Lieutenant Commander [redacted]. Last name [redacted] U.S. Coast Guard.

MR. MOSELEY: Jim Moseley, Jr., Vessel PNI Club. Last name M O S E L E Y.

MR. CAMERON: John Cameron, advisor, Brunswick Pilots. C A M E R O N.

MR. FLAHERTY: Okay. Thank you. So, I'll turn it over to you for the initial questions.

INTERVIEW OF JONATHAN TENNANT

BY MR. LEDET:

Q. Good morning, Captain. Les Ledet with U.S. Coast Guard. What type of license do you hold?

A. I hold a full branch unlimited restriction state license from the state of Georgia.

Q. Okay. And you're licensed by the U.S. Coast Guard.

A. That's correct.

Q. And what license is that that you have?

A. It's a first class pilot endorsement for the Port of Brunswick.

Q. Okay. And you said you hold a state commission as well -- state license?
A. I hold a state license, and at the time of piloting this vessel I was operating on the state license as a foreign vessel.
Q. Okay. How long have you had your license?
A. I've been a state pilot license since the year 2000. I began my apprenticeship in 1998.
Q. Okay. Can you tell us a little bit about your background?
A. Beginning?
Q. Yes. Your --
A. Well, let's just say my first maritime career was at age 15. After building a boat for my Eagle Scout project got hired on onto a sailing ship in Charleston, and worked on a square rigger and then a schooner through high school, learning the ropes, and then attended United States Merchant Marine Academy, Class of '97. Of course, that's about one year sea time as a cadet. And probably 12 crossings and 19 countries visited before graduation. And then upon graduation, I sailed as an AB for a brief period of time before I could get a third mate job, sail the oceans third mate unlimited, for Maersk Lines, Limited. And I did that rather aggressively, so I could advance with the hopes of becoming a pilot somewhere.

When I came ashore, I interviewed with the Brunswick Bar Pilots, and was hired as an apprentice. And the apprenticeship in Georgia for the Port of Brunswick is a minimum of three years,

where you ride with other pilots to learn the task of piloting from those that do it, since you can't learn it from a book. And during that time, you pretty much become comfortable with any class of vessel under normal conditions.

And after the three-year period of time, there's an oral and written examination for each branch thereafter of licensure and -- which at the time there was, I believe, seven different levels of licensure. And so, they start you off small, with draft and length limits, and I spent numerous years on each branch of license in such -- still practicing on all class of vessels with other pilots, in addition to the vessels I was piloting on my own, in such time that I reached the full branch licensure, and so -- and I brought a copy of that license. So, that's it in a nutshell.

Q. Okay. Sure. Over a period of how long does it take for your apprenticeship that you served, from when you begin to when you get fully licensed, that you have all the licenses now?

A. Well, let's see. Fully licensed was --

Q. Is like a ten-year --

A. -- fully licensed, which means no restriction at all --

Q. Right. Yes.

A. -- was January of 2014.

Q. Okay.

A. But it would be interesting to note that the branch that preceded this one I was limited to, say, 750 feet in length and 11

meters in draft. And the majority of vessels -- and I was on that for years -- the majority of vessels calling our port don't exceed that. So, the -- and then the license prior to that one was, say, 650 feet long. I worked the peer rotation with all the other pilots. They would jump me if there -- a ship came up that was out of that parameter.

Q. Yeah.

A. And then I would still work the rotation, if that makes sense to you.

Q. Sure.

A. So, in Brunswick we essentially take -- we bring in a ship in a normal rotation, and we take her -- the same ship out.

Q. Okay.

A. And so, that's how that works.

UNIDENTIFIED SPEAKER: Okay. Thank you. So, just -- so you were on the *Golden Ray* when it came in?

MR. TENNANT: Correct.

UNIDENTIFIED SPEAKER: Okay.

MR. TENNANT: Correct.

BY MR. LEDET:

Q. [redacted]

[redacted]

Q. [redacted]

A. [redacted]

Q. -- [redacted]

[redacted]

Q. Right. Okay. The vessel the *Golden Ray*, had you previously piloted that vessel?

A. I can't say with certainty, but I don't believe I've had that one.

Q. This would have been your first trip.

A. Yeah.

Q. As far as you recall.

A. Not on a car carrier.

Q. No, no, but --

A. But on that --
Q. -- on the *Golden Ray*.
A. -- specific vessel.
Q. Yes.
A. Yeah.
Q. All right. Okay. Now, you -- I thought you had mentioned that you -- whatever your -- the way you're turned or schedules work, what you bring in you bring out. So --
A. That's correct.
Q. -- did you bring the *Golden Ray* in?
A. Yes.
Q. You did?
A. Uh-huh.
Q. How -- when did you bring her in?
A. It was -- I can refer to my notes here, but it was 1500 -- I had a 1500 boarding the prior day.
Q. Okay. To --
UNIDENTIFIED SPEAKER: So, on Saturday?
MR. TENNANT: Correct. Yes.
BY MR. LEDET:
Q. And where would you have boarded her?
A. We board vessels within one mile proximity of the STS buoy, which is our sea buoy.
Q. Okay. And she was bound for where, Captain?
A. Colonel's Island, berth one.

Q. And do you know what her function was going to be there? Was she going to load, unload? Do you --
A. I usually don't concern myself with cargo operations.
Q. Sure.
A. Whether they load or unload is irrelevant. If the ship wants to come in and she meets the parameters, where it's safe to do so, I bring her in.
Q. Right. What was her -- what was her situation when you boarded? Was she -- her draft, do you recall, coming in?
A. Yeah. There wasn't an appreciable draft change, as noted. She was similar on the outbound as she was on the inbound, on my best recollection. It's kind of difficult because the pilot card was lost on the ship, and that has that data.
Q. Right.
A. When everything flew off the bridge. So, we were pretty busy that day.
Q. Now, excuse me, we're talking inbound. Right?
A. On that Saturday.
Q. Oh. Okay.
A. We had a good bit of traffic.
Q. Yes.
A. I was set up with a -- what we call a conjunction move, meaning a vessel is departing Colonel's Island and it's going to meet me in the sound. And it's a tidal movement. I'm trying to think the best way to explain this, because there's -- if you even

need to know this information. But there was a -- there's a significant amount of coordination of passing other vessels on her inbound voyage. I boarded the vessel and had to wait until another outbound car carrier cleared the confines of the bar. Then I started in, met another large car carrier that was deep draft in a tidal movement, meaning she could only be there a specific point in time. So, once I passed that one then I came up and it was just a normal day, spun her around, backed her up a mile. I brought a chart, in case that helps you all in any way.

Q. Yes.

A. If I start speaking where you all aren't following me, just stop me.

UNIDENTIFIED SPEAKER: I'll just put this right here.

MR. TENNANT: Yeah.

UNIDENTIFIED SPEAKER: Oh, okay, that's great. That's easier.

UNIDENTIFIED SPEAKER: Yeah, we'll just stand it right here.

UNIDENTIFIED SPEAKER: Sure.

UNIDENTIFIED SPEAKER: Can you see that?

MR. TENNANT: Yeah. So, the STS buoy -- St. Simons sound buoys are sea buoys out of (indiscernible) 506 in here. So, this all began probably around 1345 or so. I left St. Simons pier. The pilot boat picked me up here, and drove me to meet the outbound car carrier, the *Honor*. The *Honor* is American flag car carrier. Had her many times. I relieve the pilot on that ship,

and I drive that ship out. That pilot goes home, because he's been up working. He's already done that turn around on the --

BY MR. LEDET:

Q. Do you know what time you left?

A. I've got notes right here. I think it's like 1145.

Q. Okay. Just (indiscernible).

A. 1145 is -- no, I'm sorry, 1345. I wrote 1345-ish, okay.

Q. Okay. That's fine.

A. So, I relieved the outbound pilot. There's another car ship behind him coming out. So, I drive the *Honor* out, make arrangements with my ship that's out there, the *Golden Ray*. I disembark my ship, board the *Golden Ray*, probably about a mile out from offshore, best guess. Because we have shoal water here. And pilot 4 is outbound, and on a tidal movement that has to be -- meet the outbound precisely. I went ahead and aligned myself with the channel to the north of STS, so that the outbound pilot could exit to the southeast. Then I entered in, came up, met the *Figueroa* outbound here. All is well. *Figueroa* is behind me. And I come up here, and then turn and align through the bridge. The tugboats would join me typically here. We'd come up to Colonel's Island turning area, the confluence of the Turtle River and South Brunswick River. Well, that's where with tug assistance, since we don't have docking pilots here -- that's one reason why there's so many levels of state license here and it takes so long to grasp the docking evolution. We maneuver the vessel, turn clockwise,

back up about a mile to berth number one, Colonel's Island, where we make fast the ship. And then my notes it says I departed around 1730 on Saturday. I went back home. Jumped in the car. Drove over here to St. Simons. And rested until it was time to sail. The captain's best estimate was sail around 0100, a lovely hour.

Q. All right.

A. And so then, set my alarm for midnight. Woke up over here. Drove back to Colonel's Island in a port car, leave it at the berth. Board the ship.

Q. Is that the *Golden Ray* you're talking about?

A. It's the *Golden Ray*.

Q. All right.

A. And I sail the ship. I'm watching Jamie Kavanaugh, the pilot outside --

Q. Talk about --

A. -- pilot 7. He's --

Q. He's cast off.

A. Yeah. Yeah. So, prior to casting off I want to know, okay, number one, I get my pilot orders. This is a -- yeah, another conjunction movement, meaning I have to time a meeting with an inbound vessel, just like I did on these other ones, because at Brunswick these are narrow channels. We just can't -- we don't -- we have one-way traffic here, because the channel is 500 feet wide offshore. They're 400 feet wide inshore. And number one, our job

is safety. And so we don't meet in narrow passages.

So, what we do is -- and this has been done since colonial times, with the pilots here -- St. Simons Sound has a lot of natural water. If you see all this white area, that's all navigable. And it's much deeper than the actual channel, okay. So, that's our safe meeting and passing zone. It's also emergency anchorages for us, if we needed that for visibility reduction or a casualty. So, this is our passing zone between Jekyll pier and, say, 15 and 16 out here, the first bar.

So, in my orders I get that I'm going to meet pilot 7 in the sound. So, before I start this movement I want to know that he's there and on time. And before he starts in, because the tides is with him -- flood tide -- he's got to make sure that I'm on time. Because he can't come up here and whoa, Nelly, and -- that would create a situation. Right. So, I confirm with -- up here that Jamie is on time. All is good. Wonderful weather. Light south wind, tide coming in. Great visibility.

Then I start my normal undocking routine, and start the evolution. I'm running with this. I don't know where --

UNIDENTIFIED SPEAKER: Yeah, keep going.

UNIDENTIFIED SPEAKER: Keep going.

UNIDENTIFIED SPEAKER: You're doing perfect. Go right ahead, man.

MR. TENNANT: So, that leaves us up here at Colonel's Island. Berth one -- I'm just going to stand, because it's easier. I'm

still sore, because, believe it or not, two days after a shipwreck -- I've always heard that about car wrecks, but a shipwreck you're still sore. So, up here I come to the ship -- of course, this is dark, you all. This is probably maybe 20, 30 minutes prior to -- say this is midnight 30.

UNIDENTIFIED SPEAKER: Was there a moon that night?

MR. TENNANT: I don't recall.

UNIDENTIFIED SPEAKER: All right.

MR. TENNANT: I don’t -- I'm thinking of where -- if I saw it. I mean, I didn't need it to do the job, you know.

UNIDENTIFIED SPEAKER: Sure.

UNIDENTIFIED SPEAKER: Okay.

MR. TENNANT: So, my normal routine. I remembered from the inbound one reason why the same pilot does the inbound and the outbound is that -- there's numerous reasons. One is logistics with the vehicles. But the other is that we've already established a working relationship with the master and the master pilot. Interaction is important. And so, when I joined the vessel I board by gangway, although I came early enough to board by ramp. Many times we board by the ramp, which takes about 20 or 30 minutes to raise up. So, if there's a conjunction I'll show up a little bit early because I don't want -- if there's miscommunication, they secure the gangway and the ramp is still down, now it's going to move -- make the other vessel late.

So, I join -- I get up to the wheelhouse, greet the master.

They were already there. Like, when I'm walking on board they're already calling the announcements through the ship, all hands to their stations. They see me walking up. Go to the bridge. Set up all my gear. Double-check -- do my normal preflight, is what it -- like they would do in the airline industry. Confirm my gyro headings and set up my gear, my PPU. I'm looking at, okay, is the tugboat coming to me down the river. I'm looking at the environmental conditions. Everything that a pilot would normally do. A lot of it now is just instinctual. It's not like a checklist that I'm going down, checking off.

So, the master and I have an MPX, is what we call it, master pilot exchange of information. And when there's very limited English sometimes that MPX gets abbreviated, because the -- you can overwhelm a foreigner that can't speak English well. But I give them the nuts and bolts of the job.

UNIDENTIFIED SPEAKER: Yeah. How would you rate the captain's English? In your opinion.

MR. TENNANT: It was a challenge. And it was -- and that's not -- that is a typical. You know, that's typical. And --

UNIDENTIFIED SPEAKER: All right. Let's -- before we ask any more questions, let's let you finish your whole story.

MR. TENNANT: Yeah.

UNIDENTIFIED SPEAKER: Yeah.

UNIDENTIFIED SPEAKER: And then if anybody has any -- I'll just take notes.

MR. TENNANT: Okay. Yeah. So, I don't want to get disjointed here.

UNIDENTIFIED SPEAKER: Yeah. Got you.

MR. TENNANT: You know, I haven't slept in a couple days.

UNIDENTIFIED SPEAKER: Yeah. Yeah. I understand.

MR. TENNANT: So, where was I at. I was sailing. Okay.

UNIDENTIFIED SPEAKER: You exchanged --

MR. TENNANT: So, we're doing the MPX. So what did we say, I certainly would be like captain, we've got the *Dorothy Moran*. She's going to make up on your transom and she's going to try to make up on your sunken bit on your transom. If not, we'll put our line on deck. It's up to the tug captain if he can get it. And with the bow thruster working, we're going to come off the berth. We got tide against us. We also are going to be meeting an inbound vessel in the sound, another car ship. I'd like to keep the bow thruster on standby until we're safely through the bridge. And I'd like to keep an anchor available for emergency for the transom. And usually at that point it's about all they can take.

And then I'll confirm what her deep draft is, which is a pertinent piece of information although it's -- albeit it's not a great concern, knowing that car ships don't change a tremendous amount regardless of their cargo ops. And knowing that I had at least half-time flood coming in. So, by the time I get on the bar where it's skinnier water, out here, I'm already going to have, you know, more water out there than I have at the time of sailing.

So, then we -- those normal procedures getting underway, the captain seemed like he was ready to go about ten minutes ahead of time. And I remembered on the inbound that the line that had a heck of a hard time with these big -- these larger ships, these new Panamax ships have heavier lines. So, it took a longer period of time to secure the ship.

So, I -- and knowing that the inbound pilot is riding flood tide, there's no reason -- and I'm bucking the tide coming out, there's no reason why I can't start dropping lines ten minutes early. So, it's not really early. It's just ten minutes before the posted time. Since the captain said the ship was ready for sea.

So, we start dropping okay, captain, let it go too long, head lines, two stern lines. We speak with our hands as pilots, because of the language barrier. So, once those are down -- is this too much detail?

UNIDENTIFIED SPEAKER: No. No.

MR. TENNANT: Once two and two, as we call it -- marine history two head lines, two springs, fore and aft, then I'm dropping the other lines. Forward, let go of the inshore headlines. Once they're being dropped and I'm -- I'm confident that they're actually going to make it on the ship and not screw up my bow thruster ability if I need it, captain, let go the last two stern lines. And so he's giving the orders -- we're on the starboard bridge wing of the ship, looking down the side of the

dock. This is your typical situation. We're not in the wheelhouse. And I'm observing that the orders that I'm giving are being followed, which is a big deal when there's a language barrier. Well, it's even a big deal on American ships. Because a lot of the times these guys have been (indiscernible).

Once those lines are clear, a lot of times the tugboat will say JT, your starting lines are clear. Okay. Captain, let go to your aftersprings. And once those aftersprings are let go, the big lines, and I do remember they were running across another fender -- I always wait until I know they're clear of that fender in the water, so that they're not taken into my propeller if I need to use it, or the tug, and then I cast off the forward springs. All right, Captain, let go of those forward springs. And they're right under us.

So, now we're casted off. Right. Okay. So, now I can work off the berth. So, I've got light, light south wind on the starboard bow. Tide coming in, not really a factor. Have the *Dorothy Moran* shape up and carry me off the berth. This is via handheld radio. I most likely would have come astern on the ship's engine, dead slow of stern, using the hand signals. The captain would then holler in to his people in the wheelhouse dead slow of stern. And so he's -- he'll repeat my commands and his crew is listening for that. Then with the bow thruster I'll thrust off, and just move the ship laterally off the berth. Once I'm sufficiently off the berth where I feel like I could come out

of there, even if I had a -- some type of failure, I'm further -- I'm far enough from the state dock that I won't hurt it and I have time to reengage the tugboat -- cast off the tug. And of course, stop the engine of the ship before casting off the tug, so that the tug's line falls in the water and doesn't hit the propeller. The tug's away. I'm coming ahead out of there.

So, then I proceed -- this is the South Brunswick River, and I proceed out of here. Somewhere in there I called Jamie, the inbound pilot 7 -- hey, Jamie, I'm outbound the South Brunswick River and he says something like I'm inside STS. Great, great status -- just normal. Inside meaning inshore of the STS buoy. So, now we're doing our timing. And so we monitor each other's progress. The ship handles as they normally do coming out. We primarily in Brunswick handle car ships, so I'd say probably 95 percent or more of our cargo -- our ships calling here are roll on roll off ships. So, although we all have handled bulk carriers -- no container ships here, but bulk carriers, break bulk ships, tankers, we all have experience on those vessels. Our heart of our business here and experience are ro ro vessels, which have a reputation at times for being -- for handling, or difficult due to the sail area. Okay. Poor sail area wasn't an issue on this night.

So, we -- I proceed out. I get to the bridge. I'm already full ahead, just normal. Captain, finish with the bow thruster. That's my typical mental threshold. A lot of times the captains

will wonder why I'll want the bow thruster standing by, since it's not effective at full ahead. But from the old days where we had the old Lanier Bridge, which was -- I don't know if you all remember, she was only about 250 feet wide of an opening, and 139 vertical. It's too late when you're down there in a casualty to bring about from start line, because all the bells and alarms are going off and the communications -- it's better just to keep it on, knowing that if we have a casualty once I get below 5 knots down in here I've got a little something in my pocket while I'm getting tugged. So, that's still something I carry on to this day, and hope I don't need it.

Once I clear this area here, I'm checking on the inbound's progress. Of course, I'm bucking the tide. I'm coming up on turn 24 onto Cedar Hammock. This is Cedar Hammock reach. It's about a mile and a half long. It's 400 feet wide. And that is our inner harbor skinny area, shallower area, and that's a sharper turn. So, I drop her to half a head. This is -- area is called -- known as Brunswick Point. Execute my turn as normal. Proceed down Cedar Hammock. At some point in here, have -- because you bleed off speed in a turn, it -- I reduce speed so that I have something up my pocket, so that if I've given her all the rudder she's got and she's not responsive that I can shoot the juice to her. And that wasn't necessary.

I executed the turn and increased the engine RPM as normal. Come up. Had to turn off of Cedar Hammock into Jekyll Island

Reach. Now I'm exiting from a shallower water area to a deeper -- naturally deeper water area. And we are looking really good for meeting the inbound ship in the appropriate area, in -- somewhere in the vicinity of St. Simons pier. I approach buoy 20 here, in the sound, and as normal there's a pronounced set towards the buoy on flood tide. And as is typical, I put her up a couple of degrees, or heading up into the current, to account for the set onto the buoy. So I wouldn't -- so, I'm trying to maintain my channel, keeping the center line. And so I do that.

And then I begin to execute my turn -- let's say this is about 1:35, 1:36 in the morning. Jamie at the same time is turning into the sound, and I'm observing him visually. We're very much terrestrial navigators. We're -- our eyes are out the window all over, using all available means of navigation, you know, to confirm that we're where we think we are.

I begin the turn into the sound, which I'm going from a more confined space to a more open space of water. And I start to execute my turn as normal, and the ship felt directionally unstable. Meaning when I started the turn, she wanted to keep turning. More so than I'd normally expect. Yes.

UNIDENTIFIED SPEAKER: You're turning to starboard?

MR. TENNANT: Correct. Correct. Thank you. So, I would initiate a turn typically with starboard ten. And so when I give an order starboard ten, the helmsman behind me repeats. I'm standing at the gyro repeater on center line of the ship. Okay.

Looking out the window at certain buoys and so forth, and the inbound. And when I give the order starboard ten, the helmsman behind me will say starboard ten in Korean or Filipino, and -- or say it in English, and I look at a rudder indicator up here and observe the rudder angle going over. To make sure it's going the right way -- its typical. Sometimes it gets wrong, and then we have to correct that, you know. At least the -- and so, if she's not responsive enough, she doesn't crack enough, then I may say starboard 20. And he'll do it. And then if she responds, midship may be my immediate next order.

She comes back to midship, and then that ship just took off. And so immediately I put a counter rudder on. That's what you do. So, counter rudder means I'm putting left rudder, as Americans might say, but in -- with a foreign vessel we say port rudder. So, port 20 or port 10, whatever it is, and ultimately it was hard to port in this case, meaning 35 degrees of rudder, to give counter rudder to slow down the rotation to starboard. And when I did that, it was like nothing I have ever experienced in 21 years here before with a car ship. And it happened so rapidly, that I was absolutely in disbelief. And the ship -- at some point in that turn, I realized that I didn't have a ship anymore. Something has happened. And I called Jamie on the radio and said something to the effect of I've lost her, watch out, go around. You know, which he was going to do anyway. And of course he's watching. I mean, we're into it. We meet each other all the

time. And when that ship -- when I used the counter rudder, at some point in there -- and remember, this is like a -- this is before a traumatic incident happened, okay. But -- and all this happened in the fraction of a second. All of a sudden, I'm -- the whole ship just does this. And I -- it's like I could not believe what's happening.

So, the whole ship starts sliding and I'm grabbing on -- there's a binnacle ship about this high, and then the gyro repeater here that's on a gimbal, right. It's my compass. And I'm standing there, and the thing just -- the ship just rolls. And I believe I said something to the captain like -- or, I know I eased the rudder thinking well, would less rudder -- we should come back. And we've had ships before that will go like this. Of course, they always come back, you know. They all have a different personality. But you feel that. This rascal -- I may have said something to the captain. I'd love to hear it one day. Is she coming back. Is this normal. What -- you know, like -- and of course, he's Korean. And that thing dove and she just went into the water. And it was just like a crash.

And of course, I reflexively -- I don't think my -- I had fully processed that I'm on my side. So, I still was looking at the inbound and still looking at driving the ship. But -- so I'm giving commands like -- because she was swinging to starboard, drop the port anchor. No, well, those people aren't there anymore. The radio is not working. The ship is blacked out. I'm

giving full of stern. You know, I instinctively am giving commands that a pilot would give, under crazy circumstances. But at the exact moment I was doing that, I'm not sure that I had the context that the rudder and propeller are already out of the water. Because it's like that. And all areas there's darkness, and alarms. The only thing that worked on that ship after the capsizing were alarms.

UNIDENTIFIED SPEAKER: Was what? I'm sorry.

MR. TENNANT: Alarms. And so many alarms that I'm shouting because I'm holding onto the railing and I climbed up on the gyro and wedged my feet into the floor and tried to hold on, as I -- my lifejacket had slid -- when everything flew across the bridge, and I felt all kinds of dirt and every -- some -- all kinds of gravel and everything hit me. Don't know what it was. Instinctually, I put on this lifejacket that I carry. And I always put it in the same spot all the time. I had my radio in it. Well, there's no -- I can't reach the ship's radio, because it's -- pretend like I'm on this -- this is -- I'm on the bulkhead. And you can't walk anywhere. You can't reach -- there's -- we couldn't sound the general alarm. We couldn't sound any -- it was helpless.

You can't touch a -- so, I grabbed the radio, Jamie, send me -- tell Moran I need the tugs as quickly as possible. Because I'm fearful that I'm going to sink in the deep channel. And I know I got to get to the sandbar, or everyone is going to die. What I know is Moran tugs are sitting up there at the bridge, and they

can only make so much speed. Jamie calls Moran, JT is in trouble, get him the tugs. I try to call Moran, and my transmissions won't get to them, apparently, because they weren't answering me. Because the ship is rolled to port, and my antenna -- it's just a little handheld. I can't -- it's not shooting through the hull of the ship. So -- but I heard Jamie say that the tugs are coming to you.

Then I'm like okay, well, I've got to -- I -- at one point I did a security call, you know, because that's instinctual. Okay, well, I'm going to ground, let's security call. So I get a security call, hey, I'm in -- on the ground near this buoy 19, St. Simons Sound. But then as I'm looking down under my feet, there's water on the bridge wing of the ship, in the sound. And so I don't know how long all this takes, when you go through a traumatic event, that's like a car wreck.

But my brain is processing what's happening, and I'm saying we're sinking. This is no longer a grounding. This is a lifesaving function. I'm no longer piloting. I can -- I got to shove this ship up on the sandbar. So, while the tugs are coming to me I get on the air and I say I need every small boat out here in the sector, I need -- so, I tried to call the local station. Then I remembered oh, no, Sector does radio watch at night. So, I just hail U.S. Coast Guard on my handheld and nothing else on the ship working. And Sector picks up. Sector Charleston, and I tell them whatever I told them -- get me everything out here you can

and I'm on a large car carrier. I didn't want them to think this was a little small boat capsized. No, no, we've got -- and I'm hollering back to the captain, Captain, how many souls on board, how many people.

And of course they're laying on the deck, and wedged in between radars and helm stations and -- the only reason I saw him is because I had -- I keep flashlights in the exact same spot every day. And so the captain -- it was many hollers over these alarms. Finally, I got out of him that 23 people on board. And then he started getting information like four people hurt in the engine room -- or four people in the engine room, two people -- the boatswain and the oiler have -- you know, the first reports from the field are always wrong. There was broken bones. There's people hurt in the accommodations. So, we're starting to try to gather this information to relay to the Coast Guard, as I'm perched on the gyro. But them I'm switching back from 16 to 12 on my handheld, I'm low power, because I want to conserve my battery. Hey, Moran, push on me, push on my transom, I -- make up somehow, whatever part of the ship you can, but do not touch the starboard side of the ship, which is the keel, because I'm fearful if you land on the starboard side that I'm going to go turtle. Like and then we're all dead.

So, Moran when they're up close to me could answer me. And they said something to the effect that JT, the company will not let me push on you until we get Coast Guard authorization. And

I'm like -- I said something to them to the effect that this vessel is in distress, and you are a tug. You need to render aid, push me to the sandbar. I can't do it. And then I switched over to 16, Sector Charleston, I need you to tell this tugboat that you -- that they're allowed to push on me. This is where the just bureaucracy and people worried about legal things versus saving lives. And so, Sector Charleston immediately -- and I don't know, I think the pilots on the back -- the pilots that were notified, because a pilot called me on my cell and he said tell me this is a bad dream, what I'm hearing, that you're -- is this -- are you really capsized in the sound. And I don't know what I said, but obviously I said yeah, yeah, we are, get everything -- roll everything. And so notify MSU, all that. So normally, we'll have a pilot shoreside, because we're still engaged in trying to drive the ship or mitigate loss. We'll have another pilot ashore call it in. And of course, I already notified the Coast Guard.

So, that's working. So, that helped, I think, because Sector cut through all that real quick. And I switched over to 12, and I said Moran, Sector -- they just said it on channel 16, VHF, that you have permission to push on the ship. That should be enough for you. And then one tug captain kind of hesitated, but the other one jumped right in and says JT, I'm on you. Tell me what you need. And I was like give me half power, pushing me in dead ahead. By then, the pilot boat -- little boats are -- I start seeing them all around, and I communicate to the little boat --

the pilot boat, pilot boat go in front of my ship and run until you're in, say, 30 feet of water. Because I need to somehow gauge how many ship lengths I need to show the ship ahead. Or thinking I could do that. But, when something like this happens there's not time to figure out the mathematics of, okay, I'm on a 70 incline, flashlight, okay, 70 degree heel. Okay. 70 degree heel, my draft is 31 feet, what is the beam of the ship and the depth.

So, I'm already aground on her bilge -- her port bilge keel, and the stack -- the engine room exhaust stack is like a foot above the water in the sound. And -- that's what the tugboat told me. So, I'm wondering -- I'm worried about downflooding through the stack and through all these air vents that are laying on their side. So, I get a distance from the pilot boat. But the ship isn't moving. And I pulled out -- the PPU slid to me, and I -- it was just the hand, which is an iPad, right, with an independent antenna system that was out on the port bridge wing. And it's showing me the vicinity where I'm at. This is the only thing that lights up in the bridge, right, other than the alarms. And I can see where I am. I'm near buoy 19. And in the tugboat, they said we have no movement on our GPS, JT, we don't think you're going to slide back in the channel. My greatest fear was flood tides. I still asked the captain let the port anchor out. I mean, I don't care, just get the anchor out. Because I wanted it to fetch up, not to mitigate the turn -- because we're already fetched up. I wanted -- didn't want her to drift back in the channel, because

the tide was still rising. Because then she'd roll more. The anchor never got out. So, the tug kept pushing and stabilized us.

Small -- at this point, this is a major rescue effort. I'm squawking to the Coasties, saying we need helos, we need MSRT teams here, we need MIST, we need guys with rappelling gear, we need people with cutting torches, this is bad. And at that time, we had DNR on scene and Sea Tow and every small boat in the area that could come out there. And the helo -- it seemed like very quick that the helo was there, which surprised me because we were always told it was about an hour for them to spin up and get to us.

And -- but I will tell you this, and warn you of this, in an effort just to be the honest guy I am, is that when you're going through something traumatic, the sense of time is different. And what -- as this was split-second, after the fact when it was we're going to lose people -- and this is like a bad dream. It's unfathomable this could happen. I thought I was on the gyro when I got off the ship. I thought I was on the gyro for like 10 or 15, 30 minutes. But people on the Coast Guard boat oh, no, you were up there for hours. You were up -- you were actually on the ship for hours, on the radio doing things.

So, the -- essentially, they got everybody they could off the ship except the four in the engine room and the master -- it leaves me and the master in the wheelhouse. The master was holding onto a fire hose which some wonderful able-bodied seaman

on the ship, this great crew, they rigged a fire hose on the starboard bridge wing because I kept hollering at these crewmen that were on the starboard bridge wing above me, right, with an open door, hey, guys, can you throw me a heaving line so I can rig a way to get out of here, so we can lower people down, a female cadet, I think she was, got thrown to one side. I thought her hand was busted. But they were able to get her in a lifejacket and tend to her.

And then it -- they lowered fire hoses through the wheelhouse from the starboard side, and went down by the helm station -- which is all behind me and the radars, tried to go up the port bridge wing door, which is below me, and let those people slide down these fire hoses to get to safety. And so, the Coast Guard RBM small boat it was coming in below me, and of course it's tearing its handrails off getting in there, which is fine, but they're -- it's just -- you know, when -- would expect they're going alongside a ship on top of a ship. And so, they're getting people off. And as -- and I'm just talking to them all. I have no -- I can't recollect everything I ever said.

And so, after all those people were out, eventually the helos were taking like six or nine people off the starboard side, where they were jammed up on the outside of the wheelhouse, up against accommodations. The helo crews were doing a great job running people out. We're trying to triage -- okay, well, who's hurt -- I'm asking the captain who is hurt where. There's just no good

information. Tugboats grab some people off the stern. I think it was the oiler and boatswain. And so, ultimately the captain and I are in there alone. And the rescue swimmer comes through the starboard door up above me, and I'm probably 40 feet away from him, and I asked him his name. He said it was Dave. He was a great guy.

I said Dave, this is the captain, get him out, you know. And so Dave was trying to figure out how to get to him, because you can't put the wench rope to the helicopter through the door, because it could chafe on the door, or whatever. So, the captain is refusing to leave the ship -- I will not leave my ship, I have four people in the engine room. In his broken as English that that he could give, and he was emphatic. And Dave is a cool customer. He's like -- he's asking if I'm injured and how to -- he's going to toss me a fire hose, see I can climb uphill to him.

And I said well, I want the captain to go first because he's older. And then the captain protests. He said well, captain, you -- best thing you can do for your crewmen is to leave this ship so you can show the Coast Guard on shore where your men are on this ship, because the Coast Guard they don't know your ship as well as you know your ship. That's a lot for him to try to take in, but I'm trying to give him some way to save face. They can't focus on your four men if they're still focused on you, get -- just leave.

And meantime, I'm trying to climb uphill because I'd prefer the helicopter ride than to take my chances sliding down this

thing. Because a bunch of tables and so forth had slid underneath me, and they were pointed legs up. So, it looked like a punji stick trap. So, if I slipped -- and so, essentially Dave says how are you doing, you can't do it. I'm like I can't climb up this wall with a fire hose that's slick. You know, we're sweating, it's hot, it's dark. I said I'm going to let gravity do it. I'm just going to slide down, Dave. I'll be fine. I'll get one of our boats to grab me. And so he could focus on the captain. Got the captain out while I was sliding down the fire hose to exit the wheelhouse.

And so I slide down the port bridge wing on it to the gyro repeater. And one thing that exacerbated the rescue effort on the bridge wing was there's a -- on the ends of both bridge wings, a lot of times there's a roof that's put there as a sunshade, and -- or to keep the rain off of you while you're maneuvering from the wing. And that kept the boats from being able to get the people. So, we had to exit from the side. So -- but I scurried out and RBM Coast Guard guys came up and they said just jump and bear hug me and I couldn't believe it but I did it. And they -- some big dude just picked me up like a toy and set me on the deck. In the meantime, the helo is taking the captain off. So, now at that point we think we only have the people in the engine room and maybe some people on deck, aft, near the tug boats.

And so when I departed -- before I put the PPU -- I put the PPU in my bag, it was waterproof, and I remember the heading on it

was 155. So, to give you some perspective on a heading of 155, if I were outbound on Plantation Creek range to meet the other ship that's a heading of 105. So, I'm -- you're talking 50 degrees more overrotated right here aground in this area here. So, she did move about a degree and a half. I was trying to ascertain is she just pivoting on one part of her being aground, but no, she's just good aground.

And then the list seemed to increase throughout the time I was there, and especially the time that I was on the small boats, as we were trying to pick up people and look -- we had a chief engineer under the port bridge wing. They saw him in the glass going into the water and the Coast Guard and the pile of boats, Sea Tow boats, were trying to figure out how can we get this guy out. Well, he ended up busting the glass and threw a messenger line out, and the Coasties put a heavier line up in there and then he was scared to come out and one of our guys in a Sea Tow boat finally got around and -- which was a pilot on the bow of a Sea Tow boat, and said get -- you're going to die if you don't get out of here. So, they -- the guy finally came out, and they took him off.

And then we -- I noted that the port airboxes were getting lower. And the tugs were reporting aft that they're hearing cargo -- more cargo breaking loose and falling. So, I assume that just more weight got on that port side. And we -- I did see some evidence of flame on the port bow, around a watertight door, which

typically is like a -- where they have paint lockers and everything. But, there's all black around a white bulkhead door. And the door was secured. One of our guys went to it to see if it said -- what it said on the door, so we could report it to the Coasties, what it was, and there was a hand wheel to an air vent that was above water by a foot and then by the time he backed away or so then I noticed that that yellow handle had gone underwater. So, she's still listing further.

So, that's kind of that in a nutshell. There's kind of like two sides of this thing. It's a -- it's pre-event and post-event. And because I'm so close to the horror of it, and the idea of losing all those people and the idea of environmental contamination and -- you know, I'm calling for -- like we got to get an oil boom out here now, let -- we can't have this in our marshes or on our beach, and everything that I've strived to protect was now in jeopardy, and it was a very helpless feeling because even though I'm used to giving commands and there -- I'm used to them being followed, and anything I could direct was going nowhere. It -- nothing -- you know, I was trying to control something that I had no control over. And then, you know, I'm sitting there with a med kit on me, hollering to the master do we have any bleeding in here, I've got a trauma kit. But I can't get to people, even if they're there. And that's the worst feeling in the world, is to not be able to render aid. So, my memory post-event is clearer, I believe, but the time is inaccurate.

UNIDENTIFIED SPEAKER: That's fine.

MR. TENNANT: I can't trust it. And then the time before is accurate, but could be jaded by the traumatic event.

UNIDENTIFIED SPEAKER: Sure.

MR. TENNANT: Because it's like it's pre and post. If that makes any sense.

UNIDENTIFIED SPEAKER: It does.

MR. TENNANT: Okay. So, listen, I'll sit back down.

UNIDENTIFIED SPEAKER: Well, thank you.

UNIDENTIFIED SPEAKER: Let's -- can we go --

UNIDENTIFIED SPEAKER: Yeah.

UNIDENTIFIED SPEAKER: Lee --

MR. WILLETT: Yeah.

UNIDENTIFIED SPEAKER: -- how -- we've been doing this for about an hour.

MR. WILLETT: Yeah. You want to take a break?

UNIDENTIFIED SPEAKER: Sure.

UNIDENTIFIED SPEAKER: Yeah, we -- maybe a five-minute break.

UNIDENTIFIED SPEAKER: So, all we want to do after this is some of us have some just additional questions.

(Off the record.)

(On the record.)

MR. FLAHERTY: Okay. We're back. Go ahead.

UNIDENTIFIED SPEAKER: So, we had one more person join us. Introduce himself and give you his last name.

MR. BARNES: Hello. My name is Dave Barnes. I am an investigating officer down at Sector Jacksonville.

MR. FLAHERTY: Could you spell your last name, please?

MR. BARNES: Barnes, B A R N E S.

MR. FLAHERTY: Thank you.

BY UNIDENTIFIED SPEAKER:

Q. All right. So, Mr. Tennant, thank you for your testimony so far, and your statements. And what I want to do is a few of us have some questions -- additional questions about the events. And just starting back, you arriving at the vessel, when you departed did you notice anything at all like a list to port or to starboard or anything to that effect?

A. No.

Q. Okay. So, the first turn -- you made, I guess you said, at this point. Correct?

A. Well --

Q. You're making multiple turns.

A. That's going to make -- this is the first large course change.

Q. Okay.

A. But my first course change would be after the lateral movement off the berth, and I drive straight ahead. Then I swing to port and make an approximately 12 degree course change to port.

Q. So, when you're making --

A. And -- so I was turn to port, to align myself with the

outbound South Brunswick River range.
Q. So, when you're making those turns is it normal for the vessel to list slightly?
A. Yes.
Q. Like you've done this a lot of times. So, did this boat -- when you were making those turns, did it list a little more than normal or was it kind of typical for a car carrier?
A. It -- I didn't make note mentally of it being any different at that point.
Q. Okay.
A. That it's - sometimes I do. Sometimes I don't. It depends on the turn. But that was just normal.
Q. So, I don't know if you recall this or not, but draft -- when it was coming in, you said it was around the same --
A. Yeah.
Q. -- as the draft going out. So --
A. Correct.
Q. -- the draft coming in, do you know if -- so, they -- I guess they -- typically when they take off cargo, they load cargo --
A. Right.
Q. -- they ballast. And do you know -- I'm wondering if they had more cargo coming in, they had more ballast, or --
A. I wouldn't be the person that would be able to --
Q. Okay.
A. -- answer that.

Q. I didn't think you would.
A. But, it would be easy for you to find out how many units they discharged and how many units they load back, and then whether or not the load back were high and heavy, or substantially heavier. You know, I'm not the person for that question. But the chief mate would --
Q. Okay.
A. -- be the appropriate person.
Q. So, also on the turns, did the -- when the rudder -- when you gave a 10 degree or 15 degree, did the rudder respond like you would normally see on any other cargo carrier, or car carrier?
A. Yes.
Q. So it was about the same speed.
A. Yes.
Q. You would get to 15 degrees.
A. Right.
Q. Did it seem vibratey or anything different or --
A. No.
Q. So it's just normal, smooth coming over?
A. Just -- that's what's so alarming.
Q. Okay.
A. Yeah.
Q. So, on this -- the turn where you've said you kind of thought you lost control of the ship, so you're making your turn to starboard -- I think you said you gave it 10 degrees to starboard

-- and you at that point felt it was turning too fast to starboard, or you went back to midship. I can't remember what you said.
A. I believe that I initiated the turn, because often we try to use less rather than more.
Q. Right.
A. I believe I initiated that turn with 10 degrees. And I hate to say it without -- knowing that we're going to get the actual thing --
Q. This is your best recollection. That's --
A. But from my best recollection, I don't think she cracked to starboard. So, I think --
Q. Can you clarify cracked?
A. I -- she didn't make a substantial movement to starboard, to my satisfaction that I would be able to make the appropriate turn to align myself with the next channel.
Q. Okay. Therefore, I believe I gave her 20, and then immediately --
Q. 20 degree starboard?
A. Correct. And then immediately that was in a pronounced movement, so I go to midships, and then the rate of turn accelerated rapidly. And then I applied counter rudder.
Q. So --
A. And then the counter rudder -- the response to the vessel was not typical to anything I've ever felt before. And I believe

that's because she was capsizing, and in an attempt I believe I tried to ease the rudder hoping that the counter rudder was not creating a movement to roll the vessel --

Q. Sure.

A. -- which it shouldn't do. I mean, I -- the ship should -- all ships should be able to answer her bells and use hard over to hard over, which would be 35 to 35 in a certain amount of time --

Q. Right.

A. -- without something catastrophic happening. So, something happened there.

Q. Do you remember if you were -- I can't remember what you said the bell was at at that turn.

A. I was just maneuvering full.

Q. Okay. So, you were full ahead.

A. Maneuvering harbor full, not --

Q. Okay.

A. -- sea speed.

Q. Okay. So -- got you.

UNIDENTIFIED SPEAKER: How many knots is that?

MR. TENNANT: I believe I was making 12.4.

BY UNIDENTIFIED SPEAKER:

Q. Over ground, or --

A. Yes.

Q. Okay. And so you give that 10 degrees. It's not cracking for you. It's not making the turn. So, you give a little bit

more. And that point, when you gave the more, it started to swing, I guess, more than you would --

A. Yeah.

Q. -- more than experienced --

A. More than I wanted. More than I -- I knew it had to come off.

Q. Has it ever happened that -- like that before?

A. No.

Q. Okay. So, you get this turn that's happening faster than you've ever seen. At that point were you starting - did you feel the list?

A. Yes. But --

Q. But the list didn't concern you.

A. -- the odd thing -- but -- this is where it's a little clouded.

Q. Uh-huh.

A. But I'm just going to tell you what I -- what I -- my best recollection of what I feel.

Q. That's fine.

A. But I don't what to be hung up with whatever the -- everything else comes out, you know, when the facts are --

Q. Sure.

A. -- on PDR and everything, if you've got the inclinometer -- there's no telling spatially when you're used to being -- standing up right at the gyro, when you start leaning one way or the other

-- now, I've got a lot going on.
Q. Right.
A. I feel like she leaned to starboard, as they often will do, and then when the counter rudder -- then I think it was just like a plane just crashing. Just --
Q. So --
A. -- like -- so, so --
Q. Yeah.
A. -- if -- I don't know if it makes sense, but perhaps there's a -- if you had a pan of water and it's upright level, and then we turn to starboard and now that water is going to run to the starboard side. Right. And then I -- this turn to starboard is too quick. So I'm going to go to midships to try to level her out. But that's not -- she's still rotating. So, I go to port. Well, all that water is going to run to one side. Right. So, all the weight is --
Q. Sure.
A. So, I don't know what happened. But I -- my body felt like I was turning to starboard. I don't know if the ship was. But that -- I perceived that I was leaning to starboard. Not anything like that turn -- or, the lean to port. But the lean to port was just capsizing. I mean, it wasn't --
Q. Do you --
A. -- it wasn't gradual. It was --
Q. Do you recall if you heard any alarm at all prior to -- like,

so the steering alarm was -- you didn't hear any steering --
A. Now, I hear alarms --
Q. I know. They're always going off.
A. They have alarms for if you don't answer an alarm in a certain amount of time they alarm. They have alarms for alarms. So, early in my career alarms could increase my pulse rate when you'd hear them, but now I hear alarms all the time. So --
Q. Like nuisance alarms, almost.
A. Yeah. It's a -- so, my alarm as a pilot nowadays is hearing the engine room call to the bridge. And when you hear foreign languages being spoken rapidly, and reduction RPM and stuff, that's when that starts really to get my attention.
Q. And you didn't hear any of that.
A. Nothing -- none of that. It was just normal, until it wasn't.
Q. So, did you -- do you feel --
A. It happened quick.
Q. -- that there was a steering loss at all?
A. I believe that the rudder was answering my commands.
Q. Okay.
A. And I believe the engine was answering my commands, until such time that there was no power to the ship and the -- everything was out of the water. Now, the rudder may have been applied to my command but the rudder may not have been vertical.
Q. Might have not been in the water.

A. Right. Or it could have been at an angle where the effect of a rudder doesn't work, because it stalls in a heel.
Q. Right.
A. So, at some point it doesn't matter what my command is. It's out of the water.
Q. How did you feel -- like, I know there's a language barrier. But we work these ships all the time.
A. Yeah
Q. Do you feel the team on the bridge were working well together prior to --
A. Yes.
Q. And anything you asked, they were doing it quickly and like you would normally see on a vessel?
A. It -- prior to, yes. And then during the time when we were in the lifesaving mode, there was fear in some people's faces, frozen, where the master is not answering. He's -- he may not -- I may not have been phrasing the questions to him in a manner that it would be easier for him to interpret, if that makes sense.
Q. Sure.
A. Like I'm trying to ascertain how many people are injured where, because I'm just acting to relay to the Coast Guard. I'm basically like the liaison to the Coast Guard on the ship, because there's -- it's like the only American there that's trying to decipher what's going on --
Q. Right.

A. -- to give to the helos answers.
Q. Right.
A. So, there was times where the captain -- I got pretty onto him, and he wouldn't -- he -- I turned to some third mate or some younger mate that was ghost white over here, and I'm asking him do you know if this person is there or the anchor is out or what -- answer me, because they -- and culturally, they don't want to say anything over the captain.
Q. Right.
A. The captain -- you know, they've been chastised their whole time --
Q. Sure.
A. -- you don't -- so --
Q. So, going back to --
A. -- but prior -- but prior to it --
Q. Okay.
A. -- I don't -- everything worked as normal. It's a bridge team.
Q. And during the exchange, you -- he didn't say -- did he say they have conditions of class or anything wasn't working correctly or --
A. Oh, no. So, typically with the MPX on the inbound -- we talked about the MPX on the outbound. But that's another good point about whoever brings it in takes it out. So, the inbound MPX is -- there's a little more to it. And so, I already set the

stage -- Captain, if you have any -- at the very end, Captain, is -- if there's -- if you have any questions, feel free to ask. Because sometimes there's not -- usually an older captain to a younger pilot, but there's usually a barrier that I want to pierce with them so they know they can ask me anything. It's not -- I'm not going to beat them up if they ask me a question, you know. So, on the inbound that rapport is established with them.

Q. Okay.

A. Yeah.

Q. He said there were no conditions. Everything, he said, worked right.

A. Yeah. First thing I say when I get on the ship out there, other than your deep drafts, is Captain, is everything working on your ship.

Q. Right.

A. And I'm asking that before I commit to the channel.

Q. And he said yes?

A. So, that -- yes, so that I can bail out, do an around turn. Because I'm not going to go up there and meet the outbound pilot 4 with -- and then I'm committed to a narrow channel. My goal as a pilot is not to introduce a hazard into the port environment.

Q. I think that's probably -- I had one more question. I'll pass off to anybody else. So, the speed you were at, you said about 13 knots over ground when you were making --

A. No, it was 12.4.

Q. 12.4, sorry.
A. 12.4.
Q. Is that typical, that's what you would normally be?
A. Yeah.
Q. Okay.
A. Maybe a little less. But yeah, it -- it's typical.
UNIDENTIFIED SPEAKER: Okay.
MR. TENNANT: Yeah.
BY MR. LEDET:
Q. Les Ledet, with the U.S. Coast Guard, Captain. A couple of questions for you on the actual route running through the reaches. I believe the -- you make a -- one reach is -- outbound, after you leave your berth, is Cedar Hammock range. Is that a --
A. That is.
Q. Okay.
A. Yeah.
Q. And how do you -- what's your maneuvering process in that? Of course, we're talking dark, right. It's nighttime. So, what are you using to make that run in that reach?
A. Well, our primary aids to navigation would be our range lights. Which would be stationary aids to navigation versus buoys, that can move.
Q. Okay.
A. So, outbound on Brunswick Point cut reach to make the turn onto Cedar Hammock.

Q. Excuse me. I'm not familiar with --
A. Yeah.
Q. -- the area, but --
A. Just buoy 24 -- so, this is Cedar Hammock.
Q. Okay.
A. And you'll see some towers, the lead light here, behind Jekyll and the rear light here behind Jekyll. Those stack up just like a range. So, pistol sights. So, this shorter one's in front and our taller one is in the rear. When they're stacked up, you're on the center line. That's --
Q. When you say stacked up, you mean what?
A. One light over the other light.
Q. Okay.
A. And so at night, you know, one is going to be quick flash. The green light. The clear one may be a different flash characteristic.
Q. Okay.
A. So, I see this I'm on center line. If you see this, you're approaching the turn. They're actually a part of this. So, my goal is to put them stacked.
Q. Okay.
A. And that puts me on center line of the channel, which means the center of the channel. So, the channel is, you know, 400 feet wide. I've got 200 feet of channel on both sides of me, and, you know, I've got the weight of the ship split on either side. And

so this is more -- my goal is to maintain center line best I can. It's not a perfect world, but I'm always striving for that. Because of the ship gets to the edges of the channel, bad things can happen. There's greater interaction.

Q. Okay.

A. So, that's -- so, to answer your question, I'm using the aids to navigation here along with the outbound range line that I'm exiting. So, there's a relationship between those and these buoys and lights that we're just used to seeing, along with other lights on Jekyll that help us spatially ascertain where we are in the turn.

Q. Okay. So, that's Cedar Hammock range. Right?

A. Right. This.

Q. This one here.

A. That's our narrow --

Q. Okay. So, from -- so, outbound you're using these range lights. Correct?

A. Uh-huh.

Q. And then after you make this range turn -- after you turned off here, now you're into Jekyll.

A. Correct.

Q. And what ranges -- are you running any ranges here?

A. Yeah. So, I have a range over my shoulder, which is the inbound.

Q. Okay.

A. There's never been an outbound range line for Jekyll.
Q. Right. Okay.
A. It's not as paramount as Cedar Hammock. Because Cedar Hammock is very narrow on both sides. So, there's not -- there's little margin for error on Cedar Hammock, due to the bank effect on either side of the ship. Okay.
Q. Okay.
A. On Jekyll, you can see -- see all this blue, right next to Cedar Hammock --
Q. Uh-huh.
A. -- because that's shallow water. You see all this white on either side of Jekyll.
Q. Yeah.
A. That's big water. And I've anchored small ships over here, outside the channel.
Q. Okay.
A. So, there's a lot of water. Okay.
Q. Okay.
A. So, I would use buoy 20 in relation, which is this one. And the relationship with airport lights and other terrestrial objects that if -- it's like you pulling your car in your driveway every day, you are not even thinking about it. But you're -- you could be talking to your wife on your phone and pull in your driveway every day. So, we can cut -- we can make that turn every day, because we're used to seeing that. Okay. And so, we're also

turning close aboard to this buoy here, 20 alpha. And since that's such a reach, if you turn and look at this buoy is right here, you know, you can ascertain where you are.

Q. Right. Okay. So, when you make this turn here you use this buoy 20, right --

A. Uh-huh.

Q. -- for your next point. Then when you go to make the turn into this reach --

A. Right.

Q. -- what do you -- is there any line up there, or is it by sight or feel or --

A. Yeah. There's no outbound range for Plantation Creek either. Because you're turning in a huge body of water.

Q. Okay.

A. And if I did need to check my position, then I could look over my shoulder on Plantation Creek inbound ranges. So, it --

Q. Which are --

A. -- which are these here.

Q. -- these, correct? Okay.

A. And there's --

Q. Do you recall --

A. -- just like here, there's no -- the bar channel, there's no outbound.

Q. Okay.

A. So, the whole time, you know, we can use the ship -- use the

shotgun range here.
Q. So --
A. So, if I'm -- if I don't know where I'm at, if I'm not comfortable with where I'm at, then I can walk to the port bridge wing and sometimes you can look down the side of the ship, depending on what kind of angle you are, to see the lights. But most of the time, the lights are obscured on car ships, because a car ship -- this is one thing that most people may not realize, but we're sitting on the bow of the ship. It's a bow rider. So, most ships you perceive the wheelhouse in the rear and you have this ship ahead of you that you can look over. Our vision is obscured aft on a car carrier.
Q. Okay. Okay. So, do you recall using those ranges over your shoulder and back?
A. No. It's too soon for that, in that turn. The time that I would be out here fine-tuning where I'm at, especially meeting another guy, if I think that I'm going to blast over this range I'm going to go out there and look. But I never got to that point, because she just rolled over. You know, it --
Q. Okay.
A. I was inside the -- I knew that I was inside the turn, because here's buoy 20 right here. I'm passing close to buoy 20. I'm putting the rudder on. I already know that inside this wider -- I'm in that wider zone. So, it's not time -- I've got too great an angle of intercept to worry about that at that point.

Q. Got you. Okay. And throughout this transit, even up until the point of the incident, you're still full ahead.
A. No.
Q. Okay.
A. I'm full ahead here, but -- I was at full ahead up in here. But I did drop her back to half to get in speed for the turn on at Cedar Hammock.
Q. To make the turn --
A. So, I was probably 11.5 in here.
Q. Okay.
A. And then I increased. But yes, up here with the turn I was at full maneuvering. Yeah.
Q. Full maneuvering speed. Okay.
A. Yeah.
Q. You had mentioned that you and the other pilot -- I'm sorry to be jumping back and forth, but --
A. No problem.
Q. -- I'm trying to get everything in. You and the other pilot had communicated early on, as early on as when you were at the dock -- still at the berth. Correct? And he was boarding outbound. He was inbound, but out at the sea buoy approaching the channel. You all had communicated to make the arrangements of where you were going to meet at. Is that right?
A. We communicated -- I don't recall if I talked to him before, but I remember communicating with him via the ship's VHF after I

was underway in South Brunswick River near the berth.
Q. Okay.
A. And to let him know -- then he says hey, I'm -- of course, we already knew this because we already ran our radars out on the ship, like you're all right. And I'll see him out there. I'll see the pilot when we get close to him. So, I'm not going to start dropping lines until I'm satisfied that he's there on time.
Q. Okay.
A. And so, then we -- that's when we made our arrangement there, is, hey, I'm -- just to confirm --
Q. Sure.
A. -- this is where I'm at. And then we can just monitor each other visually, and confirm with the ship's electronics where he's at.
Q. Got you. And all communications between you two take place over VHF or cell phones or --
A. Yeah, typically it's -- it can be all of the above, if we've got a lot going on as far as coordinating movements. But the -- it wouldn't be, you know, like if a guy is running behind, you know, we may say that, hey, I'm running 15 minutes behind boarding time, or whatever.
Q. Uh-huh.
A. Yeah, we'll use text or VHF or cell. Yeah.
Q. Got you. Throughout all your experience, you've certainly handled enough vessels to get a feel or get -- or had the

knowledge to know which routine or what's common -- maneuvering the vessel when you give a command. When you gave her the starboard steering after making the turn, and you said she continued to follow through -- she was swinging hard to starboard and you centered her up -- you brought her back to midship, but she continued swinging. At that point, did -- what -- was there any thought in mind like bang suction, steering --

A. No, because there -- it's -- as much as the event is not common, it is not uncommon to have a ship that is somewhat directionally unstable. Meaning that you may have to use as little rudder as possible to initiate a turn and take it off as quickly as possible. And then you may have to apply a substantial greater amount of counter rudder to steady her So, that is not uncommon in the shipping world. But it didn't seem common in that situation, for that ship at that point. Because that's a -- you know, it's a wide open area. You know, there's deep water.

Q. Do you have any thoughts as to what might have happened? What could have given way?

A. As a -- I hate to speculate because I hate people armchair quarterbacking --

Q. You've got so many years of maritime experience --

A. -- decisions I've made, and I --

Q. -- Mister --

A. -- don't have expertise in ship stability and there's people that could answer that fair better than I could.

Q. Okay.
A. I do believe that something catastrophic took place. And whether it took place during the turn or whether it was -- it had taken place back in the berth, I don't know. But obviously something catastrophic happened. There could be any number of reasons something could have happened. I don't think that the rudder is designed to work with a ship heeling over at a certain degree. And whatever caused that may have been -- it could be any number of things, but what caused this -- a change to the center of gravity, maybe, I'd be grasp at that, I guess. But that could be any number of things, whether ballast or cargo or --
Q. You recall hearing any kind of -- and I know there was a language barrier, but were there any discussions or anything you heard as far as cargo being secured or securing while underway, anything of that nature?
A. I'm sorry, I don't -- nothing stood out to me like that.
Q. No.
A. And I think all the -- those -- it's typical to have other languages being spoken --
Q. Sure.
A. -- when they're not answering the pilot. You know, they're going to use English with me. But it's very typical that they'll be speaking in their own native language. Now, sometimes I'll recognize if somebody has a heightened sense of urgency on the phone, because that piques my interest because it could impact the

pilot. They may not be telling me the truth about an engine or whatever. And so usually when I hear that I start looking at gauges, going -- because they'll still tell me something is good, and say the RPM is decreasing --

Q. Okay.

A. So, I'll look at things like that instinctually now. But the -- as far as the heuristics of the whole environment, I don't -- I didn't sense anything.

Q. Right now I don't have any further questions. I'm going to pass. But I would like to tell you this, that I'd like to mention, that I know you've been through a lot of training and a lot of courses in your training as a pilot. And I think these types of situations are very difficult to train and actually go through, and you did a great job in considering what you were under and what happened.

A. Well, thank you. Thank you. I appreciate you all being here, and I'm -- we're all very interested in determining what caused this --

Q. Yes.

A. -- so that this could never happen again.

Q. Correct.

A. And I'll enjoy finding the results.

MR. LEDET: Sure. Carrie?

BY MS. BELL:

Q. I just have a couple of questions. You did a great job with

the narrative, so you answered a lot of the questions I initially had. One thing that we do usually ask for, and I don't know if you've already given it to the Coast Guard, is like a 96 hour work rest history.

A. Okay.

Q. Just so we have that.

A. Sure.

Q. I would just like to know a little bit about how, you know, you started your day that day. I know you were --

A. Right.

Q. -- working the day before. I don't know what your on-call schedule is.

A. Okay.

Q. If you could just elaborate on that.

A. Yeah. So, we -- we're such a small port, we work a -- what we would consider a pure rotation. Bigger ports, they may split the roster of pilots and have a week on week off and all that. Sounds real nice. But here, since we only handle, you know, say 42 to 50 ships a month -- of course, you double that for the number of movements, because they come in and go out. So, there's -- right now, we have seven pilots on our roster and six of which are full branch pilots, meaning there's no restrictions. And so six guys are working the pure rotation. And then the short branch pilot will cover the ships that he can on his own, within his restrictions. And if there's any fatigue issues on his, they --

his get thrown back in the hopper, and the guys in the rotation take care of it. So, essentially of the six full branch guys five of them have to work before I go back to work.

So, prior to that Saturday it had been seven days since I had a ship. And that Saturday morning I remember setting my alarm for 6:15 to get up to wish the family off to go see the Georgia game, that I couldn't go to because I would be working. And so the kids loaded up and left, and I had a -- you know, over eight hours of sleep that night. And I -- then I had the whole morning at home to prepare for the rest of the day working. I knew that I had a day's work ahead of me, and I knew that the ship was going to be sailing in the early morning hours of Sunday.

So, I kind of put myself in a slow mode where I don't let myself do too much. So, I was trying to knock out some things. You know, so I remember going to lunch. And then I went to the -- I did the work in the afternoon. So, I did about four hours of work in the afternoon. And then I came home and rested for six hours, and set the alarm for midnight. And got up and went to work, and there was no kids in the house to distract me, because they're at the Georgia game. And then I just went -- got up and went to work. And you know, thought I was going to be home -- be able to get to sleep before sunup, which is always kind of nice. But, you know, everything else happened.

Q. Yeah.

UNIDENTIFIED SPEAKER: We can probably fill out a --

MS. BELL: Yeah, that would be great.
MR. TENNANT: Yeah.
UNIDENTIFIED SPEAKER: -- a 96 --
MR. TENNANT: I'll be glad to do that.
UNIDENTIFIED SPEAKER: Yeah.
UNIDENTIFIED SPEAKER: -- and we'll turn it in --
UNIDENTIFIED SPEAKER: Yeah.
UNIDENTIFIED SPEAKER: -- later today or --
MS. BELL: Yeah, that would be great.
UNIDENTIFIED SPEAKER: Sure.
BY MS. BELL:
Q. So, do you have like a policy -- any kind of a fatigue policy that you guys --
A. Yeah.
Q. -- go --
A. Well, we certainly aren't going to exceed 12 hours in the wheelhouse a day. Typically, we all kind of know our threshold is -- even if it's not to the hour, we're not going to do more than three full jobs a day. And if that -- we get in a situation where -- it's rare that that happens. Sometimes if, say, I have a bulk carrier import, and she doesn't leave for, say, a week and a half after doing cargo, sometimes I'm already back up in the rotation invariably. So, say I bring in something early in the morning and then she's going to go out later that night, and if the bulk sails during the day that might be a scenario where I might have three

ships movements within a 12-hour time period, if that makes sense. But it's -- so, but it doesn't exceed 12 hours, you know.

So, that's just -- that would be a busy day for us, but if we -- any one of us -- it's the beauty of having an association, if any one of us -- you know, say you're not feeling right, the -- you're off, something is going on where you can't concentrate or you're tired, something -- you know, any one of us can pull the rip cord and call dispatch and say put the next man up. Because, you know, the state pilot oath is that we have to rely on this, it's a hard thing to do when the wind is blowing. Especially with car ships, is -- it's come from the day of sails, that sail with -- the oath is wind, weather and health permitting. And if any of those things don't permit, then it gives us shelter to be able to say, hey, this is the oath I swore, so I'm not healthy to go. Or the wind is blowing 35 knots, I can't bring the car ship into the dock. So -- if that answers that.

Q. Yeah. And so, you mentioned that you do inbound and outbound with the same ship. So, if one comes in and it's in -- you're at the end of your on-call period, how does that work? Or --

A. The on-call period is just for your ship. So, it's --

Q. Oh.

A. -- so, this blows the captain's mind. They don't understand it. So, I'll bring them in. And then they'll say do you know who my pilot is on the outbound. I say well, sure, it's me. I have nothing to do until I sail you. I'm going home and I'm going to

rest, and I'm going to be back here whenever you need me. Give us two hours notice, and we'll have to scramble the tugs and everything else. We'll be here.

Q. Okay.

A. So, basically what that means is we hang tight. You know, we may go back to the office and do paperwork. We may go home and rest. You know, it just depends.

Q. Yeah.

A. So, we're just -- we got to be close. We got to stay close by.

Q. Okay. Thank you for explaining that.

A. Okay. Yeah.

Q. In terms of visibility, you were talking about your obstructed view on the ship and how that's characteristic of the car ships. Was this one any different than others, in terms of that obstruction or having to make any kind of adjustments because of that?

A. No.

Q. And weather -- I'm kind of just picking up at the end of -- you know --

A. The weather was just -- you know, it's amazing how the difficult jobs are on the perfect days. You know, that's when you better watch out.

Q. Okay.

A. Yeah.

MS. BELL: I think that's all the questions I have.
UNIDENTIFIED SPEAKER: Sir, you represent the pilots.
UNIDENTIFIED SPEAKER: Uh-huh.
UNIDENTIFIED SPEAKER: Could you get us a copy of their work rest policy?
UNIDENTIFIED SPEAKER: Sure.
UNIDENTIFIED SPEAKER: Thanks.
UNIDENTIFIED SPEAKER: Yeah.
BY UNIDENTIFIED SPEAKER:
Q. I just have a couple of questions. I appreciate your time, and everything. So, you took the vessel in and you had -- on the inbound track, you had two port -- one port turn and two essentially starboard turns before you were getting up to the dock, when you -- on the inbound route. Right.
A. We would have at least three port turns.
Q. All right. But you had a couple of starboard turns when you were coming in as well.
A. Correct.
Q. Okay. During those starboard turns, do you recall, in retrospect now --
A. Uh-huh.
Q. -- the ship feeling different, maybe being more tender at those moments.
A. Nothing -- there would probably be an equal number of port and starboard turns coming in, if you include the turn to

starboard in the turning basin. To answer that question, there was nothing that felt abnormal --

Q. Okay.

A. -- on the starboard turns.

Q. All right. And then, you mentioned you had, what was it, 10 degrees on the outbound before the vessel started. Was the vessel feeling at all after -- when it was heading towards the turn, did it feel unstable at all prior to you ordering the starboard 10 degrees rudder?

A. No.

Q. Did you hear -- at any point from the time you left the dock to the accident, did you hear any kind of shifting, anything that would be an unusual noise on a ship where you're heading out?

A. No. Remember I'm up on the bow.

Q. I realize that.

A. Sometimes the only things we'll feel would be like an anchor chain going out at our feet, I might feel. When we're maneuvering, we might feel the engine RPM --

Q. Right.

A. -- going through critical, or a bow thruster running. But in transit, you know, we feel her when we're maneuvering.

Q. Uh-huh. Yeah, especially when you're --

A. But it's don't --

Q. -- up on the bow.

A. -- but I don't recollect any noises beyond typical bridge

stuff.
Q. Do you -- was the captain focused on the transit out, or was he engaged in other discussions with the -- was he on the phone a lot with anyone? Or radio? Was he having other discussions or was something -- was it something maybe distracting him at all during your time with him?
A. I can't accurately account for every moment the captain was doing something. But I could say this, that usually prior to my turns I'm at the counting position, which is forward of a lot of the radars. And I'll walk behind the radars and look. And so the captain is back behind me, and then there's like a chart area behind the helmsman.
Q. Right.
A. I do remember -- so, that kind of -- what I'm getting at is that puts me where I'm forward of him, and I'm looking out the window ahead of me --
Q. Right.
A. -- because that's my wheelhouse, what I'm doing.
Q. Right.
A. I'm not observing what people are doing behind me unless they're not following my orders.
Q. Correct.
A. And -- but I do recollect hearing the master at times repeat my commands, which is not uncommon for the captain or any of the other bridge team members -- a lot of the ships, they'll all

repeat the command to make sure it's heard. So, if -- I would assume that if he was able to repeat my commands that he's watching what I'm doing --

Q. Okay.

A. -- and not engaged in extraneous things. Not to say -- there's typically phone rings and -- from engine rooms and different radio calls. That goes on all the time. But I don't -- it was just as a bridge normally is.

Q. Right. Okay. When -- so, it was -- you turned the rudder 10 degrees and the vessel -- was it heeling to starboard or turning to starboard further?

A. Definitely was -- eventually, it was definitely turning to starboard. This is where I'm not 100 percent, but my gut tells me -- I felt like I was leaning to starboard. But nothing like capsizing to port, okay. I just felt like it -- it felt like tender to starboard. Like it was --

Q. Did -- by chance when that happened did you have a visual on something you could say I'm -- was it a feel or like hey, I'm noticing that that's just starting to look strange in front of me?

A. No. I mean, we're driving by feel.

Q. Right.

A. And --

Q. Especially at night.

A. Yeah. I mean, that's what we're, you know, paid to do. It's a --

Q. All right.
A. -- you know, it's not like a mathematical calculation --
Q. Right. Right.
A. -- based on what I'm seeing up here.
Q. Okay. At that moment --
A. It didn't seem abnormal. It just -- I perceived that.
Q. Right.
A. You know, it --
Q. So, turn to starboard. Then you're doing this.
A. To starboard?
Q. Yeah.
A. I just said that I feel like she -- and I don't -- I didn't make a log of the inclinometer or anything like that. It's just my perception that she -- it was like noted, whoa, she's -- something is different here.
Q. Okay.
A. And --
Q. At that point, and I know a lot are going on, did you hear any alarms at that moment?
A. I don't recollect hearing any alarms at that moment. And I recollect alarms when -- and it was a fraction of a second, everything rolled over --
Q. Right.
A. -- and everything is black.
Q. Right. And at that moment -- and I know you had -- you were

facing forward and the crew was behind you --
A. Yeah.
Q. -- did you sense anything like all of a sudden was it -- everyone is really quiet on the bridge, or all of a sudden everyone is really -- you know, someone started barking orders, or was there any commotion or how would you describe what was your sense of what was happening behind you with the crew?
A. I think that I was so hyper-focused on trying to drive the ship and ascertain how to counteract what -- I could not believe what was happening, and I didn't even understand fully that she was going to capsize. I just thought that she was going to come back. I wouldn't be surprised if I said something like captain, is she going to come back, is this normal.
Q. Right.
A. That's -- if somebody -- if it's -- if I'm on a real tender ship or something, captain, is this normal, is that normal, is that -- you know. Because you want her to come back, you know.
Q. Right.
A. You can't even comprehend her not.
Q. Yeah.
A. I may have said something like that.
Q. Right.
A. And I think the master was off my port shoulder, behind me. And when I -- I either eased the rudder, I tried hard over and then I may have eased it trying to hope that that rudder is not

exacerbating the problem.
Q. Uh-huh.
A. Because this is kind of like a Catch-22.
Q. Right.
A. If you don't use counter rudder, the ship is going to turn around and then the inbound is going to T-bone me.
Q. Right.
A. Or, she's going to keep turning and she's going to run into the sandbar.
Q. Right.
A. So, obviously I got to do something. And man, is that too much rudder, let me ease it, let me see if I can get this rascal under control, you know. And I think he said -- I remember him saying -- port 20 is all I remember.
Q. Sure.
A. Now, I don't know if that's in response to me saying port 20 or ease in 20.
Q. Right.
A. Because sometimes we'll say -- if I'm hard to port --
Q. Right.
A. -- I may say ease to 20. It's -- and so their response typically is either ease to 20, meaning ease their helm to 20 degrees, or they may just say port 20.
Q. Okay.
A. Because I remember him with that heavy Korean accent over my

left shoulder going port 20. Of course, that -- I think the rudder was hard to port, which is out of the water. So --
Q. Yeah. And so, it's --
A. Yeah, I -- so, so much happening so quick, and I -- you know, I just can't say with certainty. But I -- to answer your question, I don't -- I can't recollect what was going on around me. I just know that afterwards I looked over and everybody is on the deck.
Q. And that's when it started to go to port.
A. Right.
Q. All right. And --
A. Not started. It's like it just happened.
Q. It just happened. So --
A. So, everybody is wiped out. Everything that was on the bridge was up against the port bridge window wall.
Q. Okay. When the vessel started to go to port, did you start hearing any crashing? Movement of cargo.
A. I was trying -- I called the inbound, not believing what I was seeing, and I said something to him on the radio and I can't recollect what it is. Something like I'm losing her, or get around me, get -- you know, it was something like that. I'm not focused on any of that.
Q. All right. So --
A. I think at that point, you're looking at the world through a straw.

Q. Yeah. Yeah. Okay. So, no -- you don't recall any secondary or -- noises, as the ship is heeling over the other way.
A. No.
Q. All right. And again, no -- you don't recall hearing as the vessel is heeling over to the port side any type of alarms?
A. No.
Q. Unless she fully went over.
A. Yeah. And then I just remember looking at the tack, and it's zero. I'm like --
Q. All right.
A. -- you know, when did this happen.
Q. Okay.
A. You know, but I think at some point the engineers could say at some point they've got speeds --
Q. Yeah, the speed trip on the propeller --
A. -- that it stops running --
Q. -- probably tripped.
A. Because my speed just fell off, just -- so quickly.
Q. All right. All right.
A. I'm sorry I can't answer that.
Q. No, no.
A. I just --
Q. It's just a question I just had.
A. I'd love to be a fly on the wall out there.
UNIDENTIFIED SPEAKER: All right. No, I have no further

questions. Thank you.

MS. BELL:

Q. I do have another question, I -- I'm sorry. Do you guys -- you and the other pilots by any chance take ship -- take notes on the ships that you're on, that you kind of share with each other? Any kind of handling characteristics that might be different or anything like that that you share among each other?

A. I wouldn't say that historically there's any physical notes written. But it is a tradition that dates back since the days of sail that pilots -- we sit around and jaw jack about jobs and if one of us has somebody's vessel that is a poor handling vessel, we may note it for other people and say, hey, before that rascal comes in again you need to keep an eye on that thing, she's squirrely, or she's a poor handler. And we don't want another pilot -- if one of those ships gave us a problem, we would alert the other pilots or the dispatch hey, if that ship shows up here again you better make sure you have two tugs, or watch it. You know, so it's a heads up. And then that's a lot about the apprenticeship and the short branch years, where there's ad nauseam discussions with the older pilots, the experienced people, about certain scenarios in ships, to be aware of. Things to do and not do. So, a lot of that is -- it's just so built into our structure that we don't need it written down. And then it's just done. And then as our training program, they're called analogs. So, when you have bad things happen that's when you kind of learn

the most. And it's seared in your memory as a pilot, and we share that amongst one another so that we don't have to learn the mistakes or issues on our own. We can learn from someone else's.
Q. Yeah.
A. If that makes sense.
Q. Yes. So, on this --
A. So, there's not going to be a notebook on *Golden Ray*. Now --
Q. And I'm not asking for --
A. Yeah.
Q. -- physical evidence of that.
A. Yeah.
Q. I'm just curious if you -- if this might be a ship that you have talked about --
A. Yeah.
Q. -- or has had problems with other pilots in the past.
A. Yeah, we would say that -- neo Panamax ships, it would be -- we've all accepted, and it's not pertinent in this case, that there's a wind threshold that's going to be lower than your traditional 200 meter car ship, due to -- you know, they're building larger ships with greater gross tonnage, with the same size engine and same rudder and same bow thruster horsepower. Not always, but that's becoming typical, that the shipping companies are powering it the same as they would a traditional 200 meter ship that you can handle that ship in a higher wind condition than you could neo Panamax ships. And so that's duly noted. And we

just as individual pilots have to be aware of that when the wind is up. And it's just going to require in the future greater horsepower for tugboats and things like that.

Q. Yeah.

A. Yeah.

Q. And in case -- since you're aware of that, is that something that you guys -- you restrict --

A. Yes.

Q. -- movement of vessels at certain wind speeds, or --

A. Yes. So, it's very common practice for -- and it's the pilot that's the duty pilot for that vessel, that's on that vessel, is going to make the call, based on their best skill and judgment, that this is a -- a lot of times, it's easy to make that decision. None of us want to restrict commerce. But our number one priority is safety over efficiency of commerce. But determining those thresholds is the hardest part of the job. And -- because the -- we don't want to do a bubble job, what we call it, you know, if it's 35 knots gusting that -- it's a no known, if it's onsetting wind, okay, well, I'm not doing that. But if it's a hey, it's 25 in here, with some gusts, those are the hard ones.

Q. Yeah.

A. You know.

Q. Because it's kind of up to you --

A. And -- it is.

Q. -- with that call.

A. It is, so it's -- and no one else is going to make that call, and the shipping company is relying upon us to make a sound judgment. As much as they don't want a delay, they don't want a problem. And we don't want a problem. And so, that's part of the job. That's actually the hardest part of the job, not the mechanics of ship handling.

MS. BELL: I understand. Thank you.

BY UNIDENTIFIED SPEAKER:

Q. I have a couple of follow-up questions for you. You had mentioned that when you give the command on the bridge, you could -- on this particular ship, you could hear the captain repeat your command, which was -- it is common, and it's for the quartermaster to make sure everyone has heard it on the bridge. Heard you. Do you recall the quartermaster also repeating that order?

A. I do remember that, in certain circumstances, vividly. Like undocking. Because that's usually a time where either I'm going to holler the order in from the wheelhouse -- from the bridge wing, or the master standing next to me will do it. But a lot of times the pilot will give the command to the captain, instead of hollering it in, because he's wanting to talk on the radio to the guy in there. And the guy in there will answer it back, over a loudspeaker. So, I do remember that happening, in that scenario. And then I can't with 100 percent certainty remember that every command was answered. But I'll -- I would say that -- like, I can't hear it in my head right now that every command was

answered, but I can tell you that if it wasn't answered I would be making a mental note of that.

Q. Right.

A. And it would be addressed. So, the fact that I don't remember me ever addressing that something wasn't followed, I would presume that everything was normal. That's a complicated way around it, but I --

Q. No, I get it.

A. -- there's no telling what -- you know.

Q. I get it. I get it. I --

A. It's -- it's --

Q. Yeah.

A. I remember when things aren't followed, because there's so many orders given.

Q. Got you. What's being so -- as you said, you steer from forward on this vessel. She's not an aft steer. Right?

A. Right.

Q. You -- the bridge is forward. And certainly your aspect of swing in this is visually shorter.

A. Correct.

Q. As you look sternway --

A. Correct.

Q. -- right, and see the swing there.

A. Right.

Q. By any chance, when you noticed this swing -- and I take it

you're referencing off of a steer light in front of the bridge on the bow, in relation to the horizon.
A. Some people prefer to use the steering lights. But I don't care if it's on or off at this point --
Q. Okay.
A. -- in my career. I can see a mast. And I can see pretty well, if they're not blinding me with flashlights. So, you know, I -- I don't -- you're correct, it's a shorter sight radius, if you will.
Q. Correct.
A. Versus a -- if you're on a bulker.
Q. Right.
A. And yes, if you look over your shoulder you're going to see the stern moving very rapidly, relative to the bow.
Q. Okay.
A. Yeah. But that's something that we're just accustomed to the -- 95 percent of our traffic --
Q. Yeah.
A. -- we're on bow riders. But I do remember over 20 years ago that that was certainly a different perspective that took time to get used to.
Q. Right.
A. Yeah.
Q. That's right.
A. Yeah.

Q. So, in this particular incident when you see her swinging -- and of course I'm using my pin as you being here at the pilot --
A. Yeah. There you go.
Q. -- just as an example, as you see her swinging to the starboard here, right, and a rapid swing you referenced to, are you certain -- with certainty that the stern is also swinging to port?
A. Absolutely.
Q. Or is she in check and swinging by only? Do you know?
A. I think the stern is turning.
Q. Okay. And -- fair enough, you know.
A. Yeah. Yeah.
Q. Because it's certainly possible. Right. And of course, the reason I'm asking is whether -- where -- do you recall any referencing back to see if the stern actually was swinging or -- and it would have had to been quick. Everything happened so fast for you.
A. Yeah.
Q. I understand that. But do you know that with certainty?
A. I've never not had the stern turn.
Q. Okay.
A. And I kind of have a scan, like a -- any pilot would have, to where I'm normally observing everything in a -- it's just constantly goes on. And so, it's not out of the question that I'm looking through my whole plane of -- that's available to me

through the windows. You know. So, I'm trying to be as aware as you possibly could be, you know. So, I don't understand -- I'm not sure of the situation where the stern would not be turning, in that situation.

Q. Okay.

A. And -- I'm not sure what outside force would prevent that.

Q. Do you recall feeling any bumps?

A. No.

Q. Humps? Nothing --

A. I'm --

Q. -- nothing out of the --

A. So, the only thing that I could think of -- because that's deeper water, so I'm exiting the shallower water into deeper water.

Q. Okay. Okay.

A. So, I don't want to really get into the speculation side of things, but --

Q. I don't --

A. -- my instinct would be that if that vessel were not stable, even at the berth, and I didn't know it, she may have been held stable as -- by being in the confines of a shallow channel. And then once she's released from the confines of a shallow channel, and the underkeel clearance grows, right the pressure dynamics changes. And then she's free to do whatever she wants to do.

Q. Right.

A. Where so if she's in this narrow ditch at Cedar Hammock in South Brunswick, she can't do anything. And -- although there's a lot of water in the turning area that I transited, right after the berth, but I wasn't in a turn either. So, as the underkeel restriction changes, then perhaps she's free to behave the way she wants to behave.

Q. Uh-huh.

UNIDENTIFIED SPEAKER: But prior to that she didn't feel tender at all?

MR. TENNANT: I would say that she -- I would say this was very pronounced, the change.

UNIDENTIFIED SPEAKER: But when -- before the --

MR. TENNANT: It didn't strike me --

UNIDENTIFIED SPEAKER: Well, so from the time you -- at the dock until the time you -- prior to entering the deeper water, you didn't --

MR. TENNANT: Yeah.

UNIDENTIFIED SPEAKER: -- have any sense of a -- being -- the vessel being tender.

MR. TENNANT: Well, she certainly wasn't stiff. But she wasn't -- it wasn't abnormal.

UNIDENTIFIED SPEAKER: Okay.

MR. TENNANT: It did not create any alarm.

UNIDENTIFIED SPEAKER: Okay.

MR. TENNANT: It didn't -- or, you know --

BY MR. SIPPLE:

Q. Captain Tennant, my name is David Sipple, with Hunter McLean. Just got a couple of questions.

A. Yes, sir.

Q. When you went to counter rudder, what -- was that a degree turn or was that hard to port? Excuse me. When you went to counter rudder, was that hard to port?

A. It was numerous commands, and ultimately hard to port.

Q. Okay. I believe the captain repeated port 20, you think? Port 20 was one of your commands before you --

A. I know it was one of my commands. And -- yes.

Q. Okay. And then ultimately you went hard to port.

A. Yes.

Q. Okay. Thank you. Based on your experience piloting car carriers -- and I know you may not have actually experienced this yourself, but based on your experience as a bar pilot and piloting car carriers, if there is a significant shift in the cargo on the car carrier, is that something that you think you would be aware of on the bridge? By way of noise or movement or other factors.

A. I don't think that I would -- I -- first of all, I don't know that -- the answer to that, other than the fact that in my best judgment I don't think that I would be able to hear that unless I was --

Q. I'm talking about a significant cargo shift.

A. Like a -- I don't -- I'm not certain I would hear that.

Because I'm so far forward. You know, just like -- especially if it was two football fields after me, or a football field after me, I'm not sure I'd hear that. Because there may be like 10 or 12 decks. It would depend on which deck, and if it was closer to me and -- I don't -- I -- that's a great question. I wish I had a definitive answer for you on that.

Q. Before this incident -- before you started getting into difficulty, did you feel anything that would indicate that there had been such a shift? Was there any noise or movement under your feet or anything that would indicate to you as an experienced bar pilot that there had been a significant shift of cargo on the vessel?

A. I felt nothing.

Q. All right. If there had been a significant shift in cargo on the vessel, and let's say it was forward in the area where you were -- near where you were, what would you expect to hear that you did not hear on this particular vessel?

A. I think it -- I most likely would feel it and not hear it.

Q. All right.

A. I think that I would feel items, say, striking one another or a bulkhead, and that would reverberate through the deck of the ship to me. I think that that may happen. I -- we can hear like an anchor being pulled home into the hose pipe. So, it's conceivable that we could also audibly hear it. But I think I may sense it through the feel or the touch, through my feet.

Q. What areas of the vessel -- you said you didn't think you would hear anything if it was toward the stern. If it were in the midship area, on forward, do you think you would hear noise or feel a movement with your feet?
A. It's hard to say.
MR. SIPPLE: Okay. Thank you.
MR. FLAHERTY: Mark, you had a question.
MR. DeJESUS: Yes, sir.
BY MR. DeJESUS:
Q. This is Mark DeJesus, with the Coast Guard. Captain, the -- let's talk about crew makeup on the bridge itself.
A. Okay.
Q. Did that makeup ever change, as far as the amount of personnel during the transit, before the incident?
A. The quantity up there really only changed significantly after the incident, when it became a life-saving event. When we were mustering as many people as we could up there, outside the wheelhouse on the starboard side. I would say that there was a normal amount of people, like -- but it wasn't bare bones up there by any means. I'm guessing that there was probably -- I try to even keep an eye on who is behind me. I want to say there was at least four people up there, during the transit. So, you know, you have the mate, the quartermaster, the captain and a cadet. And then there's sometimes a changeover during the transit, depending on the hour. And so sometimes those faces change but the head

count may remain the same.
Q. How did they communicate with each other as far as the -- if the bridge was talking to engine area? Through radio?
A. The master did have a radio room. They usually all have a radio on them. But oftentimes if there's a communication to the engine control room that they'll pick up a phone that's wired to the console next to the telegraph area, and that usually has a buzzer or a ring distinctive. And they usually are answering that. Usually their handheld devices are talking to the bow or rigging the pilot ladder or to someone -- you know, to someone on deck.
Q. So, did you notice --
A. But as far as the languages, I -- just -- I'll just say that nothing -- it just didn't seem abnormal to it, you know. There's oftentimes I'll hear other languages, and I'll hear English and other, you know, dialects.
Q. So, the conversations behind you before the incident was pretty much normal. You didn't hear any pickup on any conversations or things going on?
A. I think I heard the captain -- you know, either I said something captain, what's going on, is this normal, or something like that, or has she ever done this before, or -- because I'm trying to figure out is she coming back and I believe I heard -- and I would hate to try to show you my best Korean, but he was -- it was lot of astonishment or oh -- you know, like oh, oh -- or,

you know, and repeating orders, and it was like a -- I think it was just shock and awe.

Q. Which was a little bit --

A. You know, it would just be remarks like anybody would be, like oh, my God. You know, it would be --

Q. But --

A. But nothing that precipitated --

Q. -- say like five or ten minutes before --

A. No, no.

Q. -- nothing --

A. No, nothing precipitated that.

Q. Okay.

A. Yeah, it's just --

MR. DeJESUS: Thank you.

MR. TENNANT: I wish I had an answer for you.

BY MR. BREMER:

Q. How are you? Tom Bremer with the Marshall Islands. I know you mentioned that you were transitioning from a shallower area to a deeper area as you were commencing that turn. Do you have any recollection or idea about what underkeel clearance that you would have had prior to that transition to deeper water and, you know, what you would expect after?

A. Yeah. So, the sound is -- it's very typical as we're leaving, say, Cedar Hammock we turn on Jekyll reach. Because there's deeper water from there all throughout our passing area --

that's why we meet other vessels there --
Q. Yeah.
A. -- it's typical that even though I'm still at the full bell that she's going to increase speed, because there's greater depth of water available.
Q. Okay.
A. Right. And the same is true for the inbound. It's exiting shallower water at the bar to deeper water. So, that's a dynamic that we're used to. And underkeel is not a consequence to us in the sound, because of the available depth of water.
Q. Okay.
A. And at the stage of the tide that I had when I sailed, I would have at least a half tide -- you know, it was a smaller tide. It was like over 6 foot tide, but it was a --
Q. Yeah.
A. -- it was a less than normal tide for us. But I still would -- by the time I got on the bar, I would have 3 meters underkeel, which is -- you know, how much more would you want.
Q. Okay.
A. And so it's a -- it would be typical for me to transit the sound and then enter the bar and my speed would decrease on her own, due to the available depth of water becoming less.
Q. Okay.
A. If that answers your question.
Q. Yes. Perfect. Thank you. And the last question I have, as

far as your familiarity with the port already, unique current dynamics? I know you said it was a flood tide at that point.
A. Uh-huh.
Q. Is there anything unique to that area, where you're initiating the turn?
A. Well, you know, not -- it's nothing unique possibly to that area, other than the fact that the current is going to be on a flood tide --
Q. Okay.
A. -- be setting me substantially to port. So, it's going to be striking maybe not on my being at a 90 degree angle, but at a large angle --
Q. Okay.
A. -- so that that's going to require me to make an alternation into the current, so as to maintain the channel.
Q. Okay. And do you have any idea what you were looking at for current on that evening?
A. Several knots.
Q. Okay. Two to three? About two?
A. I'd say -- I'd stick more towards two.
Q. Okay.
A. Because the tide is -- you know, was a less than normal tide.
Q. Okay.
A. Yeah. But it was the midstage of the tide, so, you know, if high water was, you know, at -- like 4.15 or so on the bar, just

say -- yeah, say 4.10 on the bar and 6 1/2 foot tide, and if I'm hitting it in that midrange of the tide --

Q. Yeah.

A. -- then that's going to be at the strongest set.

Q. Okay.

A. If that helps.

Q. And that's a -- that 2 knots --

A. Yeah.

Q. -- is something that you deal with frequently. It wasn't out of the --

A. We typically deal with --

Q. Okay.

A. -- greater current --

Q. Okay.

A. -- than that.

Q. Okay. Perfect.

A. Okay.

MR. BREMER: Thank you very much. No further questions.

UNIDENTIFIED SPEAKER: Just one question, real quick. Are you aware if the propeller is a left turning propeller or a right turning propeller?

MR. TENNANT: Right-handed turn. Yeah.

UNIDENTIFIED SPEAKER: Thank you.

BY LCDR [redacted]:

Q. Sir, good morning. This is LCDR [redacted] [redacted] with the Coast

Guard. So, when you were giving your rudder commands were you facing forward every time you gave a command? Or any one were you facing aft?

A. I am facing forward. And the only time that I gave a rudder command facing aft is if I'm navigating the vessel astern.

Q. Okay.

A. And which time I'd be on the bridge wing of the ship, looking aft.

Q. Okay.

A. Backing up to the berth. Because we turn them around in the turning area, then back up a mile to the berth.

Q. So, when you brought the ship in -- and you guys turned it around, correct?

A. Correct.

Q. You backed it in. In that turn, anything abnormal about that ship?

A. No.

Q. Okay. When you gave your commands, you said the captain repeats your commands. Is there a delay between you giving the command and the command taking place?

A. Typically not. It's -- sometimes they even hear me saying it, on the wing, and they'll start executing. You know, I -- it’s not that big of a delay. And I'm looking -- as I say it and he's repeating it, I'm watching to see that, number one, the rudder is turning in the direction I have ordered --

Q. Okay.
A. -- to confirm if -- so, if it's not doing it quick enough for -- perhaps they're on the radio or they're talking over one another, and it delays the execution of the command, then I'm already stepping up and repeating it.
Q. So, would you say the helmsman is reacting to your command first, or to the captain's repeated command?
A. He's -- inside the wheelhouse, he would be reacting to me. And it's only in the bridge wing dynamic if I'm working with the captain, you know, 50 feet or more away from the -- they're in an inside environment, we're in an outside environment, if he's on the radio there's -- that's where they may be operating just off the captain. But that was never an issue around the berth. Everyone of my orders in the berth, docking and undocking, were followed. That wasn't a problem. And then inside the wheelhouse, it's more kind of like ingrained in their bridgekeeping that it's typical on ships -- foreign ships that whatever I say it's just repeated to -- everybody just repeats it. But I -- it doesn't relieve me of watching to see that it's being done. It's like trust but verify.
Q. All right. Okay. So, you said earlier you were standing by the gyro repeater. Is that the one on the bridge wings?
A. Center line of the ship, in the center of the wheelhouse.
Q. Okay. So, I want to talk about this meeting. So, it seems like when you're outbound and he's inbound there's a very critical

time that you guys can pass in the sound. So, what -- I guess the best way to ask this is how much of a window of time do you have there that you've got -- you two guys are managing?
A. Right. Well, it's -- we have a target zone that we're going to want to hit. Poor choice of words. There's a target zone that we would like to meet one another. And -- but we're capable of meeting one another from the last pair of buoys on the bar, which is 15 and 16, all the way up to Jekyll pier, and behind Jekyll. And so, you have, you know, over 2 miles, almost 3 miles of a 17 mile route. So, it's a pretty significant spot where there is time that we can meet. Okay. So, we've -- are so used to meeting there that the timing becomes just intuitive, to meet there. We know that there is benchmarks where if we're going to meet there and he's making this speed that I've got to make this speed or I'll tell him to slow down or speed up or vice versa. So, we were -- in this particular instance, we were right in the sweet spot of the area. So, even if I was faster or slower or vice versa to him, we would still be within that zone that's safe to meet. If that answers that. But a lot of times we'll target from buoy 17 past the -- then there's the lighthouse, then the pier area. We'll -- if we don't have to do anything substantial to change things, we try to stay in a straight-away instead of meeting in a bite. Because it just doesn't -- like meeting at buoy 20, it can be done. There's plenty of room to do it. But say on flood tide it doesn't look good. You know, it would make the captain

concerned if the other vessel is pointed up in the current. Because of the range lights it's going to look like we're not going to meet port to port. But --

Q. Right.

A. -- you know, we implicitly all meet port to port. And if there's any change to that, or a casualty or something, we'll tell the other guy, just as I did in this case, you know, yeah, I still intend to meet you port to port but all bets are off I'm losing this ship. You know, so it's kind of like putting him on notice, hey, you've got to -- it's a -- I have no control, you got to just get around me, you know.

Q. Now, let's say in a circumstance that you guys -- it looks like you're not going to meet in that zone --

A. Uh-huh.

Q. -- what's the plan of action?

A. The pilot that realizes that the first is going to notify the other pilot that, hey, I'm -- I -- and it will happen. We'll say I'm coming out. There's all kinds of reasons. The engine guy calls up at the bridge and will say hey, we just replaced a cylinder liner, we can't go over 8 knots. Then the captain tells me hey, pilot, we can't do any more than 8 knots. Which he should have told me at the dock, but it's not a perfect world. Then I will inform the other guy, hey, I'm -- got an issue, I've got to pull back. If you can reduce it, the wind -- you know, a lot of times they can't reduce, to make it up the bar channel if the wind

is blowing, because you got to keep speed to stay in the channel. Then the -- but they are already calculating, okay, well, I'm going to carry speed to get up into the sound but I'm going to pull her back and I can keep my ship -- they may be bringing a bow thruster online and doing other things to set themselves up knowing. So, the big thing is just to communicate if something is different.

Q. So, let's say everything went normal.

A. Uh-huh.

Q. You would have -- you said you gave your rudder command for 10 degrees. So, you were in your turn. Just proceeding forward on a normal outbound what would have been your next set of commands, so to speak?

A. So, I would have probably steadied up on -- and this is where I'm looking at the other ship coming in. Since we don't have an outbound range and we don't have to maintain center line on Plantation Creek, because we have, you know, all this room between Plantation Creek and the St. Simons pier, that ship -- the inbound ship is already way outside the channel, to give me room, and we'll -- we kind of split the difference in there, so that if there's shrimp boats or anything else that either one of us can maneuver instead of staying in the 400 foot channel. There's deeper water outside the channel. So, the channel really acts as a guard of the shoaling from the south moving into the deeper water, and it rarely needs to be dredged.

But basically that's the line in the sand, if you will. So, I would have probably steadied up on 97 to 100, when the true course of that reach is 105. And that heading would most likely be where it looks like I'm pointing at the stern of that inbound ship. And we're going to meet somewhere between the lighthouse and the pier, and we're going to have hundreds of feet of ship length between us. And I'll have that much sea room to my starboard side, to be able to move if there was other vessels. And then that -- what that does is it sets me up for that turn on the bar channel, instead of making -- if I came down Plantation Creek down the center line and I approached the bar channel, then I've got to make a more severe quicker turn to starboard. Whereas if I'm slicing the pie the way I'm talking about, then it's a more gradual gentle turn where I'm lined up on the bar channel way before I get to the bar channel. If that makes sense. So, it gives you an ability to make a more finessed gentle turn, in alignment with the channel, versus just slamming it over at a buoy.

Q. And I know you -- in this case, you guys were going to meet on basically a half flood tide, I think is what you said.

A. Right.

Q. Is that the preferred meeting tide, or do you guys do it on other tides?

A. We do it on all tides. Doesn't matter what the tide is.

Q. Okay. And I know you said that -- so, you've been around

here a long time operating the boats. And I know like -- because I'm up in Charleston, there's a very distinct line between fresh and saltwater.

A. Right.

Q. Is that here? So --

A. Not within our piloted waters.

Q. Okay. So, brackish and fresh is well above pH levels?

A. You may have brackish at the berth, to some extent, depending on the amount of rainfall. But it's going to be more on the salt side. So, we used to get -- when we had bulkers up there -- not that bulk berth isn't there -- we would often see their surveyors out there, and we'd always ask them hey, what's your salinity. And it might be .018 or something like that. But it may not be pure. But it's certainly going to be pure in the sound, you know, where we were.

LCDR [redacted] Okay. Thank you. I'm done.

MR. FLAHERTY: All right. If nobody has any further questions, we'll conclude. I -- oh, you have one?

BY MR. LEDET:

Q. I do. Yeah, I do. I'd like to just ask you these -- Les Ledet, U.S. Coast Guard. The PPU that you use -- is that your PPU there, Captain?

A. This is the one I use.

Q. Yeah. Is that a personal, or is that association PPU unit? Who owns that?

A. The actual tablet that's in here --
Q. Yeah.
A. -- and the case that it's in, we as pilots individually purchase those. So, each person can choose which size screen they want and waterproof case and so forth. And the antennas that are used in conjunction with this, and the software that it has, which is CIQ, are the industry standard gold Trello board, ROTs and CAT 1s. So, those are owned by pilots.
Q. So, the program that you use -- the system you're using is trailboard?
A. The software we use is CIQ.
Q. Okay.
A. And it's utilizing data from Trello board.
Q. Okay.
A. And that is one of the more accepted within our industry. Numerous associations use that, and it's maintained and we have all been trained by the CIQ. We all have certificates in that, and we maintain the units appropriately.
Q. And routine updates are done --
A. Yes.
Q. Do you know when they come --
A. Every time there's an update.
Q. Every time. Okay. One final question. At the time of the incident, how far off would you say you were between you and the other -- the inbound ship?

A. He is just turning into the sound I was just turning into the sound.

UNIDENTIFIED SPEAKER: So, three miles? Is that --

MR. TENNANT: No, no. It -- no, it -- you know, it would be a little over a mile.

MR. LEDET: About a mile?

MR. TENNANT: Yeah.

MR. LEDET: A mile in distance between each other.

MR. TENNANT: Yeah. Perhaps a mile and a half.

MR. LEDET: Thank you.

MR. GILSENAN: I just have one thing to add. Ryan Gilsenan for the pilots. We've agreed, you know, in full cooperation, of course, to turn in Captain Tennant's PPU to the Coast Guard for the Coast Guard is going to copy the data on there and -- with the understanding that the Coast Guard will return the PPU --

UNIDENTIFIED SPEAKER: Correct.

MR. GILSENAN: -- to Captain Tennant as soon as possible.

UNIDENTIFIED SPEAKER: Yeah. And in fact, we will let you hang onto it a little bit longer. We still are trying to negotiate how to make that copy.

MR. GILSENAN: Okay.

UNIDENTIFIED SPEAKER: So, you guys can retain it until we have a set plan, so we can get it FedExed and back to you as soon as possible.

MR. GILSENAN: Great. Thank you.

MR. TENNANT: Got you. Appreciate that.

UNIDENTIFIED SPEAKER: No problem.

MR. FLAHERTY: Everybody finished?

UNIDENTIFIED SPEAKER: Yes, sir.

MR. FLAHERTY: Okay. This concludes the interview of --

MR. TENNANT: Jonathan Tennant.

MR. FLAHERTY: -- the pilot. Thank you for your time.

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	CAPSIZING/SINKING OF THE *GOLDEN RAY* IN THE BRUNSWICK RIVER, GEORGIA, ON SEPTEMBER 8, 2019 Interview of Jonathan Tennant
ACCIDENT NO.:	DCA19FM048
PLACE:	
DATE:	September 10, 2019

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]

Jane W. Gilliam
Transcriber