NATIONAL TRANSPORTATION SAFETY BOARD

IN RE:	
THE EL FARO INCIDENT OFF THE COAST OF THE BAHAMAS ON OCTOBER 1, 2015	NTSB Accident No. DCA16MM001

INTERVIEW OF: CHRIS LEVESQUE, FIRST ENGINEER

Thursday,
October 8, 2015

Jacksonville, Florida

BEFORE:

BRIAN YOUNG, NTSB
JIM FISKER-ANDERSEN, TOTE Services
LOUIS O'DONNELL, ABS
[redacted] U.S. Coast Guard
[redacted] U.S. Coast Guard

PRESENT ON BEHALF OF THE INTERVIEWEE:

MIKE TANNER, ESQ., Tanner Bishop

This transcript was produced from audio provided by the National Transportation Safety Board.

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

(4:18 p.m.)

MR. YOUNG: The recorder is on. We're going to go around the room, introduce ourselves. We'll verify that it's being recorded, just to let you know. And if you would approve of that.

MR. LEVESQUE: That's fine.

MR. YOUNG: It is 1418 on Thursday, October 8th. This Brian Young, the engineering group chairman from the National Transportation Safety Board, conducting an interview in Jacksonville, Florida of the first engineer. And we'll go around the room, everybody introduce themselves. And at the end I'll have you, Chris, introduce yourself and spell your name.

MR. O'DONNELL: Louis O'Donnell, system chief, ABS.

[redacted] [redacted] U.S. Coast Guard. I'm here with (inaudible) with the engineering work group.

MR. FISKER-ANDERSON: Jim Fisker-Anderson, TOTE Services. I'm with the engineering group.

MR. TANNER: I'm Mike Tanner, counsel for Mr. Levesque.

MR. LEVESQUE: Chris Levesque. My name's

spelled C-H-R-I-S, Levesque, L-E-V-E-S-Q-U-E.

MR. YOUNG: Okay. Again, thank you, Chris, for coming down here. We appreciate your time. If you would just start out and give us a little background on your maritime training and your sailing history? And tell us about how long you've been working for TOTE and aboard the El Faro.

MR. LEVESQUE: All right. I graduated in 1995 from Maine Maritime. From there I worked for Mobil Oil, Foreign Flag Fleet for year on VLCCs, two ships, the Magnolia and the MV Hawk (phonetic).

From there I started working at U.S. flag companies being transportation for about a year, year and a half on the T-2 tankers. The company folded. And then that's when I got into the AMO union.

First job on there was breaking out the Petersburg, move it to Alabama. Brought it to (inaudible). Then eventually they went for FOS and brought it over to Guam.

Before we went to Guam we stopped off at Korea and did operations. Went to Guam. I was there for, I can't remember how long, a year, two years maybe, if that. And then from there I went to the Veeda ship (phonetic), the MV Magnolia, no Donna Sholes (phonetic), I'm sorry, Donna Sholes for Veeda.

And then I stopped shipping for four years. The first year I worked for a midsized general contracting company. And then the next three years I owned and operated with a partner a small HVAC company. And then from there I went back to shipping, 2004.

And I started my shipping career again on the Northern Lights, the SS Northern Lights, which is now the El Faro. And so I've been on that ship off and on. But I was on the ship all the way up to they converted it to SeaStar, to the El Faro. Did a few more years.

And then I went to the Flipper Tail, SS Flipper Tail, which is a grain ship in Norfolk, Virginia. Did that for about six months, and then came back to Sea Star, and worked on the El Morro. I was on that until they scrapped it. Brought the ship down to Brownsville, Texas, and left. And from there went back on the El Faro. And been on that ship every since.

MR. YOUNG: Can you give us a ball park time when you got back on the El Faro?

MR. LEVESQUE: Back on the El Faro?

MR. YOUNG: When you came back and started working on the El Faro, after the El Morro. Just so we can gauge how long you've been working on that ship.

MR. LEVESQUE: You know, I can't think of

the year. Let me see. I'm just guessing. I mean, let me see, before I was on the ship I was on the El Faro when we were going overseas to the Persian Gulf. I mean, on the, can't even think of the name now.

When the ship was the Northern Lights it was on the, going to Persian Gulf. Then we converted it. It was '06 maybe, '07. I don't, I wouldn't quote me on that. And then was on it for two, maybe 2008 I was in Norfolk for six months. And then I came back to the El Morro. And then from there I've been on it ever since, these ponce (phonetic) class ships.

MR. YOUNG: So it's been years?

MR. LEVESQUE: Oh yes.

MR. YOUNG: Okay. And have you held various positions aboard the El Faro?

MR. LEVESQUE: Oh, yes. I was on Northern Lights when I was a third, second. And then when the ship was the El Faro I got bumped up to first, and been sailing first on it, you know, since I've been sailing first on the two ships.

(off microphone comment)

MR. YOUNG: Okay. And just going way back in time to your time at Maine Maritime Academy, how did you receive any steam training at the college?

MR. LEVESQUE: Oh, we had a training ship, a

steam ship.

MR. YOUNG: It was a steam ship back then?

MR. LEVESQUE: It was a steam ship back them. And then I did cadet shipping. I worked the, on the Marine Chemist (phonetic). Also, my one, my first year at school, that winter, that Christmas, all day I did my vacation on the Westward Venture.

MR. YOUNG: As a cadet?

MR. LEVESQUE: As a cadet. And then we did the Marine Chemist as a cadet. And then a training ship. Two tours on the training ship. Four months on the Marine Chemist, and a few weeks on the Westward Venture, all as a cadet.

MR. YOUNG: Okay.

MR. LEVESQUE: And then my first ship out -- Well, then, yes, my first ship out was a steam ship. It was the, oh shit, I can't remember the name. It was the ship (inaudible). And I was on the MV Hawk. Oh, it was the Magnolia. It was the SS Magnolia was the first steam ship I sailed on on my license.

And then the second ship was a motor ship, which was the Hawk, MV Hawk. And then I went to the steam transportation, which were both steam ships. Well, I was on the, I think the Guadalupe was a steam ship. And I was on another steam ship. I can't

remember the name.

And then went to Petersburg, which was a steam ship. And then from there I went to the MV Donna Sholes, which was a motor ship. And then from there I went ashore for four years. And then came back, and been on steam ships ever since.

MR. YOUNG: That's a lot of steam time.

MR. LEVESQUE: Yes. I'm a dinosaur.

MR. YOUNG: So what license do you currently hold?

MR. LEVESQUE: Chief in Steam, First in Diesel.

MR. YOUNG: (Inaudible). Have you ever sailed chief?

MR. LEVESQUE: No.

MR. YOUNG: That's great. Thank you for that background.

MR. O'DONNELL: Excuse me. For the record (inaudible) has asked that Al come back in and attend this interview. So he'll be coming back in (inaudible).

MR. YOUNG: Okay.

MR. O'DONNELL: Okay.

MR. YOUNG: Sounds good. Okay. Now, getting into your position as first engineer aboard the

El Faro. Can you describe your daily routine and your job description as a first engineer aboard the El Faro?

MR. LEVESQUE: Daily routine was any preventive maintenance needed in the engine room. Then any immediate attention to any equipment or issues that would prevent the operation of the plant. And then I had to prioritize.

MR. YOUNG: And was a lot of preventive maintenance based on your PMS, your AMO system?

MR. LEVESQUE: Correct.

MR. YOUNG: And are you responsible for monitoring it and entering the maintenance --

MR. LEVESQUE: Yes, I am.

MR. YOUNG: -- from all the guys in your crew? Or any of the engineers?

MR. LEVESQUE: First down. Anybody, for me, anybody below me, any jobs that came up on AMOS I would have to, you know, clear.

MR. YOUNG: I see.

MR. LEVESQUE: Or if the job came up, and then I would, you know, say active. And then I'd clear it once the job was done.

MR. YOUNG: Okay. And would you put a description of the job?

MR. LEVESQUE: Yes.

MR. YOUNG: You'd type that up too? And none of the lower engineers would have access into AMOS to do that?

MR. LEVESQUE: No.

MR. YOUNG: No. That's a lot of maintenance to put in.

MR. LEVESQUE: Yes. I mean, some jobs are simple, you know, like greasing a bearing, or something like that. And other jobs are, a lot of jobs are redundant, a lot of redundancy jobs. So it was completed and what you did.

And, but anytime the, anything beyond what was a normal PM we, you know, give a good description of what you did, you know. So, I mean, you know, you had issues with a piece of equipment, you had to change out a part, you know, describe what you did and what happened, cause and effect.

MR. YOUNG: So would you say the maintenance system, AMOS, is pretty well documented with maintenance and actions performed?

MR. LEVESQUE: Correct.

MR. YOUNG: Okay. Did, other than AMOS, did you keep any other sort of record of maintenance or jobs completed on the ship, in any other form of documentation?

MR. LEVESQUE: No, if you want to count your overtime sheet. But that's, you know. Other than that any maintenance done in the engine room was in AMOS.

MR. YOUNG: Oh, it was in AMOS?

MR. LEVESQUE: Yes.

MR. YOUNG: And was AMOS available and used on the El Faro from the time you started? Or were there any other systems?

MR. LEVESQUE: There, on the El Faro it was AMOS. Yes, all AMOS.

MR. YOUNG: Always AMOS? And would you use AMOS also to order parts?

MR. LEVESQUE: No. AMOS was, parts were ordered through, well, no, well, parts were ordered -- Well the chief ordered the parts. But, no, I'm sorry. I'm just thinking of something else. No. Parts were ordered through AMOS.

MR. YOUNG: Okay. And would you, are you responsible for ordering parts?

MR. LEVESQUE: Mainly the chief would do that. He would order the parts. I would, you know, indicate what parts I used. And then he would, you know, order any parts that were necessary, and consumables. And, you know, depending on what you needed it was entered in certain areas of the AMOS.

MR. YOUNG: Right. I took it that the chief would do the ordering?

MR. LEVESQUE: Mm hmm.

MR. YOUNG: Okay. And what about receiving? Would that --

MR. LEVESQUE: Receiving, most of the time he would do it. Because I worked with Jimmy most of the time. So receive, I would either check in, or he would check in the parts received. And then he'd clear it on AMOS.

MR. YOUNG: Okay. When it comes to maintenance coming due, and the work orders, would you, how would you prioritize your work for the department? And how would you know if there was anything overdue?

MR. LEVESQUE: Well, AMOS would indicate, because you would, a date would come up on it, you know, a due date. And then there would be in chronological order on the dates. And you would see if it was pending or due, or it was clear, you know.

And then I would prioritize by that, based off of what was actually going on in the engine room at the time, if we had other maintenance, like bigger jobs. Like, there was a lot of small jobs I would dictate to all the, you know, junior engineers.

If we had something big where everybody was

included, like cleaning a boiler, or doing condenser work, or some other type of maintenance, or a problem we had in the engine room, then I'd have to prioritize as such.

MR. YOUNG: And if a job didn't get done, and became further and further overdue, is there any way you could defer it and cancel the job?

MR. LEVESQUE: No. We'd have to do it. I mean, you would normally not defer jobs. They're there for a reason. So, I mean, if it got pushed back you would, if it's that late you would have to, you know, you'd clear it, you would do the job, clear it.

And then, you know, it would ask you why. Because something would come up saying why was the job not done on time. And you'd have to give a reason (inaudible).

MR. YOUNG: Okay. Okay. And now, are you aware of -- I know you've been off for a few months. But any outstanding jobs that were left outstanding when you left the ship?

MR. LEVESQUE: Well, there was jobs on there when the ship was laid up. And there was jobs that were years, you know, a couple of years old that weren't cleared. And they were just still on there.

And I didn't, I mean, I'm not supposed to

clear those. And we just, it was a few, some PMs. But stuff that was like done by outside contractors. Or stuff that had to have been, you know, with time up for inspection.

But nothing that serious that would affect the operation of the ship, I feel. I mean, if it was it would have been done. You know, they don't, those are there for a reason. If something did happen and they'd look, there would be negligence (inaudible).

MR. YOUNG: Okay. So you feel like AMOS was pretty well up to date?

MR. LEVESQUE: Yes.

MR. YOUNG: With the maintenance?

MR. LEVESQUE: Oh, yes.

MR. YOUNG: Okay.

MR. LEVESQUE: From the time they activated it, reactivated the ship, all the maintenance pretty much was done.

MR. YOUNG: Okay. So what we'll do is, when we're discussing a topic, and after I'm exhausted with my questions, I'm going to pass around the room and see if any of the other group people have any questions regarding this topic. Then we'll move on to something else. Okay. Anything new with AMOS, maintenance, his background?

MR. O'DONNELL: No. It seems like (inaudible) -- Lou O'Donnell with ABS. A lot of steam experience. You talk about big jobs in the engine room, like when you get everybody together.

MR. LEVESQUE: Yes. If we have --

MR. O'DONNELL: (Inaudible) main engine work, things like that, turbines, have a big generator work, like cleaning the generator, or something like that. Or --

MR. LEVESQUE: Well, something (inaudible).

MR. O'DONNELL: Yes, okay. Okay. Did you guys have any trouble with any of those, you know, and AMOS tying into the, you know, I guess the SMS onboard, or anything like that? I imagine some of your job descriptions, some of the things you guys did for PM came straight from your SMS as well, correct?

MR. LEVESQUE: Yes. But that was all done, like the jobs would dictate, would show who was in charge of delegating that job. It would be like the first engineer for, it would be either for the first, third, second, depending on what job was entailed.

And all the SMS was for the mate, you know. They would clear all that. I mean, I wouldn't even open it. Because that was his responsibility.

MR. O'DONNELL: Okay. And what about like

your junior engineers, your second and third? When you got a new second or third onboard did you do any familiarization with them?

MR. LEVESQUE: Absolutely.

MR. O'DONNELL: Yes, yes.

MR. LEVESQUE: Absolutely.

MR. O'DONNELL: Maybe spend a first watch with them, or something like that to --

MR. LEVESQUE: If it needed --

MR. O'DONNELL: -- make sure, you know, they were just, until they were comfortable and knew where everything was?

MR. LEVESQUE: It depended on the experience and how he felt.

MR. O'DONNELL: Yes.

MR. LEVESQUE: How we felt talking to him. And a good, the thirds, or the seconds, they stand a 48 watch. So, you know, the first, if we're leaving port they're usually standing watch. So he can get an idea. Then if he needed to then we would stand with him. But we, the seconds that were on there were all, they'd been on the ship for awhile.

MR. O'DONNELL: Yes.

MR. LEVESQUE: We, you know, with Howie (phonetic) that was on there, he was on for years. And

then Noman (phonetic), Noman who just passed away on the ship there, he's been sailing second for a number of years.

And then second Mike Brennan (phonetic), he was sailing third. And then when I came on, and he was getting bumped up, he had a whole, you know, a notebook full of notes from the second training him to become his job.

And then when he was sailing, when he -- Not so much the watch. But it's the operation of the boilers, and the day to day function of the boilers. I was with him. And then when I felt confident he was fine, you know, I let him be, especially with feeling. I mean, he tested water, blow in tubes.

MR. O'DONNELL: So, very much sounds to me like there was a good trickle down effect from chief on down, you know, regarding probably the first giving you some guidance. And then, you know, the guys, when they see the guys coming to move up, you know, third to a second, there is kind of --

MR. LEVESQUE: Well, it was --

MR. O'DONNELL: -- a lot of good OJT going on --

MR. LEVESQUE: Yes.

MR. O'DONNELL: -- from the actual people

doing the job.

MR. LEVESQUE: When it happened. Because it was rare to see a third go to second.

MR. O'DONNELL: Yes.

MR. LEVESQUE: Because seconds never left. You know, we've all been, you know, me, I've been on there so many years. And then with the seconds, they were fine. So we just kind of like had a routine.

And everybody knew their job. So we had a lot of trust in that respect. And then when Mike got bumped up we were very happy. And he took the job and did great. So we were very happy. I was very happy with him.

MR. O'DONNELL: Good. Okay, thank you. I'm through with questions.

[redacted] [redacted] with the Coast Guard. To expand a little bit on what Brian asked you about. Outside of AMOS did you have anywhere else that you kept records, like a notebook or a laptop, or anything, personally? With what was going on?

MR. LEVESQUE: Any work that was done, well, no, I'm sorry. There was a daily record I would keep on my computer in the office. And at the time --

[redacted] Okay. Do you have that computer now? Or did it stay --

MR. LEVESQUE: Oh, it was on the ship.

[redacted] It was on the ship.

MR. LEVESQUE: That was for, you know, any records I, you know, it was on a daily, every day, you know, we were putting in the stuff we did. And it was more like a -- Well, little things.

But the main things was put in AMOS. And then you would just kind of have a redundancy on the computer, just to have another avenue to look at. And then at the end of your tour you wrote your turnover notes. And then you kind of consolidate everything.

[redacted] Yes. Was there any major maintenance from, that was scheduled maintenance from AMOS that was due to be performed in the near future, or had been performed recently?

MR. LEVESQUE: I can't recall. You know, I mean, you mean when I left was there any pending maintenance coming up?

[redacted] Yes. Was there any major maintenance projects that were in the near future that were coming up, that were coming due? Or anything that had been done recently that you would consider major? Not like just routine minor maintenance.

MR. LEVESQUE: The trouble with, I'm trying to recall, I mean, I can't recall what AMOS was saying

when I got off. Like, we, there's, they do boiler cleanings once a tour. Like a chief does a boiler cleaning, both boilers cleaned once a tour. Main condenser is cleaned. Those are big jobs (inaudible).

They had, you know, I know they had a boiler inspection coming up with (inaudible). They were coming to look at the boilers, because they had questions about the tubes on there. Because the boiler front started bowing out.

And, you know, they were trying to get, you know, what the repairs needed to be done when the ship was going in the yard. But other than that, anything major coming up, no, not that I can recall.

[redacted] Thank you.

MR. FISKER-ANDERSON: No questions.

MR. YOUNG: No. Good. Just to introduce, that's Tom Roth-Roffy, he's our investigator in charge for our investigation. So he's my boss. So we are talking about notes and maintenance records, turnover notes. Are you required to leave a set of turnover notes after every rotation?

MR. LEVESQUE: Yes.

MR. YOUNG: Are they required to be sent into the office?

MR. LEVESQUE: Yes.

MR. YOUNG: And --

MR. LEVESQUE: Well, my notes? I know the chief's notes should be in. Mine are kept in the chief's office for his record. I make a copy. It's on the computer. One, you know, hard copy on the computer, and then I make a copy for my relief. And then I give another copy to the chief.

MR. YOUNG: Okay. And is it a standard format or a template that you fill out? Or is it --

MR. LEVESQUE: Yes.

MR. YOUNG: Okay. Company provided?

MR. LEVESQUE: No. We just go by what was, you know, done previously. It's not an actual formatted piece of paper. We just kind of, you know, list the equipment and any repairs that, you know, the highlights of the repairs, anything major.

You know, any of the small PMs, or any stuff like, you know, like greasing a bearing and stuff, it's not in there. Anything that him coming on that he should be aware that this maintenance, this repair was done.

Not so much maintenance, but repairs. So he has an idea of where, when coming on, and seeing that, oh, there was an issue with this again. So they just did a repair. And, you know, and make them easier to

assess a situation.

MR. YOUNG: Okay. Your relief, have you guys been based on the job for awhile? Or is this one of the first times?

MR. LEVESQUE: Two tours he did. He just got bumped up to first, Keith. This was his, I think his second or third, I think it's second tour, second or third tour as first.

MR. YOUNG: As first?

MR. LEVESQUE: Yes.

MR. YOUNG: But prior to that he was second in the boiler section?

MR. LEVESQUE: Second on the, yes.

MR. YOUNG: Before him there was another first obviously, before he was bumped up.

MR. LEVESQUE: Yes, Derrick, Derrick Mendow (phonetic).

MR. YOUNG: Okay.

MR. LEVESQUE: Oh, and, well I've -- No, Matt Campbell (phonetic). I'm sorry. Matt Campbell, yes, he came on. When I first was, when I came back to the El Morro, Derrick Mendow was sailing first. And then he left and Matt Campbell came over. And then we were base balling (phonetic) for a couple of trips. And then he went over to the Elionka (phonetic) as

chief.

MR. YOUNG: As chief, okay. Were there any other firsts or chiefs that left El Faro due to either quitting or being fired?

MR. LEVESQUE: I think, well they, yes, there's a number of firsts on there. I need to think back here. The names. Ask me out in the hallway I'd probably remember. Can't remember. Can't remember the names now, (inaudible).

Yes, there was one first I know of got fired. But not because of him directly. It was mismanagement of someone. Because of, I think he sprayed the main circ down. The guy, he was wiping, he was washing and he sprayed the main circ down and shorted it out. But that wasn't, that was, he was a manager (inaudible) watching him.

MR. YOUNG: Okay.

MR. LEVESQUE: But that's what I heard. It's hearsay so, I'm sorry. That's my understanding at the time.

MR. YOUNG: Okay.

MR. LEVESQUE: Firsts, I can't think of any right now.

MR. YOUNG: But as of late, you and the other first have been based on the job for the past few

trips, last two trips?

MR. LEVESQUE: Mm hmm.

MR. YOUNG: Okay. Any issues with your turnovers? Or is it a smooth transition?

MR. LEVESQUE: It's a smooth transition. I mean, I've been on the ship for years. So basically it's like, give me the highlights. I mean, if it's, it's in your, I mean, it's in your notes. And basically you're going to talk about anything that's immediately going on Like, we just put the boiler back on. We did a boiler wash. So that's good. We're ready to go.

Or there's something, a repair going on right now, you know, make you up, bring you up to speed, then you go down and help finish the job, or watch contractors finish it. And then make sure we're on time. So everything's tested, and then we can leave.

MR. YOUNG: And you were due back the next 13th, October 13th?

MR. LEVESQUE: October 13th, yes.

MR. YOUNG: On your rotation did you typically work with, which chief did you typically work with? Did you have more time with one than the other?

MR. LEVESQUE: James Robinson.

MR. YOUNG: And he's off duty now, right?

MR. LEVESQUE: Yes.

MR. YOUNG: Okay. How was your relationship with your chief?

MR. YOUNG: Jimmy, you got to build up trust with him. But after that he, you know, let's you be first. He doesn't micro manage, you know. But if he, you know, if he looks and he sees you're not doing your job then --

Or sometimes, you know, you get busy and things, you know, you kind of lax on something, he'll get on you. But bottom line, his first concern is safety of the ship, you know. Because he knows that -- Or even, you know, just anything, you know.

If you're not up to speed with the equipment, or something like that, you know, things tend to happen. Or, you don't want to be blindsided by, you know, if you had tested this properly. Not tested, but if you'd done stuff on time then you'll be able to catch it early. But no, he was a good chief, solid chief, I mean, someone to be in the situation more.

MR. YOUNG: Okay. And how about the other chief, Richard?

MR. LEVESQUE: Rich? He was, Rich was

young. But he was good, he's fair, a good manager, smart guy.

MR. YOUNG: Did you get an opportunity with him much?

MR. LEVESQUE: Oh, yes, I worked with Rich. Actually, we brought it over to the, we brought the Morro over to Brownsville for scrap. Yes, I sailed, it was, I sailed with Jimmy a lot on the, when it was the Northern Lights. And then brought it over.

Now, was that Jimmy? Jimmy was on, Jim came on (inaudible) El Morro. It was someone else I was thinking of. But I sailed, yes I sailed a lot with Rich too when he became first, or chief.

MR. YOUNG: You had a decent relationship with them?

MR. LEVESQUE: Oh, yes.

MR. YOUNG: You feel comfortable working for them?

MR. LEVESQUE: Yes.

MR. YOUNG: And how would you describe Rich's safety culture, and bringing safety to the engine department?

MR. LEVESQUE: Mr. Policy.

MR. YOUNG: I'm sorry.

MR. LEVESQUE: Mr. Policy. He was always

looking at policy, making sure things were done properly. Because he didn't want to, you know, he didn't want to have room for interpretation. It was, you know, what he read for, you know, policy.

And, you know, things needed to be done a certain way, you know. Because it's there for a reason. And he followed it. Yes, he's very involved with the policy. And, you know, policies that the company had.

MR. YOUNG: And when it comes to safety and safety management, were there frequent engine department safety meetings?

MR. LEVESQUE: Frequent safety. We -- Safety meetings? Define frequent.

MR. YOUNG: Monthly.

MR. LEVESQUE: Oh, well, we would -- Let's see, safety.

MR. O'DONNELL: In lieu of this, maybe rephrase your question a little bit. Did you have kind of an all hands every morning with your engine crew, and people starting to work (inaudible)? Kind of have, you know, maybe mix a little work with safety every morning. If you're going to do a big job, kind of lay out the plan on how you want things done. Kind of like mini JSAs, or something like that.

MR. YOUNG: Like tool box talk.

MR. LEVESQUE: Yes.

MR. O'DONNELL: Tool box talk?

MR. LEVESQUE: Well, not so much. Because, I mean, we were on for so long, we just knew what to do. I mean, safety was always there. That was, because, I mean, if you have a lot of new people on there then you would sit there and discuss.

And I would say, hey, this is what we're doing, you know, be aware of this going on, and stuff like that. But a lot of the guys had been doing it for so long we just knew the job was coming up. We'd prep for it, and get the job done. Not as frequent if it was like more of an experienced crew

Because you had people return all the time, an easier flow of jobs without so much getting hard core about the safety. Because we already knew what the safety issues were. And we knew where all the safety equipment was, and how to apply if needed.

MR. YOUNG: Okay. And if, and when you did get a new engineer aboard, how would that be --

MR. LEVESQUE: Oh, I would do an indoctrination.

MR. YOUNG: Okay.

MR. LEVESQUE: There was two books to sign.

It was an indoctrination book from the company that has the company policy. And then you had the chief standing orders. And they would have to, they would, you know, we would take time. Say, take as much time as you want. Read it and discuss with it if you have any questions.

And then I would walk around the engine with him, engine room. Show him all the escapes, the engine call alarms. Trying to help him get familiar with the, you know, our equipment.

But, you know, but he also has to make it, the person coming on has to make the initiative too. You know, you can't always, I mean, give him a basic. But you can't sit there and spoon feed him. Because it's, you know, they need to want to know stuff and learn.

But if they're just going to go in one ear and out the other it's hard. You do your best. But you hope that they're listening. But that was just anybody coming on they had to sign the policy from the company and the standing orders from the chief.

MR. YOUNG: Okay.

MR. LEVESQUE: If you have questions, ask. And, you know, I'd discuss after they got done. Did you understand what you read? And if you have any

questions, ask them.

MR. YOUNG: And was there one set of standing orders from the chief? Or did each position have their own standing orders?

MR. LEVESQUE: One standing order, a book from the chief that both chief's on.

MR. YOUNG: Okay. And that was generic for all the engineers, right? Each of the first, second, thirds, would sign that?

MR. LEVESQUE: Yes. They would all sign it. And, well, they could describe the responsibility that the chief expected the engineers from, you know, from the chief down to me, first, second, and the wipers, and the (inaudible).

MR. YOUNG: Okay. And while we're talking about SMS and everything, while you were issuing jobs to people and looking at the AMOS, were you ever required to do any sort of risk analysis for any of the jobs that you were --

MR. LEVESQUE: Not directly. If it was a standard with the chief, it generally got submitted to the office if the chief, you know, risk management assessment, stuff like that.

MR. YOUNG: Okay. And was your system set up that if a risk assessment value was a certain height

or number, then it would get transmitted to the company, if it had a certain value to it, based on risk?

MR. LEVESQUE: Not that I'm aware of.

MR. YOUNG: Okay. Would all of the risk assessments go to the office?

MR. LEVESQUE: Yes.

MR. YOUNG: Oh, they all would.

MR. LEVESQUE: Yes. They would generate, it would, if something came up and was like something to be aware of, then they would generate it and send it to the office.

MR. YOUNG: Okay.

MR. LEVESQUE: And then there should be a sheet that, I mean, I think they should have a sheet that you see all around the ships that list the, you know, their risk assessment.

So it's kind of like, you know, even if it's, you know, it's good, you know, you're thinking about it. So sure, not each ship is being aware of the safety on the ship. So you'll see that recording. I guess, is that right (inaudible), if I'm not mistaken?

MR. YOUNG: Like a matrix?

MR. LEVESQUE: Not so much a matrix. But it shows you the risk management from, to the ships. I

thought I seen it in the hallway.

MR. FISKER-ANDERSON: Yes, yes. We do, we try to.

MR. YOUNG: And again, we're not trying to put you through an audit. We're just trying to get a picture painted of the pretty much safety culture on the ship using the SMS, and how it was utilized. Good. I'll pass it around the table about SMS.

MR. O'DONNELL: No further questions.

MR. YOUNG: Nothing?

MR. O'DONNELL: No.

MR. YOUNG: All right.

[redacted] In regards to the safety meetings outside of the engineering department. Did you participate in safety meetings as a crew?

MR. LEVESQUE: Oh, absolutely. There was a certain, that was done based off of requirements that we needed so much training in certain areas. I can, a matrix, or something to that. Or if we need, you know, every, you know, depending on what was needed we'd have either a fire and boat drill, then have a safety meeting afterwards.

And they would go over anything from defibrillator to putting on a survival suit, CPR, STDs, you know. Just, but it was based off what needed to be

done. They would always, you know, keep a record of that, keep it up to date.

[redacted] Okay. And do you recall the last audit, internal audit with the safety management system? Were you onboard when that happened with the DPA (phonetic)?

MR. LEVESQUE: I can't remember.

[redacted] Can't remember. How often would you say the DPA visits the ship? And how often do you see them onboard?

MR. LEVESQUE: I can't remember seeing them. I'd have to, maybe it's every six months they audit. I don't know.

[redacted] Outside of the audits did he make it a habit of visiting the ship and --

MR. LEVESQUE: Sometimes I don't really see people. Sometimes I'm busy down below all the time. A lot of times I don't even see people from the office. They usually go to the captain's office.

[redacted] And regarding the safety meeting, I'm good.

MR. YOUNG: Okay. Everybody all set? All right. Thank you. What I wanted to do was change gears a little and get down into the engine room, and maybe go through some of the critical machinery. And

give us a description maybe of certain pieces of equipment such as the boilers.

Let's start with the boilers. If you would maybe give us a little bit of a history of the boilers, how they're running, the maintenance that, outstanding maintenance that may be out there, or anything unique to these, so we can kind of get a better understanding of how these pieces of machinery are operating.

And what we're looking at is, we'll start with the boilers, then the main engines and reduction gear set, the turbo generators, and the emergency generator. Those are the things we're kind of focusing on.

You know, at some point out there the ship lost power, or lost propulsion. We don't know. And again, we're trying to see how these pieces of machinery were operating, and what could have possibly gone wrong. So, if we start with the boilers.

You just give us an overview of how they operate, educate us a little. And then maybe go into any issues that you may have seen over the many years you've been on the ship. So let's start with the boilers.

MR. LEVESQUE: We have two Babcock Wilcock (phonetic) type, D type boilers, 900 pounds, natural

circulation. Three registers in each boiler. Forced air fan for each boiler. And then you have crossover. Maintenance, you know, once a tour with the chief we -- I mean, is that good, enough information about the boilers?

MR. YOUNG: Maybe a little bit of the automation on how it operates?

MR. LEVESQUE: Oh. Well, the automation, well, they were done by Nortek (phonetic), which is the boiler management system. And they were manually fired. They used to have an auto sequence on there, but that wasn't working. Or, yes, it wasn't working.

So everything, fires were done manually. The automation was controlled by TMS for the rest of the plant. But the actual boiler management system was by Nortek, or Norcom (phonetic).

And the boiler fronts, they have air actuated lans (phonetic) with the vasco (phonetic) valves supplying the pneumatic, or the pneumatically operated -- You know, you have your three burners in there that tog in (phonetic) the fuel.

And, but you could, they light in manually. You're refueling steam, I mean, your steam open to your burners at all times. Once, if there's a fire lit, and then when you light the fire, you know, the fuel valve

will open.

Well, you have the igniter that goes in, the fuel will open a light, and then you damper your register doors all open. And then you'll see on your boiler management you'll have a flame in the (inaudible) you have fired.

And if it doesn't light you'll get an alarm. And then you got to try again. Sometimes there's a glitch. But it does, you know, they worked 99 percent of the time.

MR. YOUNG: Maybe safely features of the boiler. What kind of shut downs --

MR. LEVESQUE: What we got --

MR. YOUNG: -- you have.

MR. LEVESQUE: Well, you got four safety valves on the boiler. You got, well actually on the main, on the drum you got two safeties and one pilot safety. And, but the pilot safety will operate, once that operates that opens up the safety at the steam stop.

So you have, you maintain flow through your super heated tubes. So you don't, if you saw the fire in there you don't (inaudible) them. You got soot blowers in there, that they're usually, they're operated twice a day, so you don't accumulate too much

soot, which actually can (inaudible) and can melt down your boiler.

So that uses high pressure steam to blow soot off. And you have your fan running on high. And that will blow out the soot from the stack. You have your, you got to worry about your chemicals in your boiler. And then you monitor that.

You do it for, chlorides start creeping up on you. You got to do periodic surface blows. Then once a month we would do bottom blows to maintain the TDS in the boiler.

What else. Let me see. You'll have a jack if you have an issue with the safeties, and then on upper. And you have a manual jack on there, which is a valve that, it's all tied in by cable, that will lift the lifting arm on your safety valves. And that will release the pressure in the boiler if for some reason that your pressure's creeping up on you. I'm trying to think. I mean --

MR. YOUNG: Maybe some of the features that could shut the boiler down?

MR. LEVESQUE: Well, you have your, if you lost your forced air fans you lose your fires. If your water level got too high you'd lose your fire. Oh, I'm sorry, if your water got too low you'd lose your fires.

And then if it got too high you'd get the alarm. And then you'd have to kill your fires, and then do a surface blow to get the water out. What else is there? I mean, high water, low level, low water level, high water level, loss of fire, high steam pressure, low steam pressure, loss of forced air fan.

MR. YOUNG: If you hit low, low water level --

MR. LEVESQUE: That will kill your fire.

MR. YOUNG: Is there any delay in there?

MR. LEVESQUE: Any delay?

MR. YOUNG: Yes. If the ship is rolling around and you hit a low, low water level, do you know if there's a extended --

MR. LEVESQUE: A timer on it?

MR. YOUNG: Yes.

MR. LEVESQUE: At a low, low, no. It should kill the fires on a low, low. But the low level (inaudible) should have a timer on there. Because you do have a, the ship does roll. And you might get a, you know, the reading where it's at might get a false low for a second, and then clear up. So you (inaudible) timer so you don't have the alarm going off all the time.

MR. YOUNG: Right. But on a low, low you

don't believe that there's a time --

MR. LEVESQUE: (Inaudible) longer ship code fire.

MR. YOUNG: Why not?

MR. LEVESQUE: Because you don't, I mean, that's something, if it gets to that point you don't want to take a chance on melting your boiler down.

MR. YOUNG: Do you know the approximate time of the delay on the low level alarm?

MR. LEVESQUE: Approximate, I mean, I'm thinking eight seconds.

MR. YOUNG: In the many years you've been on the ship have you experienced many, or any problems with any of these boilers, either of these boilers, of note?

MR. LEVESQUE: I'm trying to think right now. Yes, I mean, you could have issues with high super heat. Or carbon building up because of the, you know, your distance isn't set properly in registers.

You know, you get leaky hang hold (phonetic) gaskets in your super heater. Periodic, you know, I mean, I've seen tube leaks in the water tubes in the furnace. But nothing major, I mean. Like, but, I mean, actually, a number of years ago, I mean, those boilers had been retubed. Just, I mean, (inaudible).

I can't, I -- What was the question again?

MR. YOUNG: Have you had any issues with the boilers that they failed?

MR. LEVESQUE: They failed? Define failed. Like, just --

MR. YOUNG: Shut down? Complete shut down?

MR. LEVESQUE: A complete shut down?

MR. YOUNG: Yes.

MR. LEVESQUE: Yes. We, I mean, like, I lost the force draft (phonetic). Well, this was in port, like when I switching from high, the low to high speed on it. Contacts they had closed.

And somehow burnt leads up on the pecker (phonetic) head on the forced draft fan motor. Or was that the Faro or the Morro? No, I think that was the Morro. I'm sorry. The Faro, if they shut down. I can't think of anything right now.

MR. YOUNG: Okay. Thank you. I think I'll pass it around the table. Any other boiler questions, or operation, or maintenance (inaudible)?

MR. O'DONNELL: When you do your -- Sorry, Louis O'Donnell, with ABS. When you seconded his major bar blows, you know, probably, I don't know, once a month, whatever, in port, did you guys test both low and low, low water level sensors when you do that?

MR. LEVESQUE: They were done, because you blow the boiler. Not the low, you get a low level of a --

MR. O'DONNELL: Yes.

MR. LEVESQUE: -- a low alarm because you're blowing both down.

MR. O'DONNELL: Okay. But you wouldn't go all the way down --

MR. LEVESQUE: No.

MR. O'DONNELL: -- to low, low, and test the low, low? Like, physically test the low, low?

MR. LEVESQUE: No, not all the time, no. It was like we --

MR. O'DONNELL: Periodically you would?

MR. LEVESQUE: Periodically.

MR. O'DONNELL: You mean quarterly, or something like --

MR. LEVESQUE: Periodically we would.

MR. O'DONNELL: Yes, okay. Okay. Do you consider the Norcom boiler emission pretty reliable?

MR. LEVESQUE: It was reliable.

MR. O'DONNELL: Yes?

MR. LEVESQUE: I mean, it had its bugs. But, I mean --

MR. O'DONNELL: Yes.

MR. LEVESQUE: It was reliable.

MR. O'DONNELL: Okay.

MR. LEVESQUE: It was older. I'd prefer a more modern system. But it was an older pneumatic. You had the typical hair leaks on the boiler front.

MR. O'DONNELL: Okay. How about your fuel to air ratio, fuel controllers, water level controllers?

MR. LEVESQUE: That was by TMS.

MR. O'DONNELL: TMS, all by TMS? Okay. So the -- Okay. So you had a mix of the TMS and Norcom?

MR. LEVESQUE: Correct.

MR. O'DONNELL: Okay. Okay. You mentioned the boilers were retubed? You said a few years back --

MR. LEVESQUE: I (inaudible).

MR. O'DONNELL: Do you happen to know when the last time the boilers was retubed?

MR. LEVESQUE: I can't remember that.

MR. O'DONNELL: Okay. That's all I have. Thank you.

MR. YOUNG: [redacted].

[redacted] with the Coast Guard. Did you ever have any issues with fuel, with the boiler fuel system, bunkers, or anything like that?

MR. LEVESQUE: You get dirty fuel. I mean,

if you have dirty fuel that's going to effect the fuel system with more periodic cleaning of the strainers, or your fuel heaters getting fouled up.

But the fuel system itself, or your, some, or you would just need, maybe do a cleaning on your fuel regularly, or at your boiler front. But nothing we couldn't, you know, effect the complete operation. Well, it would affect the plant. But you'd have to clean it, you know, regular maintenance done on the system, because if the fuel was bad.

[redacted] Can you briefly just describe to us how the bunker works, what's (inaudible) how the arrangement was for --

MR. LEVESQUE: Well, on the --

[redacted] -- the fuel?

MR. LEVESQUE: Yes, you had, on the Faro you had three inboard double bottoms, and 2 A inboard double bottoms. They were your, you know, storage. And then you had your settler. And when you bunkered you took it on on the port side through an eight inch line. And that would come in.

And you would direct it to wherever, most of the time it was three double bottoms, because that's what they would suck out of. Because they would fuel every week. So they would top those off.

And then we'd top off the settler in the same time. Because they have this, the stand pipe you go through. So while you're filling the double bottoms you're also filling your settler through the stand pipe.

And then the fuel system would take a suction off your settler, and you'd have a high and low suction on that. And then that would come off and go through a suction strainer, go suction strainer, fuel

No, suction strainer, pump, heater, discharge strainer, then it would go to your boiler front through a fuel regulator. And then that would go to your individual burners that we're using.

[redacted] And you normally draw high or low?

MR. LEVESQUE: Normally after low. (Inaudible), you know, I mean, you go off the low. And if you have issues with water in your fuel, or some sort of a suction problem you go to your high.

[redacted] So any oil analysis testing, or anything, that ever --

MR. LEVESQUE: Oh, yes. Every time we take on fuel we get a sample from the barge. And we keep that on for at least six months. And we have it stored down in the engine room, you know, every, you know,

they have it all on a shelf there.

And it's got the label on it, and the ship's stamp, and what company we got the fuel from, all the stats on the fuel. And that, chief keeps all the information in his office.

[redacted] Would you happen to recall the last hydro test on the water, when that was performed?

MR. LEVESQUE: (Inaudible).

[redacted] Were you onboard when it was performed? Don't need an exact date, or anything. Were you there when they did the hydro?

MR. LEVESQUE: I've been on there. The last hydro I -- No, I wasn't on there when they broke the ship. I don't know if they did a hydro when they broke the ship out or not. I don't think they did. But I wasn't on there.

[redacted] Okay.

MR. LEVESQUE: And if I was -- I've been there on hydros. But I can't remember the last time it was done. So I can't answer that correctly.

[redacted] Okay. (Inaudible).

MR. YOUNG: Good, good. You doing all right? You need a break or anything?

MR. LEVESQUE: I'm fine.

MR. YOUNG: Okay. Anything else that you

can remember with the boiler, in terms of describing it, or any sorts of maintenance issues?

MR. LEVESQUE: The only thing I know right, was currently at, was the, you know, (inaudible) had the front water wall tubes. They were starting to bow out. And they were having Walcheck (phonetic) come in do an inspection to see the extent of the repairs needed to get done when the ship was going in the yard.

And all I know is they had to clean the furnaces before they did an inspection. And that was just from a conversation I had with Keith before I was coming back to the ship, why it was done. I mean, other than that the boilers were running fine.

MR. YOUNG: And would you typically run at sea with both boilers?

MR. LEVESQUE: Absolutely. Absolutely. You can't get up to speed, you know, your sea speed without having two boilers. One boiler's only going to operate around 80, maybe 85, 90 rpm, depending on the load on the ship. (Inaudible) you'd only go to one boiler.

If we were going northbound to Jacksonville, we're cleaning one boiler at sea, we'd go down to one, you know, we'd have one boiler on line, and maintain 85 rpm, 84 rpm. And then until we got done cleaning. And then we'd dry it out and put it back on line before we

get into port, before we maneuver.

And we would never come, unless it was -- I can't even think of an emergency. We would never come into port on one boiler, I mean, if we could help it.

[redacted] Right.

MR. LEVESQUE: If the boiler's ready to go on line we'd have that on line at all -- Both boilers are on line at all times, unless we was doing a cleaning, or some other situation where we, prevented us putting it on line. But most of the time that I can recall the boilers were on line as needed.

MR. YOUNG: If you can do 85 rpm on one boiler, what could you, what would your speed be on two?

MR. LEVESQUE: On what, two?

MR. YOUNG: Two boilers, yes.

MR. LEVESQUE: We could do 120, I mean 122. That speed varies depending on the load on the ship. How much, you know, our drafts, and what's, you know, what's the weather conditions, how fast you can do. But normally we do about 118.

MR. YOUNG: 118?

MR. LEVESQUE: 118 going southbound. Could be a little bit fast, what we can get out of the blowers. But, you know.

MR. YOUNG: Now, if we could shift from the boilers to the main turbine set and the reduction gear? That may be considered as the propulsion for the ship. Can you give us a brief description of that? And then kind of go through the same thing, if there are any maintenance issues or failures.

MR. LEVESQUE: Maintenance issues? Well --

MR. YOUNG: No. First a description of it.

MR. LEVESQUE: Well, the pure fire's on it all the time. And that's, you know, any water getting in the tube wall, because of (inaudible) steam. But that's on 24 hours a day, unless it's down for a cleaning.

And then you might have a couple of the bubblers indicating flow to your bearings. It might have a small leak. But nothing that could stop the operation of the main unit. Then with it you may have the main turbine. The turbines and the reduction gear, you know, they --

Besides that you don't really mess with them. Because they're, that's the main thought, you know, anybody touching that has to be an experienced turbine guy, to do any inspections on the turbines and the couplings.

But my maintenance, you know, fixing a

gasket leak, or something like that, that was, we could do that. But you'd have to turn the (inaudible) system off. So it's not like an easy fix.

But really, the cost of maintenance is the purifier on the main sump. On the waterside you have the main condenser. And then we, every month, well, depending on the readings, you'd have to clean the -- That would dictate your frequency on the condenser cleaning.

I know before I got off we had one of the expansion joints on the condensate pump suction had a crack in it. So we had to change that out. Any other maintenance, it's, you don't, I mean, maintenance is just cleaning on the condenser.

Then you have a saline system seeing if you have any tube leaks. And if it's not, you're not indicating any alarms, then you should be fine. And then the second, he'll do a, he does a test, a (inaudible) test on the condensate system once a day.

So you're constantly monitoring the salinity in the steam cycle, I mean the water cycle coming when the steam condenses to make sure that your tubes are fine. You have the main --

And then some, greasing the linkage comes up on AMOS, on the throttle. You have greased zinc

(inaudible) fans there. You got to grease that. Then we exercise the manual jacking gear for the throttle. There's hydraulic jacks that are tied on cables on the throttle. You have the head and the stern.

And we just, you know, we pressurize that to lift it up. This one steams off the engine if we're in port. Just to make sure that it is working and you can lift it up. That's like extreme measures when you use that.

Because there's other, another redundancy to direct drive on. But you only goes, that hand jack pumps when you really need to. Then you can go over and jack open a throttle with a pipe, which is (inaudible). I'd say it's a lever that you're able to jack open the throttle if you need to in case of an emergency.

Like if you did have loss of oil, and you need to stop the engine real quick, go over there and open up your stern to stop the ship. Because you don't want to, you know, you only got eight minutes off the --

If you lose lube oil you got eight minutes off your gravity tank to stop the main engine from turning, so you don't wipe out your bearings. Because those bearings, the backup bearings, they don't have

the durability of say regular ball bearings or roller bearings, you know, your backup line bearing.

I mean, it's something that's -- Make sure you always got oil going down your bullseye from your gravity tank. Because if you don't, you're shit out of luck there. What else? (Inaudible). Make sure you steam stop, I mean, you know, your steam, stop and close it, it's shut off.

Make sure it's not leaking (inaudible). And then if it is then you got to make sure that valve is pulled when it's in the yard. They got to refurbish it. I told you about the greases on the linkage. And you exercise it.

Every time I'm taking standby, before I take standby I test the throttle and make sure it works with the direct frog (phonetic) and then the (inaudible). Making sure that the throttle's moving up and down. And what else? You know, exercise the valves as needed, you know.

But the maintenance, it's, [redacted] know, it's self contained. I mean, that's -- But it's not a whole lot of maintenance we do on it. But just the regular greasing and operations of it.

MR. YOUNG: The LUBO (phonetic) system, if you would refresh my memory. It takes suction from the

sump? And is there an electric pump?

MR. LEVESQUE: Yes. There's two electric pumps.

MR. YOUNG: Two electric. Any steam pump --

MR. LEVESQUE: No.

MR. YOUNG: -- backup? And if one of the LUBO pumps is running and loses suction, is the other one on a standby?

MR. LEVESQUE: Well, yes. There's, yes, the other should kick on. Because you have a switch that controls the lead, the lead pump, you know, which one's on the lead. So you have the lead, and the one, the backup. So if the one pump loses pressure, the pressure drops off, first you get an alarm, so low LUBO pressure. Then you have another alarm that will kick on the other pump.

MR. YOUNG: Right.

MR. LEVESQUE: And then that pump will come on. And you got your pressure gauge at the console. You got one for discharge pressure from the pump. And then you got one pressure gauge reading you your throttle.

MR. YOUNG: Okay. And do you know where that pump takes suction from within the reduction gear set?

MR. LEVESQUE: Where exactly?

MR. YOUNG: Whether it's center line, port, starboard?

MR. LEVESQUE: I think it more, because I can see it, probably from the middle, like right near the -- I can see it coming off. And it goes over towards the shaft, and then goes into the sump. So I'd say closer to center line.

MR. YOUNG: Close to center line? And if you lose both pumps, then you have your gravity tank, correct?

MR. LEVESQUE: Yes. That's your last backup for that. You know, that means you got eight minutes to stop those engines from turning.

MR. YOUNG: That's all I've got on the main unit. Go around the room for main unit. He gave you a description and maintenance that was performed. And very little. That's okay. Very little that could go wrong with it. Apparently there's very little maintenance.

MR. LEVESQUE: Well, they're solid generators. And when you do what the frequency of the inspection for the couplings are. And then you have your temperature monitors of your bearings. And then they have a, they check the quality of the oil coming

out of your purifier.

Well, they do oil samples on that, you know, basically based off your LUBO chart, and the cycle of taking samples and sending them to shore to see, have to see how much water's in there, if the purifier's working properly.

MR. PETERSON: Okay. This is Lee Peterson. I got a couple of things maybe you could address, Chris. Good to see you, by the way. Maybe [redacted] could also talk about the, speak to the high speed coupling maintenance, and then, and also the vibration monitor that goes on those units?

MR. LEVESQUE: Yes. I mean, AMOS, we've got a, I think it's, it comes up in an annual inspection. And you look at the, what you do is, you get a contractor comes in, and they assist you. And we pull the, open up, we have to secure the LUBO on the system.

So we go over to the auxiliary plant. And then that allows us to secure the turning gear, shut the steam off to the main unit. And we pull the cover on the HP coupling. And it's inspected. It's cleaned. And we'll make sure that if that coupling's showing signs that the flex coupling isn't --

If you're able to move it then it's a good sign that the (inaudible) coupling is good. So based

off the inspection of the HP, that will affect the inspection on your LP coupling. And the last time we inspected it was clean.

MR. PETERSON: When was that?

MR. LEVESQUE: Oh, I can't remember the date. I can't remember the date.

[redacted] Was it during your last turnover?

MR. LEVESQUE: No, no. This was, I don't know if it was last year. But I was on there. I think I was on the last time they did a coupling. I can't remember the frequency. I thought it was a year, but maybe not. (Inaudible).

But I know, I mean, I remember doing it twice on there. And both times it was good. I mean, I don't think, I haven't seen the -- I mean, if they did the LP they did it in the yard. But the HP's usually really good on that.

And the vibration analysis. Yes, they just did the vibration analysis recently on the ship. I do know that the, you know, the guy, the outside contractor comes in, and he goes around all the motors. And I have to go, you know. He puts the sensors on there, he does his analysis on it, takes the reading.

And we go around to all the equipment that's

running. And then like I swap over the other, you know, the same equipment, so he can do the test and do the report. And there was a little excessive vibration in one of the bearings on the reduction gear. But it wasn't enough to cause an alarm. I think they were going to look at it in the yard maybe.

But, you know, that vibration is huge. Because it will tell you if your bearings are going bad. It's, I mean, it's really, it saves you a lot of headaches down the road. Because if you don't have equipment failing, this type of test, I mean, they give you big heads up on, I mean, forced air fans.

You know, knowing that those bearings, you know, they're showing excessive vibration. You should consider, you know, they'll say consider, or you need to do this based off the extent of the test, or the extent of the readings. But that, those tests will save you a lot of issues down the road.

That and the thermo test too, you know. Like the guy will come down and do a heat reading on all your motors. And they'll show you the hot spots. And, you know, they'll give you the report. And when he's done there's, you know, we go around and correct any issues.

He'll have it rated on the extent of the

severity of the issues. And you address them. And you're not getting motors burning up. You're catching it ahead. So there wasn't a lot of motors burning up. I mean, if it did it was a rarity.

A lot of times we'd always catch it up. We'd do it at the motors, and right at the pecker heads. And then you go to the motor control boxes and do thermo tests on that. And have a picture, and an arrow showing this lead is hot. You need to clean it or address it. And then they were doing that anyway. So --

MR. PETERSON: It's good stuff.

MR. LEVESQUE: That was part, that's part of AMOS too.

MR. YOUNG: This is Bryan Young again, NTSB. Do you know the name of the company that does the vibration analysis, off the top of your head?

MR. LEVESQUE: No.

MR. YOUNG: Okay. Is it the same company that does the thermography --

MR. LEVESQUE: No.

MR. YOUNG: -- or someone else?

MR. LEVESQUE: No.

MR. YOUNG: Okay.

MR. O'DONNELL: Louis O'Donnell, ABS. Just

a couple of quick questions. Do you ever do any, as part of PMs or exercising, emergency maneuvering drills, anything like that, with the --

MR. LEVESQUE: Oh, every time, well, if we're, excuse me. If we were coming in to maneuver, I was a part of doing a stern test before we take arrival.

MR. YOUNG: The standard arrival tests.

MR. LEVESQUE: Yes. I would go, I mean, I would slow down. And then I'd go and start on the throttle.

MR. O'DONNELL: Yes.

MR. LEVESQUE: You'd see the ship slow down, and then I'd bring it back up to speed.

MR. O'DONNELL: Yes.

MR. LEVESQUE: And then I would call back, they would call on the bridge, you ready to do the stern test. Yes. Hang up. Do my test.

MR. O'DONNELL: Yes.

MR. LEVESQUE: Sometimes I would talk to them directly. Or I would call back and say, did you get that? It's good. Yes, we're happy with it.

MR. O'DONNELL: Yes.

MR. LEVESQUE: And then that was it. That was the, you know, the throttle test before --

MR. O'DONNELL: Okay.

MR. LEVESQUE: -- arrival.

MR. O'DONNELL: All right. I apologize. I had to excuse myself for -- I understand you also talked about the TG sets too?

MR. LEVESQUE: Not yet.

MR. O'DONNELL: Oh, okay. Okay. We're just on the main. Do you remember the last time you looked inside the LP casing? Maybe on one of your tours? Was it something --

MR. LEVESQUE: Well I -- No, it's not something you do very often.

MR. O'DONNELL: Yes.

MR. LEVESQUE: If you were, if it was just doing a visual inspection you had someone, a contractor coming to do a visual inspection.

MR. O'DONNELL: Okay.

MR. LEVESQUE: Or you were maybe, open up the LP. That wasn't done too often. I mean, we --

MR. O'DONNELL: Yes.

MR. LEVESQUE: It was done more maybe cooling, maybe to cool something down.

MR. O'DONNELL: Yes. Maybe not when you checked in the condenser, you guys cleaned the condenser, and they didn't check the LP?

MR. LEVESQUE: No. We don't, we wouldn't do that unless it was necessary, because it's hot, you know. It's still hot. And you still, you secure your gland (phonetic) seal. But then, no, we wouldn't touch the LP.

MR. O'DONNELL: Okay.

MR. YOUNG: Going on. [redacted] [redacted] with the Coast Guard. So just, I want to make sure I understand this correctly. You said that the last vibration analysis, or testing you did, indicated that you were on the edge of one of the reduction gear bearings being --

MR. LEVESQUE: Well, it was, it showed signs of excessive vibration. But, you know, it wasn't enough to cause like immediate attention.

[redacted] Right. So you got to, were going to do that most likely --

MR. LEVESQUE: My understanding -- Well, I don't know if they fully had decided to do it in the yard or not. But they were aware of it.

[redacted] It wasn't at the point to where it was --

MR. LEVESQUE: No. It wasn't enough to be --

[redacted] -- other than (inaudible).

MR. LEVESQUE: No. It wasn't setting off,

we didn't have alarms. We weren't bypassing an alarm because we knew it was hot.

[redacted] Right.

MR. LEVESQUE: But we kept -- Bless you.

[redacted] So with regards to the propulsion in its entirety, what, have you been onboard during heavy weather?

MR. LEVESQUE: Yes.

[redacted] So, would (inaudible) with the screw, or anything like that, cause --

MR. LEVESQUE: It would slow down. It wouldn't keep the same speed. You'd slow down because it was just, it was too much weather. You were putting too much stress on the engine.

[redacted] Okay.

MR. LEVESQUE: And so you would slow down. And they would direct it to a point where hopefully you weren't getting too hammered by the sea.

[redacted] You have ever any problem in heavy seas losing suction, or anything?

MR. LEVESQUE: Suction? No.

[redacted] No. Just --

MR. LEVESQUE: That's something I would remember if we lost suction because of heavy seas. Because then you're affecting your throttle. But no.

[redacted] Right. Okay.

MR. O'DONNELL: Excuse me. Lou O'Donnell. But even in heavy seas, if you were taking heavy rolls I know the captain would always probably try to put in ahead sea so you wouldn't be taking rolls. You don't ever recall having a problem with the suction on the main engine?

MR. LEVESQUE: No.

MR. O'DONNELL: Okay. Thank you.

MR. YOUNG: [redacted] go ahead and (inaudible).

[redacted] So, did any of the rolling, or any of the heavy seas have any effect on any of the propulsion equipment that you had to do any type, make any measures, or anything to address?

MR. LEVESQUE: No. I mean, you would, the rolling, if you had anything from the plant or the boilers, I mean, you would like, like if you had a roll or something you might get a low level in your boiler, because it was, you rolled.

But then, you know, the timer was set, maybe the timer was too, it wasn't long enough. Because you have a roll, and the roll might take a little bit longer than others. You might get that one. But, think, think, (inaudible). What, you're asking me what else would be affecting the plant by a roll in heavy

seas?

[redacted] Anything that you're aware of, or any, from your experience on any (inaudible) El Faro. The heavy seas, any systems that would be affected.

MR. LEVESQUE: Oh, okay. The whole, I mean, yes, your LUBO. Not your LUBO, you're fuel. I mean, you can agitate your assembler. You got a lot sitting -- Sometimes depending on the quality of the fuel you get sediment in there.

And that will foul up your suction strainer. And then you get (inaudible) you could foul up your fueler heater. And then foul, I mean, fueler heater might be probably the last things. Because that's a gradual. It's not going to be all of a sudden unless you have real crappy fuel. But the suction --

[redacted] The sediment would.

MR. LEVESQUE: The, well the suction strainer, you would see it in your suction strainer. You know, you have differential gauge there. And it's monitoring your pressure drop across the strainer. And that one would, that could get fouled up.

And then your suction, or your discharge strainer, which is a finer strainer, that one would probably get fouled up quicker than the suction,

because it's a coarse. And then you could see that, if you're at the throttle you can see your fuel pressure gauge.

And the pressure will actually start creeping up because your pressure sensors, entrance at the beginning of the, or the inlet of the strainer. So if your pressure's coming up you know it's getting fouled. You don't have to go down there and look at a differential gauge.

And I usually pass that information to the watch stander if it's anybody new. I'll be saying, watch that. If that starts creeping up it's indicating you got a dirty strainer. And, or also if your suction strainer is getting fouled, your pressure will start dropping off.

But that's, as it got to a point where it's, you actually lost fires because your suction dropped off. You'd catch it because you always should be making rounds every hour. And then you got a gauge down there. And that's cleaned as needed. Usually the second will keep an eye on that. And your discharge drainer is monitored. Well, they're monitored every watch, you know, every hour watch.

[redacted] So if you're in heavy seas for a prolonged period of time, and the sediment becomes an

issue --

MR. LEVESQUE: Got to clean the strainer. And keep it clean.

[redacted] You're just constantly cleaning your strainers --

MR. LEVESQUE: Well yes, depending --

[redacted] -- (inaudible).

MR. LEVESQUE: -- on how the frequency of they're getting fouled up. But yes. There's nothing you can do. The sediment's in the strainer. That's where you're sucking from. And it's not -- I mean, you could probably, maybe --

[redacted] Can you walk us through how you would mitigate that if you were in heavy seas? How would you deal with that situation, specifically this --

MR. LEVESQUE: Well, you --

[redacted] -- in detail.

MR. LEVESQUE: Your sediments, I mean, it's not, I mean, your fuel suction's not taking, it's not like sitting on the bottom of the tank. I mean, you got a space there between the bell mouth and the suction pipe. And you got sediment in your fuel.

[redacted] You said you were taking suction from the low --

MR. LEVESQUE: Yes. You're on your low suction. I mean, usually you only switch over that I've seen, I've only seen it once, when you have water in the fuel. And then you got on to the high suction. And the low suction we stay on all the time.

And then from there you're sucking, you're going into a suction strainer, which is either called your poor strainer or your cold strainer, even though it's hot. But they call it cold because the hot strainer, or the discharge strainer is after the pump, and after the fuel heater.

And then from there you're going to your boiler fronts. And you have your fuel regulator. And then it goes through a quick closing valve. Because that will shut if you have, that will shut if you lose your forced draft fan, or you go a low, low water level.

Something else, I know there's something else. I can't think of it right now. Oh, and if you lose, there's a pressure switch. There's a pressure where it senses loss of fuel pressure. That will actually close the boiler, the closing valve on the boiler front.

But, I mean, those, you're watching your fuel gauges every round, especially in heavy seas, you

know. You're calling down, say, hey guys, make sure you keep an eye on those fuel gauges. Because, you know, if you're not it can creep up on you.

And that's, I mean, basically the maintenance on the fuel system was strainers, making sure your settler temp was 160, approximately 160. And your fuel temperature coming out of your heater was around 225, maybe 230. And then you could see, based off of your automation, how, if your fuel here is getting fouled up.

Because it takes more steam to heat the fuel. The dirtier it is you need more steam to heat that up. And you can see that at the console if you're looking at the TMS or the Yokogawa (phonetic). And those are things you're being aware of.

And so, you're looking at your fuel temp on your settler, the fuel heater, the fuel coming out of your heater and your strainers. You're looking at your fuel pumps. And then you have our fuel pressure at your boiler front.

And based off of what you were doing at sea, you're normally at three burners on each boiler. But if you're maneuvering you're manually operating them, depending on the load on the boiler and the speed of the ship. And then when you get the parts you bring it

up to speed.

Anything after, up to 80 rpm you're on three burners anyway. So you're only down to one or two if you're getting, you know, 60. Yes, 60 rpm you're at two burners. 20 to 40, that's one burner.

[redacted] So the heavy seas the normal rpm would be around 60 rpm to slow it down and --

MR. LEVESQUE: That's the call of the --

[redacted] -- (Inaudible)?

MR. LEVESQUE: That's the call of the chief. Chief, I'm sorry, the captain. The captain dictates the speed. We just got to make sure we can give him the speed. If we can't we have to justify it.

[redacted] Oh.

MR. LEVESQUE: And, you know, we're just the throttle. You know, we're down there, what do you want? We give it to you. And then if it's, we can't give it to you we have to justify it.

[redacted] Okay.

MR. LEVESQUE: Or it's that we're maxed out on the board.

[redacted] For propulsion that's all I have.

MR. O'DONNELL: In the heavy seas when you've had problems, captain, chief, no problem. The

chief tells the captain, I got to slow her down a little bit, go easy on it. Will the captain be pretty cooperative?

MR. LEVESQUE: Absolutely.

MR. O'DONNELL: Yes. Okay.

MR. LEVESQUE: I mean, there's never been an argument between the two about, you know, we need more speed. The chief, he has total, he has the final call on the engine department. And the captain has the final call on the speed and the safety of the ship, you know. Unless it was, I never seen anything where they butted heads like that.

MR. O'DONNELL: So good cooperation between --

MR. LEVESQUE: Yes.

MR. O'DONNELL: -- on that, between the departments with that type of stuff. Okay. Thank you. That's it. That's all I have.

MR. YOUNG: (Inaudible). Good. Are there any shut downs on the main unit that could protect the main unit for shut downs, over speed, trip --

MR. LEVESQUE: Yes, you have an over speed that will, it will trip it. Because you, based off your oil pressure. Your oil pressure, there's the two over speeds in the front that you, for the stern and

for the head.

And those are, well, the head, usually we test it once a month, make sure it's operating. We have to go, you know, probably like 102 rpm, around there. And they you just press a lever. And that basically drops the pressure, oil pressure underneath the oil relay. And then the throttle will close.

I mean, you need the oil pressure to open up the throttle. That's the best lock out on that. If you don't have oil pressure you can't open that throttle. You lose that oil pressure the throttle's going to close. And that's the safety on it. And over speed you do, I mean, you have a manual trip for some reason.

There's a button on the throttle, and if you need an emergency stop you hit that and it will drop the oil pressure, and you'll close the throttle. But it's all self regulating.

For over speeds it will close down based off the, there's over speed relays. And it will affect the oil pressure. It will drop the pressure from the oil relay, slowing down the ship.

MR. YOUNG: Do you know what the head and the stern over speed trips are set at, rpm wise?

MR. LEVESQUE: I can't recall off the top of

my head.

MR. YOUNG: Okay. Now if we could shift our attention the TGs.

MR. LEVESQUE: Sure.

MR. YOUNG: And give us a little description of them, how they're operated, any maintenance, typical maintenance that occurs on them. And then if there's been any maintenance issues.

MR. LEVESQUE: Well, it's just two 2,500 kw generators on there, (inaudible) GE generators. The manual, I mean, maintenance is done on one generator, like the one's on line, the other one's off. Well, that's, one generator's on line all the time for that month.

And the other one is only rolled when we're coming in, when we're maneuvering, or if we need. If it's too much of a load for one generator to handle that, the other boiler will stay on line, and we'll parallel them together to handle the load from the reefer containers. Because that puts extra load on the generator. So if we got too much of a load for one generator to handle we will put the other generator on.

Maintenance is done where you, maintenance done on each generator. Well, depending on if the generator's off line you purify the sump. You pull

the HP coupling. You grease the throttle, change the filters on the generator unit. Should be, change the oil in the (inaudible) governor.

Oh, you grease the LP coupling. Because you have an HP coupling and you have an LP coupling. Because it goes from the turbine. And you have an HP coupling to reduction gear or bull gear. Then it reduces down speed, what you call a low speed coupling. Is that what they call it? Low pressure, I'm sorry, high speed, low speed coupling.

High speed from the unit, the turbine, it's reduced down to a low speed coupling. And that's coupled to the generator. And that's coupling's greased. And you don't open it up, you just grease it by putting grease. You have the coupling hub, you got grease connections on there.

Then you do one hub where you flush it out, where you got good grease coming out on one coupling hub. Then you do the same thing on the other until you get good grease. And then it's done for the [redacted]

The high speed coupling is removed, cleaned, all the, I mean, because that's supposed to be able to move back and forth. Hence, it's called a flexible coupling. And you make sure that the gears are fine, are cleaned, they're not showing excessive wear. It's

purified for -- The LUBO purifier is put on the main sump for 24 hours.

You exercise the throttle, do any inspection on that. Address any steam leaks, like any, like if you need to change the packing on any of the valves. Try to, you know, correct the, you inspect the, off the pump, off the, they got some flex hoses on the LUBO pump.

You inspect those, make sure there isn't any cracks. If they do we have a spare to change those out. And then that's actually put into the, in AMOS, something like that. That's not normal to do every month. That's as needed. Yes. Regular maintenance, any valves as needed.

And then when AMOS comes up on testing any of the trips on there, you know, test that. And then the over speed trip is actually tested. That's how I shut down the generator, you know.

When you're ready to secure a generator you have your over speed trip, which is a panel on the bulkhead there. And what I do is, I just manually trip the over speed, which is a solenoid, drops the pressure off the whole relay. And then I would close the gimbal valve or the main throttle valve.

And that's tested at least, I don't know,

every week. On the boiler that's item for the month. So they're tested frequently. And then I change over at the end of the month. I go to the other boiler, or the other generator, put that on line for the month. And then I do the maintenance for the other generator.

So, you know, it's a constant maintenance on those generators all the time. I know, and when we're coming into port we have, always have one generator on line, obviously. And then the other generator's idle in case you need it in an emergency. And that's left like that until you take departure.

I mean, it's normal to come to port, secure one of the generators, put it back on line, and then secure and come out. You roll the other generator coming in if the (inaudible) engines are still on line. It's a real light load on the boilers.

And then when you leave if the load is too heavy in port, you know it's going to be a heavy load, then we parallel before we leave. And that's normally from Jacksonville. I mean, always from San Juan you're always on one generator. Because you don't have any current leaving Jacksonville.

We've had a lot more cargo on the ship lately. So we've been having to parallel the generators leaving. Leaving it in parallel all the way

down to San Juan. Once we get into San Juan, as soon as we get finished with the engines the load on the board is already enough where I can decouple the generators.

And then it will, through the day as they're off loading the containers you'll see the load on the boiler, or generator start dropping off. And then when we take departure from San Juan I'll secure the idle generator, and then secure it until we get to arrival on the next port, which is Jacksonville.

I'm trying to think. I mean, yes, jacks always, yes. I'm trying to think if I missed anything. Yes, it's a two port run. So, I mean, usually hasn't been the two generators on line leaving Jacksonville.

And then you're going, you know, you have two generators. You push, you know, you're going, you know, depending on, you know, you're doing 118 rpm. You're putting a strong load on the boilers. And then you get down to San Juan. You take arrival, get into port, finish with the engine.

I take one of the generators off the board, leave it idle. And then when we leave San Juan I secure the one generator. And then we're good. We start all over again.

So, maintenance. You know, that's what I do

on a monthly basis for a generator that's idle. And then you have, you know, AMOS comes up with the, you know, sump inspection. Make sure that the, you know, the oil, you're not getting any water in the oil, or sediment, you know.

After, if you get water in your oil then that, you can build and make some sort of a rust inside the sump. And that can build up sediment. So you got to make sure that's working properly. But you got oil samples, you're taking oil samples off the sump.

You know, when, you have a list every month, you take oil samples from certain equipment. And then it goes, they send it ashore. And they get it tested, and tell you that it looks good. Or there's something, obviously there's something wrong with it if the LUBO isn't good. And then you have correct.

So, it's immediate. That's something you have to have, attack, immediately attack. So, that's all I can think of right now, unless you have more of a direct question.

MR. YOUNG: Are you aware of any oil analysis that has returned with any issues that required correction?

MR. LEVESQUE: For the strut?

MR. YOUNG: For the TGs?

MR. LEVESQUE: No. They're usually pretty good.

MR. YOUNG: Okay. How about going back a little bit, for the main unit?

MR. LEVESQUE: It's pretty good. I mean, to me, everything that my, from my recollect the oil samples were pretty good, besides the strut. They were finding a little bit of particles from the bearing, and they were getting fine particles. And that was something, my understanding it was something they were going to address in the yard.

MR. YOUNG: Okay. And were you aware of any failures of the TGs whatsoever over the, your time there, where they secured themselves, shut [redacted] down, failed, any major issues --

MR. LEVESQUE: No, no. That would stick right in my head. Because I'm the only one that touched the generators. Actually, I mean, usually the chief, if he needs it -- My hands are on it the whole time. I mean, I'm paralleling them and I'm unparalleling them all the time. And if they were to trip, I mean, I would (inaudible).

MR. YOUNG: Turbo generators.

MR. O'DONNELL: No. I don't have any other further questions right now. Sounds like you pretty

well covered it. [redacted]

[redacted] Everything with the console, reverse power relay, all that stuff, was all in order, no issues?

MR. LEVESQUE: No issues.

[redacted] Tested?

MR. LEVESQUE: No, like, I mean, I would, you know, if I was uncoupling it I'd (inaudible) would test the reverse relays on it. You know, make sure that, you know, I dropped it, dropped the load on one and see it go down. And wait for the reverse power trip to open the breaker.

[redacted] Again, going back to the heavy weather question. Would there be any adverse effect to the systems as a result of the heavy rolling and pitching of the --

MR. LEVESQUE: On the generators?

[redacted] On the generators. Specific to the generators, is there anything that you can think of that the heavy weather would --

MR. LEVESQUE: Maybe cause and effect. But not direct to the generators. I mean, you might have a little, like the load you might see, you know, hunt a little bit. Because you got two generators, and you're rolling. And they might, you know, fight each other,

you know.

Because, you know, it's not going to hold as steady. But they might fluctuate a little bit. But not anything that the weather would cause an effect on the generators, to trip or do anything direct that I can think of.

[redacted] So, the El Faro is on its way from Jacksonville through Puerto Rico. So they would have been in that configuration where they would have been in that configuration where they would have been parallel (inaudible)?

MR. LEVESQUE: When I was on.

[redacted] When you were on.

MR. LEVESQUE: I don't know what the state was when the ship was there. When I was on, when I left, that's how we were operating, because of the load of the containers. How the ship was when they left this time, I don't know.

[redacted] Okay. I guess that would be determined by how many reefer containers they were carrying?

MALE PARTICIPANT: (Inaudible) itself, yes.

MR. LEVESQUE: Correct.

[redacted] And that's a decision the chief makes? Or is it just a decision that makes itself

because the load's too much for one generator?

MR. LEVESQUE: Basically it's the chief. He'll tell you, because based off the load that -- He knows that, I mean, he already gets, he already knows how many, what containers are going to be on the ship. So he knows that, based off this, off the car (phonetic) that's coming on we're going to need the --

MR. PETERSON: This is Lee Peterson. I heard (inaudible) talking over there that they were talking probably like 230 reefers would have been on this last time.

MR. LEVESQUE: Oh, they would be. Oh, obviously, yes.

MR. PETERSON: And that's, yes.

MR. LEVESQUE: Yes.

[redacted] In other words there would have been --

MR. PETERSON: Yes.

MR. LEVESQUE: Yes. I mean, 190 would have been basic, well 190 --

MR. PETERSON: But they do have a power pack on there though.

MR. LEVESQUE: Yes.

MR. PETERSON: And I'm not sure how that factors in on there.

MR. LEVESQUE: Oh, well, okay --

MR. PETERSON: (Inaudible)?

MR. LEVESQUE: -- they do have -- I don't know the exact number. But because of the extra containers and the load on the generators they had an independent diesel up there that would supply --

[redacted] Right.

MR. LEVESQUE: -- power to the containers, which would isolate it completely from the engine room. They wouldn't be, it would be independent power from the engine room. They would, diesels, you know, diesel generator would supply power to the containers up forward.

[redacted] And that was a, like a containerized module --

MR. LEVESQUE: Yes.

[redacted] -- type generator?

MR. LEVESQUE: Yes. Closed generator.

[redacted] How often did you need to use --

MR. LEVESQUE: They were using it every week.

[redacted] They were?

MR. LEVESQUE: Yes.

[redacted] So the load in the parallel mode, was that ever what you would consider a strain on

the --

MR. LEVESQUE: No.

[redacted] -- (Inaudible) handle?

MR. LEVESQUE: We had plenty of room, plenty of room.

[redacted] Plenty of room.

MR. LEVESQUE: Plenty of room.

[redacted] Okay.

MR. LEVESQUE: That's why, I mean, that's, you know, that's why they had the power pack up for. You weren't putting excessive load on the generators. That took all, a lot of the work stress off the generators, you know. So you had the (inaudible) power pack up front. And because of that we never had problems with the generators.

[redacted] I'm good.

MR. O'DONNELL: Just one more question. I'm sorry, Lou O'Donnell, ABS. The power pack for the reefers is totally isolated from the ship's main bus, correct?

MR. LEVESQUE: Correct.

MR. O'DONNELL: Correct. Okay.

MR. PETERSON: This is Lee Peterson. I'm sorry, I had to step out. But I did, I was wondering, Chris, I can't remember. The over speed trip for the

main unit. Do you recall if that's a trip, or is it a speed limiter?

MR. LEVESQUE: Speed limiter.

MR. PETERSON: Okay.

MR. LEVESQUE: Speed limiter. Because, I know, because I can, because I've tested them. I mean, it doesn't trip it, it slows it down by dropping the, by closing the throttle by dropping the oil off the whole relay.

MR. PETERSON: That's what I was thinking. But I didn't, I was trying to think of --

MR. LEVESQUE: I'm sorry. I may --

MR. PETERSON: -- something --

MR. LEVESQUE: Like they do have trip. There is a trip that drops the pressure, you know. There's a button up there to trip the throttle.

MR. PETERSON: Manual.

MR. LEVESQUE: Yes.

MR. PETERSON: Manual trip.

MR. LEVESQUE: But this is a limiting. That's right. It's a speed --

MR. PETERSON: For the over speed.

MR. LEVESQUE: Yes. But this is speed limiting.

MR. PETERSON: Yes.

MR. LEVESQUE: They'll slow it down.

MR. PETERSON: I was just trying to think if it was something with, in that rougher weather, you know, if your prop came up, you know, if you --

MR. LEVESQUE: But I would think (inaudible) --

[redacted] So if the prop completely came out of the water, and you're steaming ahead at 19 knots --

MR. LEVESQUE: No. They would have --

[redacted] - it would just --

MR. LEVESQUE: -- slowed down by now. They would have slowed down. I mean, that I can --

MR. PETERSON: (Inaudible)?

MR. LEVESQUE: No.

[redacted] It would have just slowed the --

MR. LEVESQUE: It would have slowed it down.

[redacted] It wouldn't have shut it --

MR. LEVESQUE: No. No.

[redacted] Okay. It wouldn't be a situation where over sped and --

MR. LEVESQUE: Unless there was a failure in the speed liminator (phonetic), which should have slowed it. And it would actually come to a point, if it got to extreme it would close the throttle

completely, or to a point where it wouldn't be a danger to the engine. It would slow it down, yes.

[redacted] Okay.

MR. PETERSON: And, this is Lee Peterson again. As you recall, we did go through those over speeds not too long ago, after the Masonian (phonetic) had an issue with their ship where the over speed didn't catch it. So we went through all the SeaStar ships and --

MR. LEVESQUE: That was --

MR. PETERSON: -- (inaudible).

MR. LEVESQUE: That, because I think that because of that was implemented into the PM, or the --

MR. PETERSON: The test over there.

MR. LEVESQUE: Yes, the test. That was part of the preventive maintenance program. Because the oil was sitting in there and stagnant. They weren't exercising it, so the oil was getting dirty in there. So when it would start and trying to operate it wasn't working properly. So we test it. And that keeps the oil fresh inside of the --

MR. PETERSON: It's a dead end. So you don't get a flush to there.

(Off microphone comment)

MR. YOUNG: Okay. And the last area we're

going to look into is the emergency generator. Yes, the same deal. If you can just give us a little description of it, the ball park maintenance that is conducted on it, and any issues with it.

MR. LEVESQUE: On the generator?

MR. YOUNG: Emergency generator, yes.

MR. LEVESQUE: Oh, the emergency generator. The emergency generator, we'd do a tour, and test it once a month. And that's, you know, it's, so we, and then we test, we also -- Well first we do a load test.

But before we, while we're doing the load test we test the automatic bus transfer on there, to make sure that when you show loss of power down off, you know, loss of power -- You simulate loss of power from the main switchboard by opening the bus tie breaker.

And the nav will sense the, the sensor up there will sense loss of power, open up the bus tie there, start the generator. And then it should close the generator breaker. And that's supplying power to the emergency system.

You know, basically it's your lighting system, and supply power to any equipment that's tied into the emergency switchboards and your LUBO pump, your air compressor. And so there's two, the very

final. And then that's done once a month.

And then any other maintenance, basically if the AMOS comes up with changing the fuel filters, we would change the fuel filters, change the oil as needed. Not as needed, but as maintenance was scheduled to do on it. And then, that was pretty much the maintenance I did on it.

Let me think. Oh, you know, so exercise the valves coming from the diesel tank, you know, the suction valve up there, making sure they were open. And you had to cycle that. Then you'd operate your dampers, your air intake dampers, and your exhaust.

You know, you have the air intake to your generator. Then you have the dampers in the floor so you got air circulation on your generator. And then you would, they'd do a weekly maintenance on the batteries.

The electrician, he tests the voltage and the specific gravity in the boiler, make sure that the trickle charge is being maintained in the batteries, or good voltage. And (inaudible) that batteries, the -

Yes, that's what we do currently, like a standard weekly, batteries we check weekly. And then with the generator we do two hour load tests, and test the bus transfer once a month.

MR. YOUNG: Where are the battery records kept?

MR. LEVESQUE: Chief's office.

MR. YOUNG: Are they ever entered into a log book and sent ashore?

MR. LEVESQUE: They, I would think they -- Don't know.

MR. YOUNG: Were they recorded in AMOS? Is that a job in AMOS?

MR. LEVESQUE: Yes. They're recorded in AMOS.

MR. YOUNG: Okay.

MR. LEVESQUE: What were they recorded in? I know, yes, well they were recorded to, I would -- The exact readings, no. The frequency of them done is recorded in AMOS. But the results of the test, like I would put, the batteries were tested this week. Everything was fine based off what the electrician told me. And that the results were given to the chief.

MR. YOUNG: Okay. Does the emergency generator have its own fuel tank?

MR. LEVESQUE: Yes.

MR. YOUNG: Is it contained in the same space?

MR. LEVESQUE: No.

MR. YOUNG: No.

MR. LEVESQUE: Concern -- Well, it's contained in a tank just aft of that. And then they have drop lines that go right in there and feed it.

MR. YOUNG: Okay. And is there a certain level of fuel that is maintained in that tank, as far as you know?

MR. LEVESQUE: Yes. But I can't give you -- Chief would be able to answer you better on that. But yes, there is a certain level they need to maintain at all times on that.

MR. YOUNG: Okay.

MR. LEVESQUE: And I know just before, I know they had just filled it up when I was on there. I can't remember to give the exact date. But that was topped off.

MR. YOUNG: Okay.

MR. LEVESQUE: Because I assisted with the transfer.

MR. YOUNG: And is there a secondary way of starting that generator if the batteries were to fail, or the two sets of batteries? Or is there a hydraulic start?

MR. LEVESQUE: No.

MR. PETERSON: Aren't there two sets of

batteries?

MR. LEVESQUE: Yes.

MR. PETERSON: Yes.

MR. YOUNG: So you could switch between one back and the other bank?

MR. LEVESQUE: (No audible response)

MR. YOUNG: And have you ever had any failure of the emergency generator, where it didn't start, or it wasn't --

MR. LEVESQUE: Awhile ago, back last, was it -- See, now I'm getting confused between the two ships. So, I can't say 100 percent if it was the El Faro or the El Morro. I mean, I want to say the El Faro. But it's, I want to say it was the El Faro we had something wrong with the --

When we tested the diesel on the two hour load test to do the, test the bus transfer, there was an issue with the breaker closing. And we had the contractor, Nortek, come in. They changed out the -- Well, I wasn't there for the following repair. I had just got off.

But they had replaced a part. And then after that it got, it worked perfectly. It was, see, it was a periodic, not periodic, spon -- Not spontaneous, but a intermittent problem. It would

work, and then it didn't. Like one time we had issues with it.

And the, was it ABS was on there, or Coast Guard came on to make sure we -- They were notified. They came on. We got them working. We did the test at least twice for the inspector. He was happy with it, and we were able to leave. Because they weren't going to let us leave without it.

And then it happened again, because we tested it again. That's when they, Norcom came in. Dick Norris (phonetic) came in, and they changed out a part on it. And then --

MR. PETERSON: Was that the -- Lee Peterson. Was that the breaker down in the --

MR. LEVESQUE: It was on the main emergency switchboard.

MR. PETERSON: It was on the emergency switchboard (inaudible).

MR. LEVESQUE: Yes. But then the chief would not, you know, he was there for that repair. Because I know I, he was working. He was actually, they were repairing it when I was paying off. But after that we never had any issues.

You know, that's why we're kind of, you know, it's just, it's never had any issues. So it's

always been flawless. But then that came up. And it was, you know, the issue was corrected. And then we haven't had any issues after that.

MR. YOUNG: And do you know off the top of your head, it's a tough question, but do you know what degree of list that emergency generator is designed to operate at?

MR. LEVESQUE: No.

MR. YOUNG: Okay. Okay, emergency generator, anybody?

MR. O'DONNELL: Just confirming the location of the fuel tank. It's not exposed to weather, the emergency diesel fuel tank, is it?

MR. PETERSON: Yes.

MR. LEVESQUE: Yes. It's, well, it's the, located near the elevator shaft. So it's back aft. And it's exposed. And --

MR. O'DONNELL: Outside exposed. Okay.

MR. LEVESQUE: Yes. But it's like kind of tied into where the elevator shaft is.

MR. O'DONNELL: Okay.

MR. LEVESQUE: And then we can take a (inaudible) off the tank on the engineering deck.

MR. O'DONNELL: Yes. Outside the EEG space?

MR. LEVESQUE: Correct.

MR. O'DONNELL: Okay. No further questions. [redacted] [redacted] with the Coast Guard. The test that you do every month, can you just give us a description of exactly -- You said you would drop the bus.

MR. LEVESQUE: Oh, okay. Normally --

[redacted] (Inaudible) tell me what --

MR. LEVESQUE: Okay. The test is between me and the chief.

[redacted] Okay.

MR. LEVESQUE: And I would go down to the engine room, the chief would be up in the emergency diesel generator room. He'd call down. And after he checked the oil level, everything was working, the dampers, and he was happy with it and ready to start, he'd call down and say, all right, open the bus tie.

And I would repeat back to him, open the bus tie. And I'd hang up the phone. I'd walk over to the emergency switchboard, make sure I was looking at the right breaker. Because I didn't want to open up the wrong breaker.

Then I would say, bus tie. Because you had the breaker, the switchboard here, and then the breaker was down here. So I'd go to open it, and open that bus tie. We'd lose the emergency lighting down in the

engine room.

I would also, before I'd do that I would tell the engineer on watch we were doing a test. And he would be with me the whole time. So I would open up the bus tie, we'd lose lights. And after a few seconds the lights would come back on, indicating that the bus, the automatic but transfer system worked, the generator was supplying to, the emergency diesel generator was supplying power to the emergency lighter.

From that on we would run it for two hours, do a two hour load test. And then when we were done the chief, you know, I would talk to the chief. Everything good? We're good down here.

Any of the pumps -- I would make sure, before we do the test, normally if we have a pump that was running off the emergency circuit, to save us from having to restart it I'd always swap over, like say the LUBO pump. So I, you know, I'd swap it over, and you'd see it, you know, swapped over.

And then I'd do the, you know, we'd do the test, make sure that like the air compressor might be on the emergency circuit. We'd have to reset that so it would start automatically. And then you'd have to reset the bilge, the submersible bilge pump up in the far control room.

And then run it for two hours. And then we'd log it. And then he'd call down and say they're ready to close the bus tie. Because you would see, once you have regained power everything should happen automatically, where the generator will come off.

So I'll go down. He'll say, close the bus tie breaker. I'll be on the phone. He's in the emergency diesel generator room. He's really yelling, because the generator's running. He's saying, close the bus tie. So I go over and then close the bus tie.

And what would happen is the bus tie would close down there, energize. The power going to the emergency generator would sense that. Then would open up the breaker for the diesel generator. You'd see loss of power. And then the breaker would close up there and supply power to the emergency lighting. And then that was the test. And then you'd log it.

[redacted] **So during the test would you guys run the ballast and the bilge pumps to make sure that the generator is handling the full gamut of the load?**

MR. LEVESQUE: No. We would do it basically just, I mean, to handle, it was just basically off the emergency lighting, or any of the other items. No, we wouldn't run any pumps off that. It wasn't necessary.

[redacted] So it was never really a full load test?

MR. LEVESQUE: No, we would never, we never did a full load test.

[redacted] Okay. Did you ever routinely test to make sure that the bilge pumps were getting power from the emergency circuit?

MR. LEVESQUE: Well, you had, I mean, they were, if you weren't getting power they wouldn't operate. So they knew, regardless of where power's coming from --

[redacted] The bilge pumps, the valve pumps, the fire pump, all that stuff is not necessarily running simultaneously.

MR. LEVESQUE: No.

[redacted] You guys knew that they were getting power.

MR. LEVESQUE: Yes. Because --

[redacted] They were operating all --

MR. LEVESQUE: It was coming off the emergency switchboard. And if that wasn't working properly you would know it regardless of which was supplying power, the main generator or the emergency diesel generator.

[redacted] Okay. (Inaudible).

MR. YOUNG: Good? Okay. Just two more areas, and then I think we may be getting close to the end here. Changing gears completely, and talking about riding gangs (phonetic). As we understand it there was a riding gang aboard the ship last week when they sailed. Did you ever have any experience having riding gangs aboard while you were working?

MR. LEVESQUE: Yes.

MR. YOUNG: Okay. Do you have any recollection or idea as to why the riding gang may have been aboard the El Faro last week?

MR. LEVESQUE: Yes. They were part of the conversion. They were converting parts of the ship back to the way it was when it was operating on the west coast. Because the ship was scheduled to go on to the west coast, while the workers' ship was due to go in the yard and get converted over to a LNG burning diesel.

MR. YOUNG: And had any of this work began the last time you were on the ship?

MR. LEVESQUE: It just started.

MR. YOUNG: Just started. And do you know the extent of work that was to be carried out in the engine room, within the engine spaces?

MR. LEVESQUE: Yes.

MR. YOUNG: Can you give maybe a small scope of work of what they may have been doing in the engine room?

MR. LEVESQUE: Well, they had to get the de-icing system back on line, make sure that the system was flushed and they could get the pump running. They also had to put the Butterworth (phonetic) heater back in, so that could supply steam to the sea chest (phonetic).

Because when operating on the west coast you got to make sure that, they had issues with ice getting caught in the sea suction. So the Butterworth would prevent that from losing suction.

And then you also had, you know, you had valves they needed to put back in. Because any system that was tied into the Butterworth was blanked off. So it was completely isolated from the engine room, or any systems on the ship.

Butterworth and the de-icing that, as far -- Unless they were doing something else. Because of the contract work, that's my understanding that was it they were doing in the engine room. There may be something else that I was unaware of.

MR. YOUNG: Any other riding gang questions? Okay. You have given a great description of your

engine room and maintenance, and possible failures, or anything. Now, we're asking for your help too, if you -- And it seems like everything had been running very well.

And as far as we understand the ship, when it was out last week had about a 15 degree list to port when they last communicated in. And the message was that they lost, I have no engines. And that's all we know.

Is there anything that you could speculate, or assist us in trying to figure this out, as to what may have happened to cause a loss of the engine. And we don't know whether it's a loss of bulk boiler, or loss of the main unit.

MR. LEVESQUE: I mean, when you say no engine that's the, you need to find out what part of the engine, you know. You have steam side and you have the salt water side. You got a consate (phonetic) side. And that, we will have no engine, you know, or you have a LUBO, you know. You have, you don't know what exactly to pinpoint.

So for me to sit here and speculate, I mean, we'd be here for another couple of hours. I mean, just look, this could happen, that could happen. I'm sure, I mean, everybody that's here, you know, is aware of

what could happen in severe weather like that.

But, I mean, it could have been as simple as there was a, something, maybe a gasket that, you know, made, put steam in the engine room. And they needed to stop the, or secure the main engine. So having no engine, that's such a broad statement.

You don't have a clue. What do you mean, no engine? I mean, or even when, you know, I mean, there's more than one. There's a diesel engine on there. I mean, was it, are you sure, he said there was no main engine, or no engine?

MR. PETERSON: Well, actually it was loss of propulsion. He said he didn't have propulsion.

MR. LEVESQUE: Oh, propulsion?

[redacted] Yes. And his -- They were --

MR. PETERSON: That was John's notes when he said no engine.

MR. O'DONNELL: John's notes from the captain to DBA was no main engines.

MR. LEVESQUE: Well, loss of propulsion. I mean, yes, like I said, you have to break down what systems are affecting it. So the engineer calling up, the chief, the first are saying, you know, he gave me information.

Then what the captain, how he summed that

up, to save getting into too much detail at the immediate time, I have, you know, we have no propulsion. So what's affecting the propulsion? Oil? Steam, steam leak? Lube oil? A water leak?

You know, I can't, you know, you could look at the areas. But to pinpoint which one was the actual cause, no. But everything is just, well, this could have happened, this could have happened. And, you know, you can (inaudible) this much in saying, what could have happened to the El Faro? And, you know, until you get --

But that question is so vague that we're all going to be scratching our heads until, you know. They're never going to have an answer for that unless someone can see, you know. You know what I mean?

But to this, I mean, because the ship was running for two months. And like, if maybe if I had just gotten off, and this happened, I may give a better insight. But the ship was running for two months. And it's, you know, I never got, there wasn't like a phone call home from my relief saying, you know, this happened, do you have any idea?

Or, you know, everything was, you know, happened was in my notes. And it wasn't anything that happened when I got off that jeopardized the safety of

the ship. And then now this happened. I don't know.

You know, we had a loss of propulsion. That's, you know, too vague to speculate on. And I dare not to. It's just too many variables. Too many variables.

So, I'm sad to have to say that. I'm sad we can't have some sort of definitive answer on this. But it's a shame, because I know a lot of families want closure. But it's the best I can do, you know.

MR. YOUNG: Well, we understand. We just, you know, we had to throw it out there, you know, just to see, you know.

MR. LEVESQUE: Absolutely. I don't want to be like everybody else say, it's vague. And then me say, well it could be this. Well, no, I can't. That would be wrong. So I'm going to leave it at that. It's too --

MR. YOUNG: We understand. But I appreciate you trying. So, I don't have any other questions. If anybody else does --

MR. O'DONNELL: I just, Lou O'Donnell, ABS. A couple of quick questions. When you were onboard did you ever work with your regulatory party's Coast Guard ABS? And if so, what did you, how did you feel about the quality of the survey and inspection, and working

with --

MR. LEVESQUE: Well --

MR. O'DONNELL: -- the regulatory bodies? I mean, intrusive, cooperative, helpful? I just, I'd like to hear your feedback on --

MR. LEVESQUE: No, they weren't intrusive. They were, they're very helpful. They're there to do a job. And they're not there to like have it out for us. They're here to provide safety for me, and the crew, and the ship. They're not there just to, you know, give trouble to us, you know.

And they're doing, and basically they're coming, we have to do certain tests. And they have inspections, and a reason why. It's because of the safety of the ship.

[redacted] Yes.

MR. LEVESQUE: It's the, that's the rules. That's the regulations. And that's why they're there. We can, if he -- Now, I never had someone come off gunning to break our balls.

[redacted] Bust your chops. Yes. Okay.

MR. LEVESQUE: So, you know, they were there. They did, it was a legitimate test. We had to prepare for it, make sure everything was working. So when he came and he said, well, I want that done. I

want to see that.

We had no idea if anything (inaudible). It was there. We felt confident. They were ready to show him anything he wanted, do any tests, and that it would pass. And if it didn't pass, thank God we caught it now. You know, we would correct it. But no, there were never any issues.

MR. O'DONNELL: Now I know you called one of the chiefs, the newer chief. I think it was Keith, you said. Called, or, oh wait, I'm sorry. You called him Mr. Safety. And, you know, there was, they promoted safety and the policies within the engine -- Mr. Policy. Excuse me. Just overall (inaudible) safety. Is it a high priority?

MR. LEVESQUE: Absolutely. Absolutely. I mean, I would --

MR. O'DONNELL: Okay. That's all I have.

[redacted] [redacted] [redacted] with Coast Guard. And just a couple of follow-up questions that kind of lead into what you were thinking. In preparation for the certificate of inspections you guys would test anything that you -

During those tests in preparation for this COI or the surveys, did you ever have any deficiencies

that were notable, or anything that needed to be repaired prior (inaudible) the COI? Do you understand what I'm getting at?

MR. LEVESQUE: Yes, I know, yes.

[redacted] (Inaudible) the over speed didn't work.

MR. LEVESQUE: Yes.

[redacted] Or one of the gas turbines where you fixed that, and then the next day when the Coast Guard was there or -- Was that ever a scenario that was --

MR. LEVESQUE: Let me think now.

[redacted] And again, we're not looking --

MR. LEVESQUE: I know. I'm just trying to think of an example. I mean, if we had anything that sticks in the back of my mind. I know it's, I remember when we were, we had the check off list, we went through it. Most, we never really had issues.

If we, I'm -- Yes, never had something that really sticks in my mind. If it was it was something minor, like maybe a pressure switch. Well, it's (inaudible). But that would that would be, was it, did it go off at the right pressure? Was it too low? Was it running weak, or something like that. But nothing that was --

[redacted] So is that a situation where you'd put that in the log?

MR. LEVESQUE: Yes.

[redacted] Pressure switch (inaudible)?

MR. LEVESQUE: Oh, yes. A lot of, like if something was tested, or if something went off because of maybe we were working on something and that alarm went off. Oh, that's, you know, it was tested, and we would log that.

[redacted] Okay. With regards to the safety equipment, the lifeboats, survival suits, in general how did you feel about the, how comfortable were you with the quality and the quantity of the safety equipment aboard the vessel?

MR. LEVESQUE: Well, the quantity was there.

[redacted] Okay.

MR. LEVESQUE: I mean, and the safety of the equipment, you have two lifeboats. I mean, it was an older ship. It wasn't an enclosed one. We would love an enclosed lifeboat on the ship. But for the, well, the requirements it was full.

I worked on the, I mean, I worked on the lifeboats. We did maintenance on it. They ran. I mean, they were, for lifeboats that, I mean, from my experience, lifeboats, they were solid lifeboats. And

they were tested, dropped every, well once a week.

Most of the time when we done a lifeboat drill we'd lower it down to the embarkation deck, then bring it back up, test your limits. And then, you know, put it back in the cradle. But they were operating. Inspection on the brakes.

You know, we had one lifeboat was a diesel. The other one had flemming (phonetic) gear. You know, that was, it was tested. The lifeboat was ran once a week. The flemming gear was exercised, and then inspected. I did work on the flemming gear. I did both lifeboats before I got off. So I know they were running.

You know, did the oil change on them, oil, the fuel filter and the LUBO filter. The LUBO was changed out just before I got off. Because I know, because I did it.

And I changed out the oil in the transmission on the flemming gear. Not that that would really affect the operation because you're not dealing with high rpms. But that was done. And, you know, and they, what else?

Yes, I mean, they, I mean, based off the, what comes up on inspection, all the inspections had been done. I mean, they, it's not like they -- When

inspections are called to do, they do it.

[redacted] So from the overall crew perspective, do you feel like that everybody in the crew was proficient in the use of the equipment, and well trained?

MR. LEVESQUE: As well trained as they motivate. You know, some guys when they go through training they just go through the motions. Some people you know. But they're aware of how to use all the equipment. And they can't say they didn't know how to use it.

Because they had training from their (inaudible) school. You get the weekly training. They're talked to. They sign the sheet saying they were at the meetings. There's no excuse why they shouldn't be able to use that. Because there's, if you have any questions, ask them now. Here is it, right in your face.

And if they didn't know how to, if they didn't feel like they could use it because of their own fault, it's not like the opportunity wasn't there. I mean, they're not, we're not hiding any information from these guys. The training's there. And it's how motivated they are at the drills.

You know, some guys they just go, watch, and

then leave. But when you, are you really paying attention, you know. And a lot of times it's like you don't, you know, when am I ever going to use this? But then, here's a time that they could have used it.

Are they going to remember? But that's up to the individual. But the, it's there. I mean, the safety, they do it all, they do diligence on all that stuff, you know. I mean, they make sure people are aware as part of the program. So, there's no excuse.

I mean, I could understand when you're nervous and scared, and you know, sometimes you forget your training. But that's when your training should kick in. You're hoping that's what happens.

[redacted] Thank you.

MR. O'DONNELL: Thank you.

MR. YOUNG: One last question. Bryan Young. Do you remember which boat was which side?

MR. LEVESQUE: Absolutely. Port had the diesel. And the starboard was the flemming gear. Port boat was my lifeboat for years. And I, port side, there it is. Watch it lower, come up. Yes.

MR. YOUNG: We fired about 300 questions at you. Do you have any questions for us?

MR. LEVESQUE: No. I just hope that, I wish I would have been more helpful to you guys to come up

with some more answers, you know, to give to people to see why this happened and, you know, to hopefully it doesn't happen again. But, you know, that's, I mean, I can only tell you what I know. So, I'm sorry I couldn't give you any more information.

MR. YOUNG: It's a world of information, you know, very, very accurate, very, you know, descriptive information. We really appreciate it.

MR. LEVESQUE: I do apologize, it seemed like I got, you know, some of the answers weren't as clear because I got maybe a little flustered sometimes. But, you know.

MR. YOUNG: No. So, no further questions. I'll end the recording at 1611. And thank you very much again for your time. We really appreciate it.

(Whereupon, the above-entitled matter went off the record at 6:11 p.m.)

M

C E R T I F I C A T E

MATTER: El Faro Incident
Accident No. DCA16MM001
Interview of Chris Levesque
Jacksonville, FL

DATE: 10-08-15

I hereby certify that the attached transcription of page 1 to 124 inclusive are to the best of my professional ability a true, accurate, and complete record of the above referenced proceedings as contained on the provided audio recording; further that I am neither counsel for, nor related to, nor employed by any of the parties to this action in which this proceeding has taken place; and further that I am not financially nor otherwise interested in the outcome of the action.

--[redacted]-

TABLE OF CORRECTIONS EXTRA SHEET FOR INTERVIEW OF
CHRIS LEVESQUE [redacted]
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OCTOBER 8, 2015

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85	24	LUBO	Lube Oil
96	16	Workers	Orca's
107	15	LUBO	Lube oil

If to the best of your knowledge, no corrections are needed kindly circle the statement "no corrections needed" and initial in the space provided.

NO CORRECTIONS NEED. _____

Initials

CHRISTOPHER E. LEVESQUE

Pri[redacted] the above information

_____

Signature of Person providing the above information

11/18/15

Date

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