

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of:

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SHIPBOARD FIRE ABOARD THE *HOËGH*  
*XIAMEN* IN JACKSONVILLE, FLORIDA,  
ON JUNE 4, 2020

Accident No.: DCA20FM020

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Interview of: DANIEL WOODS, Principal Surveyor  
DNV-GL

Jacksonville, Florida

Wednesday  
June 24, 2020

APPEARANCES:

LTJG [REDACTED] [REDACTED] Investigator  
U.S. Coast Guard, Sector Jacksonville

[REDACTED] [REDACTED] Investigator  
U.S. Coast Guard, Sector Jacksonville

MARCEL L. MUISE, Marine Accident Investigator  
National Transportation Safety Board

JOSEPH PANAGIOTOU, Fire and Explosion Investigator  
National Transportation Safety Board

PAUL STANCIL, Hazardous Material Accident Investigator  
National Transportation Safety Board

KEIRAN "KURT" STEWART, Accident Investigator  
Pipeline and Hazardous Materials Safety Administration

ERIC THIEL, Attorney  
(On behalf of Grimaldi Deep Sea)

TODD BAIAD, Attorney  
(On behalf of SSA Atlantic)

JULES MASSEE, Attorney  
(On behalf of Horizon Auto Logistics)

JIM MOSELY, JR., Attorney  
(On behalf of the *Hoëgh Xiamen*)

MARK THOMPSON, Attorney  
(On behalf of the *Hoëgh Xiamen*)

GARY FIABLA, Attorney  
(On behalf of Mr. Woods)

FUTSA MALFA, Attorney  
(On behalf of DNV-GL)

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I N T E R V I E W

(9:10 a.m.)

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2  
3 MR. [REDACTED] Good afternoon. [REDACTED] [REDACTED] Investigating  
4 Officer, United States Coast Guard.

5 LTJG [REDACTED] Mr. Muise, with the NTSB, if you want to kick  
6 off?

7 MR. MUISE: This is Marcel Muise, Office of Marine Safety,  
8 NTSB.

9 MR. STANCIL: Paul Stancil, Hazardous Materials Accident  
10 Investigator, NTSB.

11 MR. MUISE: [REDACTED] Joe is not with us today.

12 LTJG [REDACTED] Okay. We'll move to the PIIs. We'll start  
13 with the vessel interests.

14 MR. MOSELY: Jim Mosely, Jr. for vessel interests in  
15 Jacksonville, Florida.

16 LTJG [REDACTED] Great. Is the representative for Grimaldi on  
17 the line?

18 MR. THIEL: Yes, sir. This is Eric Thiel on behalf of  
19 Grimaldi.

20 LTJG [REDACTED] Excellent. SSA Atlantic?

21 MR. BAIAD: Yeah. This is Todd Baiad with the law firm  
22 Bouhan Falligant in Savannah, Georgia, on behalf of SSA Atlantic.

23 LTJG [REDACTED] Great. How about Horizon Autoliners [sic]?

24 MR. MASSEE: Jules Masseur here from the firm of Hamilton,  
25 Miller, and Birthisel on behalf of Horizon.

1 LTJG [REDACTED] Okay. Great. I think that's all the PII's.  
2 Did I miss anyone?

3 MR. THOMPSON: Yeah. Mark Thompson in London for vessel  
4 interests.

5 LTJG [REDACTED] Okay. Great. Mr. Woods, for DNV-GL, if you  
6 could introduce yourself, please?

7 MR. WOODS: This is Daniel Woods, principal surveyor for the  
8 DNV-GL in Jacksonville.

9 LTJG [REDACTED] Thank you, sir. And just so everyone on the  
10 call is aware, Daniel Woods, all common spelling?

11 MR. WOODS: Yes.

12 LTJG [REDACTED] Great. And then, as I understand, there's two  
13 attorneys for you as well. If they could introduce themselves,  
14 please?

15 MR. FIABLA: This is Gary Fiabla (ph.). I'm the head of  
16 group legal for the DNV-GL group for the Americas.

17 LTJG [REDACTED] Thank you, sir.

18 MR. MALFA: And this is Futsa Malfa (ph.) with the law firm  
19 Norton Rose Fulbright, outside counsel for DNV-GL.

20 LTJG [REDACTED] Thank you, sir. And then if PHMSA would like  
21 to introduce themselves, please?

22 MR. STEWART: Kurt Stewart, Hazmat and Accident Investigator  
23 out of Oklahoma City.

24 LTJG [REDACTED] Thank you. And then is there anyone else on  
25 the line that I missed?

1 (Pause.)

2 LTJG [REDACTED] Okay. Hearing nothing, we'll assume nothing.  
3 We'll do this how we've been doing it. The Coast Guard will go  
4 first, NTSB, and then PIIs. So, first of all, I'd just like to  
5 say thank you, Mr. Woods, for taking the time to call in. If you  
6 have trouble understanding any questions or whatever, please, you  
7 know, let me know and we can rephrase or adjust accordingly.

8 The purpose of this investigation is solely to determine  
9 causal factors which led up to the accident so we can identify  
10 those and prevent these things from happening again obviously.  
11 Nine firefighters were hurt during this fire, and we'd like to  
12 obviously avoid that moving forward and hopefully prevent  
13 accidents like this.

14 INTERVIEW OF DANIEL WOODS

15 BY LTJG [REDACTED]

16 Q. So, as I recall, you were onboard the vessel June 3, which  
17 was the day before the fire, conducting an ISM audit and other  
18 class surveys; is that correct?

19 A. When I first -- well, I was onboard June 3 and June 4.

20 Q. Okay.

21 A. June 3, started to -- was there to do a combined audit, ISM  
22 ship security and MLC. But when I joined the vessel, I ran into  
23 two Coast Guard inspectors coming onboard and -- or coming off the  
24 ship. And they mentioned that there was a steering incident, so  
25 they asked to follow that up. So we took care of that to start

1 with. That was about an hour and a half, I think, to take care of  
2 that before we actually started the audit.

3 Q. Okay. Great. Yeah. And just so everyone's aware, there was  
4 a steering issue with the vessel coming into Jacksonville on June  
5 -- the night of June 2. I, myself, and a petty officer from the  
6 unit attended to check out the steering gear and conducted  
7 steering gear tests. So just so everyone's clear about that. And  
8 then, so could you describe how the audit went, sir? I mean,  
9 specifically the ISM portion of the audit?

10 A. Well, it's combined. But the audit, we always start with an  
11 opening meeting.

12 Q. Okay.

13 A. So do that with the officers, and generally I'll ask for the  
14 bosun to be there as well from the crew. And he was also there.  
15 And, anyway, the point of the audit is just to, you know, kind of  
16 introduce yourself, why you're there, the scope of the audit, and  
17 how the audit will be carried out. And we, you know, also  
18 communicate that the audit is meant to be a -- well, first it's an  
19 assessment of their system. It's not an assessment of people, per  
20 se. And it's meant to be a random process, but we -- and, you  
21 know, sampling, giving them an idea of the timescale, and sort of  
22 a plan as far as how we'll get through the audit. And that's sort  
23 of interviews and touring.

24 And at this audit, started with -- I like to always begin  
25 with the captain following the opening meeting. And I did mention

1 that I would like to do a fire drill at that meeting. And just to  
2 kind of coach them that the -- we know there is a system, but  
3 we -- the point of the audit is that we want them to be able to  
4 tell us what they know about the system, how they use the system.  
5 And that's important that the audit process -- we're trying to  
6 collect what we call objective evidence. You know, how they use  
7 the system and if it's working well for them.

8 Q. Right. And when you say system, you're referring to the  
9 ship's safety management system, correct?

10 A. Correct.

11 Q. Okay. Great. So you stated that you did a tour of the  
12 vessel. What parts of the vessel did you end up visiting during  
13 the course of this audit?

14 A. Well, joining the vessel, you're coming up the stern ramps,  
15 so they had started cargo. And so you get -- first impressions,  
16 you get it of the watertight integrity of the ship, because as  
17 you're coming up the stern ramp, you know, at the end, they'll  
18 have to close that ramp. But you can see the gasketing.

19 And you're there on a cargo deck. They were working cargo,  
20 so they've got cones out as far as directing traffic; the  
21 stevedores were there. You can -- you're greeted -- there are  
22 access control, you know, as you're coming onboard, and that's an  
23 impression.

24 Then looking around on the deck, you're also getting  
25 impressions as far as that cargo area and structural -- fire



1 integrity. There is fire extinguishers, you know, fire hoses that  
2 are mounted. Look up, you'll see the fire detection, you know,  
3 those kinds of things.

4 As far as around onboard, I was up in the bridge, let's say  
5 that, touring through the accommodation area out there. It's a  
6 car carrier, so the top deck on that ship is the 12th deck. It's  
7 all cargo spaces up to the 12th deck, and it's like a one-story  
8 hotel.

9 Q. Right.

10 A. Everything else is up on top. Towards the aft end, you've  
11 got the access that's going down towards the engine room, through  
12 the engine room. The -- getting into some of the -- while we did  
13 a drill and walking around, you see that everything is up on that  
14 deck. So you see the lifesaving equipment, the firefighting, the  
15 fire control rooms up there on that deck, your fire lockers, those  
16 kinds of things. It's -- so it's -- and then started out with the  
17 steering gear, so I was down there in the steering gear space as  
18 well.

19 Q. Okay.

20 A. So, you know --

21 Q. So what was your overall impression of the -- specifically  
22 the cargo hold areas on the *Hoëgh Xiamen*?

23 A. It looked good as far as I didn't see anything that bothered  
24 me.

25 Q. Okay.

- 1 A. You know, it's -- I didn't get any negative impressions.
- 2 Q. Okay. Great. Did you notice -- and included in that, would  
3 you say you noticed anything about the ventilation in any of those  
4 spaces? Was it adequate to you? Did you notice -- did you look  
5 at any of the shafts, anything like that?
- 6 A. No, I just -- you know that when you walk onboard that the  
7 ventilation is running, and you need that to be running if they're  
8 operating cars on the ship.
- 9 Q. Right.
- 10 A. But you --
- 11 Q. And on June 4 -- sorry, go ahead.
- 12 A. Go ahead.
- 13 Q. I was just going to ask you, on June 4, was the ventilation  
14 on the ship's cargo decks running?
- 15 A. Yes.
- 16 Q. Okay. Great. And during your typical audits to vessels, or  
17 typically when you audit vessels, is there a lot that you do  
18 checking of the ventilation wise?
- 19 A. No. It's not meant to be a survey; it's supposed to be an  
20 audit.
- 21 Q. Right.
- 22 A. So --
- 23 Q. Understood.
- 24 A. Yeah.
- 25 Q. Just wanted to confirm that.

1 A. You know, walking around, all that ventilation is up there on  
2 the top deck, and so it's -- you hear it running.

3 Q. Yes.

4 A. But you get an impression maintenance-wise, externally, of  
5 the condition.

6 Q. Understood. So you said -- what day was the fire drill  
7 conducted on?

8 A. That was the 3rd, the first day.

9 Q. Okay. And what space did that occur in -- did they simulate  
10 a fire drill in?

11 A. We discussed that. They decided -- because I wanted to pick  
12 something convenient not to interrupt anything that was going on  
13 onboard. And so they -- and it's actually easier on the car  
14 carrier because everything's up on that top deck. The fire drill  
15 was in the galley space.

16 Q. Okay.

17 A. Which is -- and if you've been onboard you would see it's  
18 pretty accessible.

19 Q. Um-hum. So did you witness the crew dress out in  
20 firefighting gear then?

21 A. I was very impressed. The drill -- everything was happening  
22 simultaneously as far as the -- I asked at the opening meeting  
23 that, you know, I'd like to have two guys suited up. So that was  
24 happening simultaneously. They ran the fire hoses for boundary  
25 cooling. Simultaneously, the electrician secured power.

1 Simultaneously, somebody else was closing up the ventilation  
2 flaps. It seemed like everybody had radios. It was a good  
3 impression with the audit. It was clear that they practiced  
4 onboard, which was the point of holding the drill.

5 Q. Okay. Great. Was there any discussion about the fixed CO2  
6 system at that time? Or reviewing of how often they trained using  
7 that? Or discussed training regarding that or anything of that  
8 nature?

9 A. No.

10 Q. Okay. Do you remember when the last time they stated  
11 maintenance had occurred on the fixed CO2 system?

12 A. I don't.

13 Q. Okay. Were any nonconformities or conditions of class issued  
14 as a result of that survey?

15 A. You mean audit.

16 Q. Audit. Excuse me. Excuse me, sorry.

17 A. No. No. It was good impressions all the way around.

18 LTJG [REDACTED] Okay.

19 MR. [REDACTED] Good afternoon, Mr. Woods. My name is [REDACTED]

20 [REDACTED] I'm one of the other investigating officers for the Coast  
21 Guard.

22 BY MR. [REDACTED]

23 Q. I'd like to start with your background a little bit. Can you  
24 tell us how long you've been doing the job that you're doing and  
25 kind of what your history is in the maritime community?

1 A. Let's see. Former chief engineer, sailed for about 13 years,  
2 then ashore as a superintendent. Then I worked insurance for  
3 about 4 years, and that's -- we did a lot of different things and  
4 working for different insurers, hull and machinery side, P&I side.  
5 I was also doing superintendent work part time, and we did a  
6 little bit of nonexclusive work for a couple class societies, and  
7 that was my introduction to GL who approached me as far as working  
8 fulltime for them.

9 And that was about 22 years ago, so I've been doing this for  
10 about 22 years now. I'm a principle surveyor, but I'm also a lead  
11 auditor. So that covers our normal auditing which would be ISM,  
12 ship security, MLC. But I also do ISO work as far as 9,000,  
13 14,000, and 50,000 energy efficiency.

14 Q. Okay. And approximately, in those 22 years, can you give an  
15 estimation of how many surveys you've conducted -- or audits?

16 A. Audits?

17 Q. Well, let's start with surveys, and then we'll move to  
18 audits.

19 A. It's a big difference between a survey and an audit.

20 Q. Right. That's why I was trying to differentiate between the  
21 two.

22 A. Yeah. It's just that I've been doing them a long time. I've  
23 probably -- you know, 100, 200. It's -- I've been doing them for,  
24 oh, gosh, more than 15 years. So that would be foreign flag  
25 vessels. We have U.S. flag vessels as well, so I've done them. I

1 know local Coast Guard here in Jacksonville has witnessed some of  
2 my audits as well as the traveling inspectors. So as far as total  
3 number, I would have no idea. But I've done a large number of  
4 them.

5 Q. Okay. And, again, just trying to establish some of the  
6 experience and everything that you have. Because 20 -- you said  
7 22 years DNV-GL. Would you consider yourself a subject matter  
8 expert, then, in what you do with the auditing and the surveying?

9 A. I wouldn't call myself a subject matter expert. I'm well  
10 experienced, but I don't know if I'd call myself an expert at  
11 anything.

12 Q. I understand. Thank you. So going back --

13 A. You can ask my wife that one.

14 (Laughter.)

15 BY MR. [REDACTED]

16 Q. I don't think any of us can get that on being an expert from  
17 our wives. So going back to the day of the incident which was  
18 June 4. When you went onboard the vessel, did you board it the  
19 same way on the 3rd and the 4th, up the stern ramp in that same  
20 direction?

21 A. Yes, I did.

22 Q. Okay. And did you happen to get off on the 7th deck at all  
23 on June 4?

24 A. No. That's the 5th deck, the main deck. And you go through  
25 a watertight door to the elevator and then straight to the top up

1 to the 12th floor.

2 Q. Okay. So, I guess, in either one of those days then, did you  
3 walk around the cargo deck areas at all?

4 A. No. I pretty much stayed -- whatever was visible on the 5th  
5 deck. So you could see down the ramp a little bit to the 4th  
6 deck, and then you could see the deck above the 5th deck as you're  
7 walking up. But I didn't have a reason to go higher up in the  
8 ships.

9 Q. Okay.

10 A. I try to avoid that anyway just because it's a car carrier.  
11 I'm fairly tall, and it's real easy to -- to get around, you got  
12 to stay hunched over, and I don't -- I just stay away from that  
13 unless I'm surveying.

14 Q. Okay. All right. And then, we can go back to -- Mr. [REDACTED]  
15 asking you a few questions regarding the fire drill. You said  
16 that there was a couple people that dressed out during the fire  
17 drill. Good, calm, and everything with the folks with their  
18 walkie-talkies and everything. You said there was a couple of  
19 hoses that were brought out too. Were those hoses charged?

20 A. No. I didn't ask them to charge -- to start up the fire  
21 pump. Only because, you know, they're working cargo, and I didn't  
22 see a need to do that.

23 Q. Okay. And is there ever any scenarios in the fire drills  
24 that are conducted that would give them any kind of more realistic  
25 scenarios such as -- are they always done during the day, or are

1 they ever done at night? Are they always done with non-charged  
2 hoses? Is there ever, like, smoke machines or anything like that  
3 to help give a disorienting, kind of realistic feel that you know  
4 of?

5 A. I don't know. What I do check is that they practice at  
6 different locations. And the reason for doing the fire drill is  
7 not so much the fire drill itself, it's back to the ISM code; it's  
8 the emergencies. There's a large number of different possible  
9 emergencies, and it is -- we're checking, or I'm checking anyway,  
10 that they're not doing the same thing every time and that they --  
11 every ship is carrying out a fire drill, abandon ship drill  
12 monthly.

13 But that doesn't cover all of the other emergencies. And so  
14 I do the fire drill just to get a sense that the crew is  
15 familiarized or trained, that they're practicing onboard. And  
16 then it helps me give an assessment about their competency and  
17 that they can work together well as a team. And then I kind of  
18 follow it up to make sure that other drills -- these other things  
19 are being carried out as well onboard. And it is a requirement  
20 that they should have a drill plan onboard. It encompasses much  
21 more than just a fire drill or abandon ship drill.

22 Q. Okay. Understand. You also mentioned during that drill, it  
23 was difficult for you, as one person doing the audit, to watch  
24 everybody getting dressed out, getting the hoses. I think you  
25 mentioned the electrician and stuff. Speaking of the electrician,



1 you mentioned that they secured ventilation. Did they -- was it  
2 their policy or did they secure ventilation throughout the vessel?  
3 Or did they just do it in the isolated area where you were  
4 conducting the fire drill?

5 A. This was just confirmation that -- I didn't actually see him  
6 secure the electric. It was reported on the radio. And so I  
7 can't tell you exactly, you know, how much, just that it was  
8 securing electric. You know, which is something that -- that  
9 would be an expectation for a drill.

10 Q. All right. So what was your location, then, during the fire  
11 drill?

12 A. First, on the bridge. Actually, it's real convenient because  
13 it's nearby and it's at -- the galley itself is 20, 40 feet back,  
14 maybe 50 feet back behind the bridge. But it's -- so, you know,  
15 you can walk out from the bridge. You're on top of the deck there  
16 and you can -- so it's -- you can see everything happening. It's  
17 not like another type ship where guys are coming from different  
18 levels on the ship. Things were fairly visible.

19 Q. Okay.

20 A. So I started on the bridge and went with the chief officer  
21 and kind of walked aft back towards that location. And things  
22 were happening. The guys dressed up, the hose was out, the one  
23 fire flap, the reporting of the electric. It was almost  
24 instantaneous. These guys knew; they knew exactly what they were  
25 doing.

1 Q. Okay.

2 A. It was a good impression is I guess what I'm trying to say.

3 Q. Yes, that's what I'm understanding. Was the master on the  
4 bridge with you during the drill?

5 A. Yes.

6 Q. Okay. So you had the master and chief officer up on the  
7 bridge with you initially when the drill started?

8 A. Right.

9 Q. Okay. And --

10 A. So that was just from there to -- and one of the -- hold on  
11 just a second. One of the fire lockers is up there. That's where  
12 one of the firemen outfits were. And the fire lockers are there,  
13 and there's another one further aft along the starboard side. So  
14 everything is -- it was just real convenient. Everything was  
15 nearby.

16 Q. Okay. So was the majority of your communication onboard with  
17 the master and the chief officer?

18 A. Master, chief officer, chief engineer, the other engineers in  
19 the engine room, and I get together with the second officer, third  
20 officer, which generally are the safety officer onboard. Second  
21 officer is more of the navigation officer, the GMBSS. We're  
22 trying to hit a lot of different subjects on the ISM.

23 Q. What was the -- was there any kind of language barrier  
24 between yourself and the crew?

25 A. No. The officer was real good. The crew was -- the

1 unlicensed crew was difficult, but the licensed officers were  
2 fine.

3 Q. Okay. So what you're saying then is the engineers, you  
4 didn't have any language barriers with?

5 A. No. That --

6 Q. Okay. And did you speak with the electrician at all?

7 A. I'd like to say that he was there. When I was down in the  
8 engine room, I had those guys together and -- I had the chief  
9 engineer upstairs and down there the second, the third, and I want  
10 -- I'm pretty sure he was there. I don't know exactly to be  
11 honest.

12 Q. Okay. Not a problem. Again, we're just trying to establish  
13 interactions with the crew. Did you -- when you're on there, do  
14 you review any of their logbooks or anything?

15 A. Yeah. Well, I looked at the -- because it was a little  
16 different for me, the recording of the drills and -- just a follow  
17 up to what you were talking about before, and how they -- what  
18 they did was fine. But it's a little different because they  
19 actually, they make entries into the logbook, and so someone  
20 actually has to write by hand the drill that's carried out. And  
21 they gave me an opportunity to check that, whether other drills  
22 were being carried out.

23 Q. Okay. And did you happen to look at any of the maintenance  
24 logs or anything? Did you look at those?

25 A. Yes. On this ship, they have an approved plan maintenance

1 system with us. So went through that with the chief engineer.  
2 And then, when we're looking at safety type stuff, like  
3 firefighting, lifesaving equipment, I'll spend time with the third  
4 officer and -- going through his records. And but the -- I'm  
5 looking at that things are up to date, being carried out, and good  
6 impressions all around.

7 Q. Okay. And where -- the record book that you reviewed, where  
8 were they kept?

9 A. On the computer.

10 Q. Okay. So --

11 A. Everything --

12 Q. -- they didn't have any hard copy records of any maintenance?

13 A. No. Everything is computerized. It's the plan maintenance  
14 system. So they have to -- if there were -- so with the  
15 electronic systems, if there were hard copies, you'd be scanning  
16 those to get those as a PDF and to get that into the system. But  
17 it's the -- let's see, manual records would be -- let's say that  
18 bunkering procedures, arrival/departure checklist, those -- they  
19 did have those in hard copy in notebooks. But the maintenance  
20 type stuff was computerized.

21 Q. Okay. And the hard copy ones that you just mentioned, where  
22 were they kept?

23 A. The -- let's see, the engine room stuff was in the engine  
24 room except energy efficiency stuff, which is more environmental;  
25 that was up in the chief's office. The navigational stuff like

1 arrival/departure checklist, voyage planning, that was up in the  
2 bridge. And then records, the chief officer would be in  
3 possession of, like, stability records, garbage management plan,  
4 ballast order managements; he would keep that in his office.

5 Q. Okay. All right. And just kind of as I'm summing up here, I  
6 just want to follow through once again, so when you came on to  
7 complete your audit, you came up the ramp on the 5th deck, walked  
8 through the portion of the 5th deck cargo area to the stairwell to  
9 the elevator, went up to the bridge. Was there anywhere else that  
10 you ended -- I'm sorry, you were down in the engine room as well.  
11 Is there anywhere else on that vessel that you walked around?

12 A. Well, just what I mentioned earlier. The bridge, through the  
13 house, throughout the engine room. Let's see, where else? The  
14 house -- I mean the galley area, provision rooms, laundry  
15 facility, recreations stuff that pertain to MLC. Let's see, their  
16 fire lockers are up on the 12th deck. Everything is accessible up  
17 on the 12th deck. But as far as cargo spaces, no. You see just  
18 the 5th deck and see down the lower deck, down the ramp.

19 Q. Right.

20 A. You can see the 6th deck as you're walking up the ramp. But  
21 I didn't have reason to go higher up on the car decks, no.

22 MR. [REDACTED] Okay. That's good. Sums everything up for me.

23 Mr. [REDACTED]

24 LTJG [REDACTED] Yeah. I actually have one or two follow up  
25 questions, Mr. Woods.

1 BY LTJG [REDACTED]

2 Q. So, as part of the ISM audit, obviously, one of the codes  
3 that applied to the vessel is the IMDG code, International  
4 Maritime Dangerous Goods code. I'm sure you're familiar with that  
5 code, correct?

6 A. Um-hum. Yes.

7 Q. As part of the ISM audit, does DNV-GL ensure -- like you  
8 said, you take a sampling of the system. Is any part of the  
9 system ever sampled to ensure that the crew is implementing the  
10 implacable provisions of the code to them?

11 A. Well, it can be when you're getting into cargo operations,  
12 but I didn't focus on that on this vessel. Other than did I --  
13 they did have the IMDG codes onboard, which goes to -- on the  
14 medical side. Did they have MFAC (ph.), which is the inventory of  
15 medicines. But I didn't focus on that on this car carrier.

16 But if I knew there were, let's see, containers onboard that  
17 might have dangerous goods onboard, I might have. I just didn't  
18 in this case. It is random as far as I was looking basically that  
19 the cars were -- sort of an OSHA type thing, that they had cones  
20 out and looked like they're driving the cars on in a safe way,  
21 that -- I did notice the cargo securing, and they did have a cargo  
22 securing manual onboard. Let's see --

23 Q. Understood, sir. Yeah. The other part of that I was kind of  
24 trying to get at, too, is verification that the goods brought  
25 onboard are prepped in accordance with the code. Do you recall if

1 there were any ISM safety management system procedures that you  
2 looked at that spoke to the crew's responsibility in that regard?

3 A. No.

4 Q. Okay. And then I just have one more follow up. Have you  
5 ever witnessed a cargo -- a fire drill by the crew in a cargo  
6 area, specifically on a RORO?

7 A. No, I haven't. You can imagine that, if there was a fire and  
8 cars were loaded, it could be difficult to -- with also the  
9 lashings out, that wouldn't -- I guess it would depend on -- you  
10 know, if somebody saw something was easily accessible, great. If  
11 it was maybe not so accessible, it would be more difficult. And  
12 then as far as using the fire equipment that they have, when  
13 the -- if the fixed CO2 system is not an option, if the ship  
14 wasn't closed up where you could actuate the fixed CO2. But --

15 Q. Right. So in your opinion, you talked about it would be  
16 difficult to access loaded cargo spaces. Would it make a  
17 difference, in your opinion, for conducting drills and increasing  
18 crew proficiency if perhaps there was a requirement that there was  
19 a certain amount of space between cars on the cargo decks?

20 A. I think it would be case by case that if something happened  
21 that someone who is in charge, like the captain, making a  
22 decision, what's the best way.

23 Q. Um-hum.

24 A. I wouldn't feel qualified in any way to make a judgement on  
25 that.

1 LTJG [REDACTED] Okay. Great.

2 You have anything more, [REDACTED]

3 MR. [REDACTED] (No audible response.)

4 LTJG [REDACTED] All righty. With that, we'll turn over to the  
5 NTSB. Thank you, Mr. Woods.

6 MR. WOODS: Sure.

7 MR. MUISE: Good afternoon. This is Marcel Muise with the  
8 NTSB. For everybody's information, Joe Panagiotou with our Office  
9 of Research and Engineering has joined us, and also somebody with  
10 the UK country code. I'm assuming that's Mr. Thompson.

11 MR. THOMPSON: Yes, Mr. Thompson in London for vessel  
12 interests.

13 MR. MUISE: Thank you.

14 BY MR. MUISE:

15 Q. Mr. Woods, my understanding of the ISM code is it requires  
16 the operators to identify their critical tasks that have  
17 procedures, and you mentioned a few of those: cargo securing  
18 manual, ballast water management --

19 A. You said critical path?

20 Q. Critical tasks. Is that right? I think that's the language  
21 of the code.

22 A. No.

23 Q. Okay. What's the element that talks about procedures and  
24 which ones are required?

25 A. There is an ISM code -- the element number 7 is key shipboard



1 operations.

2 Q. Okay. That one.

3 A. Okay.

4 Q. Do you get to review these procedures before your audit and  
5 come up with an audit plan?

6 A. No.

7 Q. So how much time does it take once you get onboard typically  
8 to come up with that plan on who you want to talk to and which  
9 procedures you want to audit on a ship that's --

10 A. We go by -- the audit instructions, if you will, would be  
11 guided by the IACS recommendation 41.

12 Q. Okay, 41. Okay. Thank you. Is there any additional ISM  
13 requirements for a Norwegian flag vessel that gets passed on to  
14 you as a recognized organization?

15 A. I'm getting a lot of background noise on this for some  
16 reason. Sounds like somebody is in a busy place. Say that one  
17 more time, please?

18 Q. I'm sorry. I'm in a busy place. I was asking about  
19 Norwegian flag requirements when it comes to ISM. On top of  
20 what's required by the code, does Norway require anything extra  
21 for ISM?

22 A. No, not for ISM, no.

23 Q. The crew on this particular vessel, how did they access these  
24 procedures? Is there a centralized online database or a server or  
25 was everything hard copy? I know you mentioned some manuals but

1 was the bulk of it online?

2 A. Yes.

3 Q. Were they using -- I think the program's called Synergy. Are  
4 you familiar with that?

5 A. Synergy?

6 Q. It's a DNV product.

7 A. Oh, oh. Let's see, the -- I'm trying to remember. They're a  
8 nonconformity reporting. I don't remember. They have a  
9 nonconformity reporting system. I don't recall if that was  
10 Synergy or not, if it --

11 Q. But it was --

12 A. I don't know if that was the name of that.

13 Q. Okay. You mentioned that you didn't issue any  
14 nonconformities. Were there any others outstanding in their  
15 system during your audit?

16 A. No. No. The vessel had a real good history.

17 Q. Okay. Do you remember if there was a -- I'm not sure if I'm  
18 allowed to ask this or not, but was there a declaration of  
19 security in place for -- between the ship and the facility?

20 A. Sorry, you're going to have to ask that one more time,  
21 please.

22 Q. A declaration of security. Was there one in place that day  
23 or in that port call between the facility and the ship's security  
24 officer?

25 A. I didn't -- I don't know.

1 MR. MUISE: Okay. That's fine.

2 Joe, do you have anything to add?

3 MR. PANAGIOTOU: No, I don't have any questions. Thank you.

4 MR. MUISE: Paul?

5 MR. STANCIL: Yes. Paul Stancil here, NTSB.

6 BY MR. STANCIL:

7 Q. You mentioned compliance with the IMDG Code and that the  
8 cargo of vehicles on this vessel was something that you weren't  
9 concerned about. Do you know if the cargo spaces have been  
10 designated by the flag state as specifically designed and approved  
11 for the carriage of vehicles?

12 A. I'm going to ask you to repeat that question, please.

13 Q. Yeah. The cargo spaces onboard, have they been designated by  
14 the flag state as specifically designed and approved for the  
15 carriage of vehicles? That would be some form of documentation  
16 for that.

17 A. Well, I mean, the vessel is classed as a car carrier.

18 Q. Do you -- are you aware of any documentation in accordance  
19 with SOLAS that -- I think it's regulation 20 in chapter 2-2.  
20 What form of that documentation exists for this?

21 A. For dangerous goods, first, the ship is built to  
22 classification requirements, and then the IMDG requirements, that  
23 would come under their IMDG certificate.

24 Q. Okay. So --

25 A. They would have to -- this is not something that I was

1 checking, but as a surveyor, that would be -- you know, the IMDG  
2 certification is subject to survey. There's an IMDG survey that's  
3 carried out in order to achieve an IMDG certificate.

4 Q. Do you know if one exists for this vessel?

5 A. Let's see. I want to say yes, but I don't know. I want to  
6 say yes, but I would like to double check just to be sure. But  
7 I'm pretty sure it did. That just wasn't an area that I was  
8 checking during the audit. I was checking other things, doing my  
9 sampling.

10 Q. That's something you would normally cover in a survey?

11 A. If the IMDG survey was requested.

12 Q. Okay. Have you ever surveyed this vessel before?

13 A. Not that I recall. That doesn't mean that I haven't. I did  
14 the survey the first thing in the morning on the first day. I  
15 mean, just the follow up with the steering gear issue. But I  
16 don't recall if I've -- I have surveyed a lot of RORO vessels, and  
17 I've been on Hoëgh vessels before, but I don't recall if I  
18 surveyed this particular one before.

19 MR. STANCIL: Okay, fine. I think that's all I have for  
20 right now. Thank you.

21 LTJG [REDACTED] All righty. Well, if the NTSB is done then,  
22 as per the Coast Guard rules, we have our parties in interest who  
23 are allowed to cross-examine or ask questions. So I know we're  
24 all on the phone for this one, so the order which I think we'll go  
25 in to just help keep it straight is we'll go with the

1 owner/operator, and then we'll go to charter, and then we'll go to  
2 stevedore, and then we'll go to Horizon. So, with that being  
3 said, I'll turn it over to Mr. Mosely, if you have any follow up  
4 questions.

5 MR. MOSELY: No follow up questions. Thank you.

6 LTJG [REDACTED] Awesome. How about Mr. Thiel for Grimaldi?

7 MR. THIEL: This is Eric Thiel. I do not have any questions.  
8 Thank you.

9 LTJG [REDACTED] Awesome. How about Mr. Baiad for the  
10 stevedoring company, SSA Atlantic?

11 MR. BAIAD: Yes. Thank you. I do -- can you all hear me  
12 okay? I do have some questions.

13 LTJG [REDACTED] Yes. Good on our end.

14 MR. BAIAD: Okay. Great.

15 BY MR. BAIAD:

16 Q. Sir, my name is Todd Baiad. I represent SSA Atlantic, the  
17 stevedore, and I would just like to get some information from you.  
18 Let me know if you don't understand one of my questions, please.  
19 Does the ship owner actually hire you for purposes of your ISM  
20 audit?

21 A. No. They submit an audit or a survey request electronically  
22 through our website, and it's handled from our central scheduling  
23 office in Houston.

24 Q. Okay. But does the vessel owner pay for your services in  
25 connection with your audit?

- 1 A. To me personally, no.
- 2 Q. To your company?
- 3 A. Eventually, I guess.
- 4 Q. I mean, I assume you're not doing this for free.
- 5 A. I'm an employee. I'm not involved with the invoice.
- 6 Q. I understand. But, I guess, who is paying your company's  
7 invoice?
- 8 A. I'd have to -- that would likely be the ship manager.
- 9 Q. Okay. How long were you onboard the ship the first day?
- 10 A. Let's see, I think that was until 1700 because we were trying  
11 to stay away from overtime hours.
- 12 Q. And what time did you arrive?
- 13 A. That was, I think, about 8:30, 9 o'clock.
- 14 Q. Okay. And then on the second day, how long were you there?
- 15 A. Try to show up after breakfast. And you said the second day  
16 was the question?
- 17 Q. Yes, sir. Yes, sir.
- 18 A. Again, about the same time arriving. And then we finished  
19 about 1430, and then the ship wasn't sailing, so stuck around to  
20 finish up paperwork so we could give the captain the reports  
21 before I left rather than emailing them later.
- 22 Q. Did you take any notes or photographs during your ISM audit?
- 23 A. The only notes I take is I'm recording dates. You know,  
24 internal audit dates; port state control report dates; master's  
25 review/handing over dates; chief engineer, his handing over dates;

1 those kinds of things. Because those -- I put that in the report  
2 and just want to make sure I don't -- it's easy to -- if I didn't  
3 record it, then I might miss it. But those dates need to be in  
4 the report.

5 Q. Okay. Did you take any photographs?

6 A. No.

7 Q. Okay. Do you typically take photographs, or is that  
8 something that's not usually done in your ISM audit?

9 A. Audits, no, no.

10 Q. Okay. And will you just walk me through the difference  
11 between an audit and a survey? I mean, I know it sounds kind of  
12 obvious, but I just want to get what you view to be the  
13 difference.

14 A. All right. Yeah. That's a big difference for some people.

15 Q. Um-hum.

16 A. Let's use our emergency fire pump. If I was onboard as a  
17 surveyor or inspector I might, for safety equipment survey or  
18 class survey, ask you to run the emergency fire pump. And let's  
19 say that you try to run it, and it doesn't work. If something is  
20 broken or whatever, it's issued a condition of class that has to  
21 be repaired within some time limits. And then to allow you time,  
22 possibly, to get the parts you need to repair that pump. Once  
23 it's repaired, we'll want to witness a function test, operational  
24 test that it's working in good order. In the survey world,  
25 inspection worlds, everybody is happy at that point that's been

1 done.

2 In the audit world, we don't ask you to see -- ask you to run  
3 the emergency fire pump. But maybe I learn in the interview or  
4 maybe I've seen in a port state's report that the emergency fire  
5 pump's not running. And then that's kind of a green light to  
6 focus -- you know, to delve deeper into that. What I mean is,  
7 most people would agree that the emergency fire pump is a critical  
8 piece of equipment.

9 And so as far as maintenance goes, is that pump on an  
10 inspection list? Is it subject to inspection periodically? Is  
11 the person that's carrying out the inspection qualified to do the  
12 inspection? If -- maybe they already know about the pump's not  
13 working, and it's been reported. And has that been done? Has the  
14 -- maybe they need the spare parts. Have they communicated that  
15 to the company? Has the company replied and sent the spare parts  
16 they need back to the ship, you know, maybe in a timely manner?  
17 There's looking at the management or systematic view of this pump.  
18 Whether the pump is working in the end is not really relevant for  
19 the auditor.

20 Q. Okay. Early -- and I know I'm kind of bouncing around here,  
21 but I'm just going over my notes. Early in your discussion, you  
22 mentioned something about a steering issue with the ship. Do you  
23 recall that?

24 A. Um-hum.

25 Q. What was the steering issue with the ship that you were aware



1 of?

2 A. They -- for about 5 seconds up there, I guess they had the  
3 pilot onboard, they -- it was something like they were at mid-ship  
4 and they wanted to do a 10-degree steering order, and the rudder  
5 didn't immediately response. And the captain was there, and he  
6 switched from one follow up mode -- from like number two follow up  
7 mode to number one follow up mode, and the rudder responded  
8 immediately. And it was about 5 seconds.

9 So, anyway, following that up in the survey, we tested  
10 everything. The steering pumps were okay, this was just the  
11 follow up control. But we tested the steering pumps, the follow  
12 up one, follow up two. Also tested non-follow up, every  
13 conceivable arrangement, and we couldn't duplicate that same  
14 glitch. And that was the extent of the survey.

15 Q. Do you know what caused the glitch?

16 A. No, no. It just seemed to be a momentary thing and  
17 they -- you know, when that happened, he immediately switched to  
18 the other follow up control, and they completed the inbound  
19 passage just fine. So it's unknown.

20 Q. How would you know that, that wouldn't happen --

21 A. We tried to duplicate it --

22 Q. -- that wouldn't happen again?

23 A. By testing. That was the point of doing all the tests. To  
24 see if we could duplicate that same, and we couldn't.

25 Q. Does that -- and, again, bear with me; I'm not an engineer

1 onboard a ship, so if this question sounds silly, I apologize.  
2 Would the follow up control -- is that run off the electrical  
3 system of the ship?

4 A. Yes. I mean, it's -- that's an electrical control. It's a  
5 switch.

6 Q. Okay. That's what I would have thought. Did you -- you  
7 mentioned also that you looked through the computerized records of  
8 the ship; did I hear you correctly?

9 A. That's correct.

10 Q. Okay. How long do you think you spent looking through the  
11 computerized maintenance records onboard the vessel?

12 A. Oh, maybe 20 minutes.

13 Q. Okay.

14 A. Because I was interested to learn what they were using. I'm  
15 guilty -- I'm an engineer myself. And from the audit perspective,  
16 I'm looking to see if there's overdue maintenance, and there  
17 wasn't. And just to get a sense of that they are familiar with  
18 the system and that they're using the system, and I got a good  
19 impression. But that particular ship, their planned maintenance  
20 system is especially approved by DNV-GL.

21 Q. Okay. What is the name of that preventative maintenance  
22 system you just discussed?

23 A. Oh, let's see. What's the name of that? Star IPS.

24 Q. Star IPS. And, again, I'm not familiar with that system, so  
25 I'm envisioning you're going to -- what, a computer screen? Is

1 that right?

2 A. Yeah. I mean, yes, it's computerized.

3 Q. And so you can, through your 20-minute examination on this  
4 computer screen going through this system, you can determine if  
5 all the ship's preventative maintenance is up to speed?

6 A. I'm not doing a survey. I'm doing an audit just to see that  
7 the --

8 Q. Well, I understand. But I thought you said earlier that you  
9 did, in fact, look through all of them. Did I misunderstand you?

10 A. You misunderstood me.

11 Q. Okay. I apologize.

12 A. But I did specifically look for overdue maintenance.

13 Q. Okay. And you could, in 20 minutes, figure out if there was  
14 any overdue maintenance in this system?

15 A. Yeah. It's a feature, and it's a feature in most of the  
16 maintenance systems out there.

17 Q. So it's just kind of a button you can push, and it will say,  
18 all right, here are the things that are overdue?

19 A. Yeah. I mean, the maintenance systems, they're set up by  
20 engine hours or by dates. And it's kind of like a spreadsheet.  
21 You can -- that if you, let's say, go to the -- like you're  
22 clicking on part of the maintenance program to bring up overdue  
23 maintenance, and usually it's -- most of the maintenance programs  
24 out there, and this one included, would show red if something was  
25 going overdue.

- 1 Q. Okay. And is that typically --
- 2 A. It's really easy to check.
- 3 Q. Is that typically part of your ISM audit?
- 4 A. Yes.
- 5 Q. Okay. And why is that?
- 6 A. Because maintenance is one of the elements in the ISM code.
- 7 Q. Okay. And other than look at this computerized maintenance  
8 system for approximately 20 minutes to see if there were anything  
9 overdue, what else did you do to confirm your thought that the  
10 maintenance was in compliance with ISM codes?
- 11 A. Well, I'm just repeating what I mentioned earlier, and that's  
12 that one was checking out the planned maintenance system, and that  
13 was a system -- I checked it in the engine control room. And then  
14 getting together with the third officer up in the bridge as far as  
15 life saving equipment, firefighting equipment, which is more  
16 typically taken care of by the third officer onboard. Normally,  
17 he's the safety officer.
- 18 Q. Okay. And how much time did you spend with the third officer  
19 in the bridge?
- 20 A. Oh, probably close to 30 minutes.
- 21 Q. Okay. Anything else you did besides those things you just  
22 mentioned?
- 23 A. Well, as far as the maintenance?
- 24 Q. Yes, as far as the maintenance. I'm sorry.
- 25 A. Just, well, I mean there are things that are related to it.

1 That's risk assessment, safety procedures, getting into confined  
2 space entry, work permits. To give you an example, let's go to  
3 the main engine. Periodically, they'll get into the scavenge air  
4 box to check the conditions of the piston rings in that. And  
5 there -- being an expectation that, that is a confined space.  
6 It's also a very dirty space.

7 And following up the safety aspects, have they carried out a  
8 risk assessment? Have they had a meeting to discuss the safety  
9 aspects of that operation? It's also a dirty operation. Things  
10 like personal protection equipment, you know, like a toolbox.  
11 Needing to discuss things that might happen, that you might want  
12 to have control measures in place to make sure that they don't  
13 happen. I would include all that as maintenance related as well.

14 Q. Okay. Earlier -- and, again, I don't mean to jump  
15 around -- there was a question posed to you about whether you  
16 wanted to look at cargo operations. And my notes reflect that you  
17 said you didn't focus on that; is that correct?

18 A. No, I -- cargo operations, it's basically what I mentioned  
19 already, you know, walking onboard and watching what I could see  
20 from Deck number 5. But I did see securing of the cars. That  
21 relates to securing of cargo; they've got a cargo securing manual  
22 onboard. As well as cargo operations -- the stability is very  
23 much part of the cargo operations, and getting into with the chief  
24 officer as far as his stability records and checking of his  
25 stability computer. And then, to a degree, ballast water

1 management may be connected with the cargo operations and  
2 stability as well. And --

3 Q. Okay. Have you ever worked a -- either as a surveyor or as  
4 an auditor, a car carrier that was transporting used cars?

5 A. I'm not -- can you repeat that question, please? I'm not  
6 sure I understand.

7 Q. Certainly. And as I understand it, you wear two different  
8 hats. You have an auditor hat and a surveyor hat; is that  
9 correct?

10 A. Yes.

11 Q. Okay. My question was, broadly speaking, in either one of  
12 those capacities, have you ever had to either survey or audit a  
13 car carrier that was transporting used vehicles as opposed to new  
14 vehicles?

15 A. Oh. I'm sure I have as a surveyor. As an auditor, I  
16 can't -- nothing comes to mind.

17 Q. Okay. So have you done a survey before on a car carrier with  
18 used cars on them?

19 A. Yeah. But, let's see, I want to say years ago. And I'm  
20 trying to recall something, but it's not clear in my mind. I  
21 think mostly they've been new cars.

22 Q. Okay. And did anybody report to you anytime you were onboard  
23 the ship in Jacksonville any problems they were having with  
24 ventilation issues onboard the ship?

25 A. No.

1 Q. Okay. And, again, you were just on Deck 5, and then you  
2 didn't go on any of the other cargo decks, correct?

3 A. Correct. I didn't physically walk on any of the cargo decks,  
4 no. I could see the cargo decks.

5 Q. Okay. Well, was there another way you could have gone on any  
6 of the cargo decks? I mean, you prefaced it with I didn't  
7 physically walk on any of the cargo decks. I mean, was there -- I  
8 was curious why you prefaced that.

9 A. No. As I said earlier, you could see the 6th cargo deck  
10 walking onboard. And then, once you're onboard on the 5th deck,  
11 you can look down to the 4th deck.

12 Q. And did you do that?

13 A. Yes. I could see that walking onboard. I mentioned that  
14 earlier.

15 Q. Okay. Is there any kind of -- as part of your audit, how is  
16 the CO2 system onboard checked?

17 A. That's not --

18 Q. Or is it?

19 A. -- part of my audit.

20 Q. Okay. So your part of the ISM --

21 A. But I mean from a survey --

22 Q. -- audit is not --

23 A. The system is checked by professional firms.

24 Q. Okay.

25 A. That is in the firefighting -- the service records. Those

1 are -- that's something that the captain would keep in his  
2 documentation. But a fixed firefighting system, excuse me, is  
3 subject to inspection by what we call crew (ph.) firms. And  
4 that's not something that a surveyor would be checking himself.  
5 It's done by a professional firm.

6 Q. Okay. Did you work this ship alone, or was there anybody  
7 else from your company who worked with you in connection with this  
8 ISM audit?

9 A. I was alone.

10 Q. Okay. And did you prepare a formal report?

11 A. Yes, I did.

12 Q. Okay. Have you had any discussion -- did you talk to anybody  
13 from the stevedoring firm at any point during your working --

14 A. No.

15 Q. -- the ship in Jacksonville?

16 A. No, I wouldn't talk to stevedores.

17 Q. Okay. What about after you heard about the fire? Have you  
18 had any discussion with anybody about what might have happened?

19 A. No. I've only seen what's on the -- what JFRD has been  
20 posting.

21 Q. Okay. And --

22 A. I mean, when that happened, there was a -- it made news. So  
23 it was in the news here locally, and then JFRD posted some  
24 pictures as well.

25 MR. BAIAD: Okay. Let me just look through my notes. I



1 think I may be done.

2 (Pause.)

3 MR. BAIAD: That's all the questions I have. Thank you for  
4 your time.

5 LTJG [REDACTED] All righty. With that, we'll move over to  
6 Mr. Masee at Horizon.

7 MR. MASSEE: Jules Masee here. No questions.

8 LTJG [REDACTED] Okay. Great. Without any further alibies,  
9 anyone got anything?

10 (Pause.)

11 LTJG [REDACTED] All right. Great. That will conclude this  
12 interview. Thank you, Mr. Woods, for your time. And, again, if  
13 anyone has any questions, I think everyone has my contact info, so  
14 please give me a shout. Thank you.

15 (Whereupon, the interview was concluded.)

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CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: SHIPBOARD FIRE ABOARD THE *HOËGH XIAMEN* IN JACKSONVILLE, FLORIDA,  
ON JUNE 4, 2020  
Interview of Daniel Woods

ACCIDENT NO.: DCA20FM020

PLACE: Jacksonville, Florida

DATE: June 24, 2020

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



Kelsea Belt  
Transcriber