

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of: *

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ROGER BLOUGH CASUALTY *

IN STURGEON BAY, WISCONSIN, * Accident No.: DCA21FM015

ON FEBRUARY 1, 2021 *

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* * * * *

Interview of: CHRISTIAN BENVIN, 2nd Engineer

Roger Blough

Bay Shipbuilding Conference Room
Sturgeon Bay, Wisconsin



APPEARANCES:

CWO [REDACTED], Investigator
United States Coast Guard

ROBERT R. TERBRACK, Esq.
Gallagher Sharp, LLP
(On behalf of Key Lakes)

ROBERT HARSHMAN, Fire Investigator
Key Lakes

DEREK STARR, S.E.A.
Fincantieri Bay Shipbuilding

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I N T E R V I E W

1
2 CWO [REDACTED]: This is Chief Warrant Officer [REDACTED],
3 assigned investigating officer for the *Roger Blough* fire that
4 occurred on 1 February, and we're doing a joint interview with
5 Christian Benvin.

6 We have several individuals present. Everyone has consented
7 to the recording of this interview. We're all sitting around a
8 table in a rectangular configuration. There are two doors to the
9 room, one to my rear right and one to Christian's left, he's
10 unimpeded. Does anybody want anything to drink, restroom, things
11 of that nature?

12 Okay. You're free to leave at any time. I appreciate your
13 cooperation and being here. I'll go around the room clockwise, if
14 we could start with you, Christian, introduce yourself and your
15 position and then we'll go around the table.

16 MR. BENVIN: My name is Christian Benvin, during the
17 operational season; I am the permanent second engineer on the
18 *Roger Blough*. In the wintertime, just winter, winter help --
19 winter engineer.

20 MR. TERBRACK: Bob Terbrack, counsel for the ship owner.

21 MR. HARSHMAN: This is Rob Harshman, fire expert for the ship
22 owners.

23 MR. STARR: Derek Starr, S.E.A. here on behalf of Bay
24 Shipbuilders.

25 CWO [REDACTED]: All right, Christian, we've had a couple of

1 conversations. I appreciate your time in that. Right now, I'd
2 like to open it up to these two gentlemen to ask any questions
3 that they feel they need some light shed on and then we'll circle
4 back around to me towards the end and I may have some additional
5 questions for you.

6 MR. BENVIN: Absolutely.

7 CWO [REDACTED]: We'll try to make this as quick as possible.

8 MR. BENVIN: Sure, understood.

9 CWO [REDACTED]: That said, you gentlemen feel free.

10 MR. STARR: Okay.

11 INTERVIEW OF CHRISTIAN BENVIN

12 BY MR. STARR:

13 Q. Christian, my name's Derek.

14 A. Hi, Derek, nice to meet you, sir.

15 Q. Nice to meet you. So as winter engineer, what are your
16 general duties?

17 A. We, we use this time period to conduct any maintenance on the
18 vessel that couldn't normally be done during an operating season.
19 Normally that's slated for, you know, big jobs such as like a main
20 engine overhaul.

21 This kind of carried forward from the fall when we did a main
22 engine alignment with the engine manufacturer of Fairbanks-Morse.
23 Aside from large task jobs, this has kind of evolved into one of
24 us, us being, you know, a ship's crew member, you know, of the
25 engineering department kind of facilitating the work that is being

1 done, you know, with vendor shipyard and then it's also kind of a
2 springboard Segway into coordinating the regulatory inspections,
3 the ABS, Coast Guard class whatever may you have, kind of a mini
4 hats maneuver --

5 Q. Okay.

6 A. -- just to prepare the vessel for the upcoming sailing
7 season.

8 Q. So during the time of the fire and the weeks preceding the
9 fire, what major or minor projects were going on on the *Roger*
10 *Blough*?

11 A. So I returned to the *Roger Blough* on the 15th of January. I
12 had been home for a month prior, obviously gone home on the 15th
13 of December so on my return to the vessel I had walked into the
14 tail end of the oil fired boiler on the gangway deck right in
15 front of the chief's office, our auxiliary package boiler, it was
16 retooped.

17 And when I got there, we were in the process of the
18 hydrostatic tests and then the days -- would you like, like a
19 chronological timeline of what I, what I've done, is that what
20 you're asking?

21 Q. Yeah, just general projects that you were working on, you
22 don't have to go through a timeline --

23 A. Sure, sure, sure. Sure, no, I just, I just, I just want to
24 be clear what, what you're asking me to do.

25 Q. Yeah.

1 A. But, the boiler -- getting the boiler backfired and then it
2 was basically just a setup with myself and Isaac of what we were
3 going to accomplish because I was planned absent. Actually the
4 Monday, the Monday morning the fire happened, I was in Florida
5 when this had, when this had gone down.

6 So it was kind of just a staging event for the weeks to
7 follow upon my return to the yard. So I got the boiler fire and
8 then I had a very, you know, random slew of projects to accomplish
9 before my absence.

10 Q. Okay. So when was the last day you were on the *Roger Blough*
11 before the --

12 A. Sunday, that would have been the 31st, I believe, without
13 having a calendar in front of me.

14 Q. And just -- you don't have to go through every specific --

15 A. Sure.

16 Q. -- but what generally were you doing that day?

17 A. On Sunday morning?

18 Q. Yeah.

19 A. I woke up, I checked emails. I believe I made a requisition
20 in NS5 either the day before or day of. I was just trying to get
21 the ball rolling so when I got back things were, things were in
22 motion, you know; parts and things were lined up, cleaned my room,
23 picked up around the engine room and then headed to the airport.

24 Q. Okay. How were you ultimately notified of the fire?

25 A. I'm on that automated call list for the, for the Sensaphone I

1 believe is the technical word for it, the system. I got a call
2 that there was a smoke alarm and then -- I don't have my call log
3 in front of me but the next one I got another proceeding alarm,
4 the power was lost to the vessel.

5 Within literally a minute of that I got a text message from
6 someone else in the company asking me what was going on. And then
7 I called. I believe my first phone call was Isaac, he had told me
8 the vessel was on fire and that's how I was notified.

9 BY MR. HARSHMAN:

10 Q. Could you go back and go over the text messages you received
11 again?

12 A. Sure. They weren't -- they were phone calls, sir.

13 Q. Oh, they were all phone calls?

14 A. Yes.

15 Q. I thought you said -- yeah.

16 A. I apologize if I was -- if I misspoke.

17 Q. Okay, all right.

18 A. Yeah, it's an automated, it's an automated call from like, a
19 robot voice. A number comes out of Chesterfield or Chesterfield,
20 Pennsylvania.

21 MR STARR: Do you have, I guess, a history on your phone like
22 a timeline of when you got which call?

23 MR. BENVIN: Uh-huh, yes.

24 MR. STARR: Okay.

25 MR. BENVIN: Digital. I don't have my phone on me but --

1 MR. HARSHMAN: Before we get lost, could you go through what
2 those messages were?

3 MR. BENVIN: The first one, that there was an active fire or
4 a fire alarm, smoke detection, it was like Zone 1 fire, smoke
5 detection and then the next one proceeding. Again, I don't want
6 to quote the timeline because I can't, I can't speak to it
7 exactly; it would have been maybe a few minutes later that there
8 was power lost on the vessel. That was another alarm that power
9 to the system had failed.

10 And then a half hour after that I got another call saying
11 that it had been a half hour since power was lost to the vessel
12 and at that point, I was on my way to the airport to get back
13 here.

14 BY MR. STARR:

15 Q. And so you mentioned like, a zone for the smoke alarm; is
16 that specifically what you remember or is that just an example of
17 --

18 A. I -- the alarm, the alarm it wouldn't -- when it sends its
19 alarm signal, there's, there's channels on the, on the enunciator,
20 if you will, and I just remember Zone 1 is the smoke alarms.

21 Q. Okay.

22 A. So I got the message. It wasn't I listened to -- it wasn't a
23 recorded message it was, you know, me in real time, you know, Zone
24 1, which is the smoke alarms. That's just in my half day of
25 sleep, that's what I remember.

1 Q. Gotcha.

2 A. Right.

3 BY MR. HARSHMAN:

4 Q. You're -- the vessel is not broken apart by different zones
5 for these detectors where it will tell you a specific --

6 A. I don't know.

7 Q. Okay, all right. Typically, when I hear terminology of Zone
8 1 we have departmental zones and divisions in the vessel and I
9 wasn't sure if you were --

10 A. Sure, sure, I understand completely what you mean by that.

11 Q. Is this the layup smoke detection system?

12 A. Yes.

13 Q. It's not a primary smoke detection system?

14 A. That's correct.

15 Q. What is a normal engineering watch while the vessel's
16 underway?

17 A. We, we do a typical four on eight off rotation with the
18 first, second and third engineers standing watch and the chief
19 working days or maneuvering.

20 Q. How many people are on watch at any given time?

21 A. One engineer on watch and then you have the day working
22 conveyor man and wiper and they're duties fluctuate with where
23 we're at. The wiper, the wiper pumps ballast, the conveyor man
24 obviously runs the underload.

25 And then if we're going through the sue (ph.) their hours

1 vary this or that, so it literally depends where we're at, what
2 time of day.

3 Q. Let me ask this way, what is your minimum manning level for
4 engine room?

5 A. I would have to see the COI.

6 Q. So you -- after hours how many people would be in the engine
7 room while the vessel is operating?

8 A. Just the engineer on watch potentially.

9 Q. A licensed engineer?

10 A. Yes, a licensed --

11 Q. To be clear?

12 A. -- a licensed engineer.

13 Q. Okay. Are you familiar with the phrase minimum manning?

14 A. No, I am not.

15 Q. Your automation system, do you have fire detection in the
16 engine room when you're underway?

17 A. Just the layup alarm.

18 MR. HARSHMAN: Just the layup one. Okay. Thank you.

19 BY MR. STARR:

20 Q. Do you know where the smoke alarms are located inside the
21 engine room?

22 A. I know, I know -- yes. Not all of them. We were still
23 trying to find one of them actually but the ones I do know and
24 this is a bad way to say this, but the ones I know where they're
25 at I know where they're at. I know that doesn't sound good but --

1 Q. All right. But it's something you could draw on a drawing
2 for us?

3 A. Uh-huh.

4 Q. Eventually?

5 A. Yes.

6 BY MR. HARSHMAN:

7 Q. Okay. Tell us kind of roughly, at this point, where --

8 A. Yeah, there's one, there's one downstairs when you first walk
9 on that port side down into the -- right in front of that bypass
10 filter for the main engine. So the MSD tank between the MSD tank
11 and the outboard side of the port main engine there's one up
12 there.

13 There's one up in the stack up in the fiddley and then there
14 is one in the passageway between the steering flat -- between the
15 fuel bunkers and the main gangway thoroughfare.

16 Q. Let's go back to that, you have one smoke detector between
17 the MSD tank and the port main?

18 A. Yes --

19 Q. Okay.

20 A. -- which was malfunctioning and we had a replacement, we were
21 going to replace it.

22 Q. Okay. So that was not operational?

23 A. No.

24 Q. When did you order replacement?

25 A. Ward was going to bring one back with him from Duluth. He

1 was supposed to be in Duluth the same time I was supposed to be in
2 Florida because the days preceding that we had actually tested all
3 of our alarms to make sure they were all functioning and then we
4 discovered that that head was not functional.

5 Q. How did you test them?

6 A. Just by -- the smoke alarms, we didn't locally activate them
7 but, you know, we changed the batteries and just went by the
8 lights. That one had a red light and then the bubbler system, the
9 float in the tunnel, the bilge, I think that's all there is and
10 then the bilge float we, you know, manually actuated them.

11 Q. One smoke detector in the stack by fiddley?

12 A. Yes.

13 Q. The fiddling? And where was the third?

14 A. In the, in the thoroughfare between the gangway and the
15 steering flat in the little passageway between the fuel bunkers up
16 in the overhead.

17 Q. Steering flat between bunkers?

18 A. Yes.

19 Q. Was that one operational?

20 A. Yes.

21 Q. Was any mind given to the fact that there was a smoke
22 detector not operational that you should have a roving watch for
23 purposes of a safe layup, was that conversation had, issue raised
24 by anyone?

25 A. I mean, I would say that we took care that it was

1 uninstalled, yes, but did we setup a formal watch, no.

2 Q. Would it have been --

3 A. I think that's a leading question but --

4 Q. No, no, it's not. It's do you think it's reasonable was the
5 vessel safe in the fact that there was safety equipment that
6 wasn't functional, did you have any concerns? I mean, you knew
7 about this it's --

8 A. I wouldn't have left if I felt concerned and that's the God's
9 honest truth.

10 Q. Okay. But you knew there was a smoke detector that was not
11 functional, you had asked for replacement or was supposed to bring
12 you one?

13 A. I didn't. My, my only assertion of the smoke alarm being
14 unfunctional is the fact that it had a red light and the other
15 ones had green ones, that's as far as we got. We didn't have --

16 Q. Okay. So there was no quantitative, it was more qualitative?

17 A. Yes.

18 Q. There's a light, something's different kind of thing?

19 A. Yeah, it was more like, hey, let's change that.

20 Q. Okay. Was the red light blinking or was it always on?

21 A. It was always -- it was a solid state.

22 Q. Thank you.

23 A. You're welcome.

24 UNIDENTIFIED SPEAKER: Do you know what other sensors or
25 conditions caused you to get a call from that Sensaphone system?

1 MR. BENVIN: Yes, I do specifically. The alarm standpoints
2 are -- again, there was obviously a smoke that was actuated. The
3 bubbler system -- if you lose pressure on the bubbler system, you
4 get a call and if there's a high bilge alarm, which is just
5 normally -- don't quote me on this, but I think it's normally
6 close contact and that's usually for what opens -- it opens and
7 then it triggers.

8 But, yeah, those are the parameters that are monitored, and
9 then that's when you -- and then the ones that I got if there's a
10 power off, if you unplug it, it will alarm and then the sustained
11 power outage, which I also got. If there's anything outside of
12 that, I don't know but I've experienced all of those by testing so
13 that's how I can answer that.

14 UNIDENTIFIED SPEAKER: Had you guys run into any other
15 unexpected issues during a layover with the equipment that was
16 operational at the time?

17 MR. BENVIN: Um-huh.

18 UNIDENTIFIED SPEAKER: Have you guys been doing any work near
19 the layover furnace? The (indiscernible) furnace?

20 MR. BENVIN: I hadn't touched it since I've been back.

21 BY MR. STARR:

22 Q. So since January 15th you came onboard, is that correct?

23 A. Yes, sir.

24 Q. And then you departed on the 31st, Sunday?

25 A. Yes.

1 Q. Then no interaction?

2 A. The only thing I noticed about it, there was an electrical
3 panel taken -- like the cover taken off of it, that was there when
4 I left it and I honestly just forgot to put it back on before I
5 left. It was just a housekeeping error in my but --

6 BY MR. HARSHMAN:

7 Q. Now, you said there was no work in that area, why was that
8 cover off?

9 A. That, I don't know.

10 Q. Do you have any idea who might have taken it off or had a
11 reason to take it off?

12 A. I can assume, but I know nothing for a fact.

13 Q. I mean, I don't -- just like any possibility? I mean, I
14 realize you don't know who it was, but is there anyone who would
15 normally do work on the furnace?

16 A. No, no.

17 Q. Okay.

18 A. It would, it would be a licensed person. I was the only one
19 there so, no.

20 Q. So any idea who that would have -- could have been?

21 A. I would, I would assume that it was during the service call
22 that happened prior, and it was just never put back on and I
23 caught it when I was doing a trash round and just didn't put it
24 back on.

25 UNIDENTIFIED SPEAKER: Who --

1 UNIDENTIFIED SPEAKER: So, if you --

2 UNIDENTIFIED SPEAKER: So who did the service call?

3 UNIDENTIFIED SPEAKER: Oh, I'm sorry.

4 UNIDENTIFIED SPEAKER: No, you're fine. I'm sorry, we were
5 both going --

6 MR. BENVIN: You would have to ask Dave on specifics about
7 that since it was on my vacation, I don't want to answer to
8 something that during a timeline I wasn't physically aboard the
9 vessel.

10 BY MR. STARR:

11 Q. I understand that, but would you be aware of service being
12 conducted onboard? Would you be given a heads up to expect --

13 A. The only way that I know that there was a service call was
14 the chief engineer called me at home to ask me for spare parts for
15 the, for the winter furnace. We had tried to procure some burner
16 tips, I believe, last year when the thing was installed and the
17 chief had called me and asked me if any of that stuff existed and
18 where it would have been and then, you know, mentioned that Tweet
19 was coming if there's anything we needed. So I knew. That's how
20 I know that they were there in the first place.

21 Q. Burner tips. Did the chief engineer mention why that
22 specifically?

23 A. No, he did not.

24 Q. Will it cause a need for additional spare burner tips?

25 A. He was -- just to have them onboard. I mean, just as a spare

1 parts item.

2 Q. Who is the chief engineer?

3 A. Mike Root.

4 Q. Could you spell his last name for me?

5 A. R-O-O-T.

6 Q. When did this phone call take place?

7 A. I would have to look at my phone specifically, but it was
8 sometime in that ballpark of me being home.

9 Q. Okay. So before January 15th?

10 A. Yes, yes. It would precede the service call I'm sure by a
11 day or two.

12 Q. Do you know if the service was completed on that unit or if
13 they just came on?

14 A. Again you'd have to speak to Dave Hunt specifically about
15 that.

16 Q. Okay, thanks.

17 A. I'm not trying to be rude I just --

18 Q. No one's, no one's assuming that. You can, you can dispense
19 with that, that's fine, just direct questions, direct answers, no
20 feelings here. I appreciate your, your explaining this for me.
21 So the chief engineer called you while you were at home on your
22 off time between -- somewhere between December 15th and January
23 15th and had asked if there were spare burner tips onboard for the
24 layup furnace?

25 A. Spare parts specifically.

1 Q. Spare parts specifically?

2 A. Yes, was just spare parts and I, and I know, you know, burner
3 tips, whatever he meant but we keep spare -- yes, you can keep
4 burner tips in there, because that was probably --

5 Q. Okay.

6 A. -- exactly what he was after.

7 Q. Okay. Is that a standard consumable?

8 A. Yes.

9 Q. Any other consumables?

10 A. Igniters and then probably a squirrel cage for the blower
11 motor, I'm sure he would have been after too.

12 Q. Okay.

13 A. But if I had to guess --

14 MR. STARR: And you --

15 UNIDENTIFIED SPEAKER: So -- can I interject for a second? I
16 may have misunderstood earlier, did you say he had ordered these
17 parts, or he just asked you if you had them?

18 MR. BENVIN: We had put in a loose order with Tweet to get
19 these things, the layup prior and he had asked me -- and he knew
20 about that and he called to ask me if we had ever gotten them and
21 where they were because he couldn't find them.

22 UNIDENTIFIED SPEAKER: Okay.

23 MR. BENVIN: And that was more so. And Mike and I -- and
24 this isn't an uncommon thing between me and this chief, we have
25 that relationship where we do communicate with each other on off

1 time over various things just to make everybody's life a little
2 easier. There's a full line of communication there.

3 UNIDENTIFIED SPEAKER: Do you have experience with the
4 particular furnace that's installed on this boat?

5 MR. BENVIN: No, I don't.

6 UNIDENTIFIED SPEAKER: Do you know -- do you have experience
7 with similar installations --

8 MR. BENVIN: Yes.

9 UNIDENTIFIED SPEAKER: -- and doing maintenance on them?

10 MR. BENVIN: Yes.

11 UNIDENTIFIED SPEAKER: How often would burner tips or
12 igniters be changed out on a furnace like this?

13 MR. BENVIN: Only time if you ever had to trim the flame but
14 as long as you had a clean flame and it ignited and it didn't have
15 any faults you would never touch it.

16 UNIDENTIFIED SPEAKER: Okay. So there would be no
17 predetermined timeline for required maintenance?

18 MR. BENVIN: As far as a manufacturer's specs go you'd have
19 to read the book but, no, I would only go by either that if it was
20 in front of me or if I -- if it faulted and I was going to take
21 the thing apart and clean it, I wouldn't want to reassemble it
22 with faulty parts potentially. That's leading, but a new part is
23 what I'm saying, put it back together with new things.

24 UNIDENTIFIED SPEAKER: How do you feel about the phrase, see
25 a problem fix a problem? Is that accurate with a furnace?

1 MR. BENVIN: That's kind of what I'm getting at.

2 UNIDENTIFIED SPEAKER: Okay. I'm just trying to make it
3 simple.

4 MR. BENVIN: Thank you.

5 UNIDENTIFIED SPEAKER: Yeah, I appreciate it.

6 UNIDENTIFIED SPEAKER: You mentioned before, one of the
7 covers was off on the electrical panels?

8 MR. BENVIN: Yes.

9 UNIDENTIFIED SPEAKER: If we consider the bulkhead as the
10 back of the unit --

11 MR. BENVIN: Uh-huh.

12 UNIDENTIFIED SPEAKER: -- can you describe where that
13 electrical panel would have been; was it on the left side?

14 MR. BENVIN: Yeah, it was, it was -- so furnace, furnace sits
15 here, bulkhead's here, you have the combustion box, if you will,
16 where the burner's at. There's a disconnect on the right hand
17 corner and then the panel right on the forward side of that.

18 UNIDENTIFIED SPEAKER: Gotcha.

19 MR. BENVIN: The cover was off of it and I honestly didn't
20 notice it until I was taking out trash.

21 UNIDENTIFIED SPEAKER: Okay. If the bulkhead's in the back
22 then you're talking about the left side of the furnace?

23 MR. BENVIN: Yeah. Do you want me to --

24 UNIDENTIFIED SPEAKER: If I showed you a picture.

25 UNIDENTIFIED SPEAKER: And you're over here at the left side?

1 UNIDENTIFIED SPEAKER: Let's just let him sketch it.

2 UNIDENTIFIED SPEAKER: Okay.

3 UNIDENTIFIED SPEAKER: Yeah.

4 UNIDENTIFIED SPEAKER: Also I want to show him the picture to
5 see if this is the panel if I can find one.

6 UNIDENTIFIED SPEAKER: I think I have.

7 UNIDENTIFIED SPEAKER: So --

8 UNIDENTIFIED SPEAKER: Here, I've got a 3D scan if we could
9 just point to it. So this is our furnace, our bulkheads in the
10 back.

11 MR. BENVIN: Uh-huh.

12 UNIDENTIFIED SPEAKER: Was it down low here?

13 MR. BENVIN: Yeah, on this.

14 UNIDENTIFIED SPEAKER: Okay.

15 UNIDENTIFIED SPEAKER: Could you point that out to me so I
16 can see it, so I can see it?

17 UNIDENTIFIED SPEAKER: So I can see it.

18 UNIDENTIFIED SPEAKER: So it's the aft of the furnace down on
19 the bottom.

20 UNIDENTIFIED SPEAKER: Yeah, it's towards it. So this is the
21 front of the furnace.

22 UNIDENTIFIED SPEAKER: Okay.

23 UNIDENTIFIED SPEAKER: Uh-huh.

24 UNIDENTIFIED SPEAKER: He pointed to right down here, right
25 down, it's laying on the ground but --

1 UNIDENTIFIED SPEAKER: Okay.

2 UNIDENTIFIED SPEAKER: Lower left.

3 UNIDENTIFIED SPEAKER: (Indiscernible) bulkhead.

4 UNIDENTIFIED SPEAKER: The left side on the lower left, it is
5 the left --

6 UNIDENTIFIED SPEAKER: Can you show me on this picture?

7 (Crosstalk)

8 UNIDENTIFIED SPEAKER: Yeah, between the bulkhead. It's up
9 against the bulkhead, yes.

10 UNIDENTIFIED SPEAKER: Christian, do you mind showing Drew
11 what you showed me where that electrical panel cover was,
12 (indiscernible) cover up?

13 MR. BENVIN: That one.

14 UNIDENTIFIED SPEAKER: Right here?

15 MR. BENVIN: Yeah. Down there, because the disconnect is
16 there, and then that panel was right there.

17 UNIDENTIFIED SPEAKER: Did that just kind of fall on its face
18 by the look of this picture for you?

19 MR. BENVIN: Yeah.

20 UNIDENTIFIED SPEAKER: Okay.

21 UNIDENTIFIED SPEAKER: And then this large rectangle on the
22 left side of this right in the middle --

23 MR. BENVIN: Uh-huh.

24 UNIDENTIFIED SPEAKER: Did you ever see that open?

25 MR. BENVIN: Uh-huh, yeah.

1 UNIDENTIFIED SPEAKER: So that was open as well?

2 MR. BENVIN: No, that was never open in my time I've seen it.
3 I was there to assist Tweet when we installed this thing.

4 UNIDENTIFIED SPEAKER: I mean did you see it open after your
5 return?

6 MR. BENVIN: No, um-huh.

7 UNIDENTIFIED SPEAKER: Okay, gotcha. Thank you.

8 MR. BENVIN: Okay, sure.

9 BY MR. STARR:

10 Q. Can you speak to the safety controls that are on that thing,
11 do you know of safeguards in place, loss of combustion air, loss
12 of fuel pressure, high temp, low temp, anything like that?

13 A. Off the top of my head, no. I know that the -- I know that
14 on the -- it's not -- it might be a Beckett burner. I'm almost
15 positive it is, but it has a different control head like say
16 what's on like the incinerator --

17 Q. Yeah.

18 A. -- where all the automation is local to the box on the
19 transformer cover where you would flip it up to pull the burner
20 assembly out. As far as we had it, it was brand new, it was
21 installed. They ran me through, you know, how to fire it, how to
22 reset it but past that, you know, I never touched it, it ran and
23 it never faulted on me.

24 It always had a clean flame on my rounds. The furnace was
25 clear, I always, you know, would check if it was fired and --

1 Q. What would be cause to reset it?

2 A. I never had to do it so.

3 Q. Never came up?

4 A. No.

5 Q. Okay.

6 A. There was a lot of time and effort put into get it trimmed
7 when they came onboard in its initial installation, you know, they
8 checked the stack gas and the flames and they had, you know,
9 scanners and all of that, and once it was set, you know, we just
10 didn't touch it again, you know, as long as it was operational.

11 MR. STARR: Yeah, I gotcha.

12 UNIDENTIFIED SPEAKER: How often do you guys check the fuel
13 filters on that forward bulkhead?

14 MR. BENVIN: I hadn't done it yet this season.

15 UNIDENTIFIED SPEAKER: It's been a while?

16 MR. BENVIN: Yeah.

17 UNIDENTIFIED SPEAKER: Okay. So no fuel system cleaning in
18 that area?

19 MR. BENVIN: No.

20 UNIDENTIFIED SPEAKER: Okay.

21 UNIDENTIFIED SPEAKER: Do you know, do you know what safety
22 devices are inside this furnace as far as thermal cutoffs, things
23 like that?

24 MR. BENVIN: Off the top of my head, no.

25 UNIDENTIFIED SPEAKER: Okay.

1 UNIDENTIFIED SPEAKER: So she's been pretty strong and solid
2 for you guys?

3 MR. BENVIN: Yes, absolutely.

4 UNIDENTIFIED SPEAKER: What is that fueled with?

5 MR. BENVIN: Diesel oil.

6 UNIDENTIFIED SPEAKER: Diesel oil.

7 MR. BENVIN: And if you needed to walk through the fuel
8 piping, I can show you five seconds, go right on the boat if that
9 were to come up.

10 UNIDENTIFIED SPEAKER: I think that probably will and it'd be
11 very helpful --

12 MR. BENVIN: Sure.

13 UNIDENTIFIED SPEAKER: -- in tracking things down.

14 MR. BENVIN: Yeah. Yeah, that one comes off the diesel oil
15 tank, the same tank that feeds the boiler and the generators.

16 UNIDENTIFIED SPEAKER: Is the boiler line that connection
17 that runs port and out port from there?

18 MR. BENVIN: Yes.

19 UNIDENTIFIED SPEAKER: Okay. Because that has that little
20 line that drops down as due (ph.) collectors comes up and over, is
21 that three quarter inch? There's a little ball cut off valve --

22 MR. BENVIN: Uh-huh.

23 UNIDENTIFIED SPEAKER: -- that ties into the bottom of the
24 unit there?

25 MR. BENVIN: Yes.

1 UNIDENTIFIED SPEAKER: Okay. So tracing that back, the pipes
2 that runs port out port, that's going to the Johnson?

3 MR. BENVIN: Yes.

4 UNIDENTIFIED SPEAKER: Okay. And then going inboard and then
5 up is that -- that's going to the day tank?

6 MR. BENVIN: Yeah, I think that's the supply which is as
7 you're describing it, as looking at it.

8 UNIDENTIFIED SPEAKER: Yeah, I'm doing a bad job describing
9 it. I apologize.

10 MR. BENVIN: That's fine.

11 UNIDENTIFIED SPEAKER: Having you down there to show me would
12 sure be helpful.

13 MR. BENVIN: Sure. Oh, I could, I could trace you through
14 it.

15 UNIDENTIFIED SPEAKER: Okay.

16 MR. BENVIN: Yeah.

17 UNIDENTIFIED SPEAKER: We'll take a look and if that becomes
18 necessary, I appreciate -- really appreciate you taking me on a
19 fieldtrip.

20 MR. BENVIN: Sure, that's fine.

21 CWO [REDACTED]: How are you guys with questions? Are you -- I
22 have a few, but I don't want to jump in there?

23 MR. STARR: Yeah, I'm pretty good, I'm ready for you. If
24 you've got more go for it.

25 MR. HARSHMAN: Go ahead.

1 BY CWO [REDACTED]

2 Q. Okay. How would you describe the workplace climate with Key
3 Lakes?

4 A. Excellent.

5 Q. Have you heard people complaining of a hostile work
6 environment?

7 A. No.

8 Q. Within your organization?

9 A. Absolutely not.

10 Q. Within your engineering department specifically, how does the
11 flow of communication work?

12 A. Excellent.

13 Q. Okay. Who do you direct report to?

14 A. What time of year?

15 Q. This time of year.

16 A. Dave.

17 Q. Dave. Other than Dave, would it be Mike when he's onboard
18 with you?

19 A. Yes or whoever, Mike or Colter; Colter's our relief chief.

20 Q. Colter's the relief chief? Okay. If you ask for a part, do
21 you get the part?

22 A. Absolutely.

23 Q. Okay. Barring any delays, of course?

24 A. Yes, of course.

25 Q. What other outstanding maintenance requests were in NS5 to

1 your knowledge that you had personally put in with in the last --
2 since January 15th or prior to, any outstanding NS5 items for
3 maintenance or repair?

4 A. There was a work order for Admore Tech in New Jersey for the
5 oily water content meter to be recalibrated on its annual cycle.
6 There were 2 two bundles en route to Indiana Radiator in East
7 Chicago, one for the waste heat pump condenser, the other being
8 one we pulled out of the jacket water cooler, which is identical
9 between number -- Generators 1, 2 and 4 to be reconditioned.

10 I don't know how close it was to fruition but Tom Lasher was
11 slated to come to the boat for a number of things. And there was
12 -- I don't think it was written yet but we had calls out towards
13 Zilla (ph.) and PMC to do the stern tube system, just overview
14 checkup and the propulsion controls systems respectively to those
15 two vendors.

16 Q. Stern tube, is that oil lubricated shaft?

17 A. Yes.

18 Q. Okay.

19 A. And it's got a sandwich of air, water, oil.

20 CWO [REDACTED]: Yeah, yeah, okay.

21 Robert, the NS5 reports for the Coast Guard, I'd like to get
22 a complete file of any outstanding NS5 reports as of the date of
23 the casualty. The things that were currently unresolved, and more
24 broadly, any NS5 reports relating to the furnace since the date of
25 installation.

1 BY CWO [REDACTED]:

2 Q. Does anything jump out at you there, Christian? I mean, if
3 it's been working like a, like a mule, I mean.

4 A. Yeah, we, we put -- I was -- last winter that was our big
5 task was to install the thing and it was a production. But once
6 we got it set and running everything was good. We ran it for a
7 month maybe that last winter and then shut it off and turned it
8 back on.

9 And, well, actually we ran it, we ran it during the engine
10 alignment in the end of October because we needed it to have the
11 engine room warm for the chawks (ph.) but it went on, it went off
12 and then I believe Mike just turned it back on again when I was on
13 vacation because it wasn't really cold when I left.

14 MR. STARR: So do you mind running through again
15 --

16 MR. BENVIN: Yep.

17 MR. STARR: -- exactly what time periods it would have been
18 on (indiscernible)?

19 MR. BENVIN: Sure. Yeah, so after its installation, it would
20 have ran until we left the lab duct (ph.) last season, so the
21 beginning of the 2020 sailing season, and then it was put in
22 operation during the tail end of the engine alignment, as per
23 Fairbanks-Morse's request to heat the engine room, to have, to
24 have an ambient temperature, and then it was secured and then when
25 I came back, it was running again.

1 BY CWO [REDACTED]:

2 Q. So when you came back on the 15th of January it had been
3 started since then?

4 A. Yes.

5 Q. Okay. Who started it then, who would have been the --

6 A. There was, there was three people onboard, I couldn't tell
7 you who started it.

8 Q. Okay. No worries.

9 A. There were two engineers and a wiper. I assume the chief
10 would have turned it on.

11 Q. Okay. The chief at the time?

12 A. Mike Root.

13 Q. So he turned it on while you were on vacation?

14 A. Uh-huh.

15 Q. And at the same time when you were on vacation he asked about
16 spare parts?

17 A. Uh-huh.

18 Q. Okay, fair enough.

19 A. Yeah. It was, it was warm in November, when I left it was
20 unseasonable, yeah.

21 Q. Yeah. Oh, it's been great until now.

22 A. We turned it off to keep the fuel, you know, so --

23 CWO [REDACTED] Okay.

24 UNIDENTIFIED SPEAKER: Can you run through what it would
25 typically entail to turn it on, is it just the disconnect switch

1 or you turn (indiscernible) first or --

2 MR. BENVIN: Yeah, just the disconnect and then make sure
3 that the -- it will go through a burner cycle and then you make
4 sure the furnace box I go put on J-5 glasses (ph.) like you would
5 with cutting and you look at the cone and a clean flame and then
6 the fan kicked on as soon as the box heated up and off to the
7 races she went.

8 BY CWO [REDACTED]:

9 Q. What if the belt and the fan failed and it continued to fire?
10 What would you expect to happen?

11 A. I, I don't know, I would assume that it would heat up but
12 that's -- I'd have to think about that.

13 Q. Yeah and it's not a stump the chump question, it's just a
14 theoretical. If the blowers were to fail.

15 A. Yeah, I --

16 Q. It's not like that Fire 2 boiler with all the safety cutouts.

17 A. Sure.

18 Q. Combustion air and stuff so but you're not familiar with the
19 safety devices on there, so you really can't forecast what might
20 occur from that?

21 A. Yes, that's correct.

22 Q. Okay. How would you describe the company's safety culture?

23 A. Oh, it's been fantastic.

24 Q. Okay.

25 A. It's paramount.

1 Q. Are communications pretty easy between crew and office
2 personnel?

3 A. Yes.

4 Q. Okay. Any unsafe conditions with regard to regulatory
5 oversight that you're aware of onboard the vessel?

6 A. No.

7 Q. Okay. Anything else that I should take a look at while I'm
8 onboard that should need Coast Guard attention?

9 A. No.

10 Q. Have you ever been instructed to hide anything from a
11 regulatory body with regard to an inspection?

12 A. Absolutely not.

13 Q. Okay.

14 A. Quite the contrary.

15 Q. It's my perception as well but it's just a question that we
16 ask.

17 A. I think Tom could speak to that, the other gentleman up here.

18 Q. Yeah.

19 A. Always been an open book.

20 Q. He's said the same but I have my questions.

21 A. Understood.

22 CWO [REDACTED]: Do you guys have anything?

23 UNIDENTIFIED SPEAKER: One point of clarification and I, I
24 just want to make sure I heard it right. There was a discussion
25 about manning staffing requirements and I think your response was

1 that one licensed engineer was required. Was that specific to the
2 sailing season, or is that at any time?

3 MR. BENVIN: That's when the ship is underway operational.

4 UNIDENTIFIED SPEAKER: Okay.

5 MR. BENVIN: But -- and the thing is too with that I don't
6 know specifically how you would interpret that with manning since
7 we're going back to that point. You always have the chief, the
8 chief's always on call 24 hours a day.

9 So I'm not sure how you're -- but from the -- there's always
10 a licensed engineer available in the engine space working on that
11 -- his designated watch and he does not leave until he's removed.

12 UNIDENTIFIED SPEAKER: Let me ask it this way; is it a two
13 watch, three watch, or one person on watch present in the engine
14 room, physically present conducting rounds watching stuff?

15 MR. BENVIN: Yes, one person.

16 UNIDENTIFIED SPEAKER: One person, okay.

17 MR. BENVIN: Yes.

18 UNIDENTIFIED SPEAKER: And, again, that's during the sailing
19 season?

20 MR. BENVIN: During the sailing season.

21 CWO [REDACTED]: During the sailing season.

22 UNIDENTIFIED SPEAKER: Okay.

23 CWO [REDACTED]: It relates to levels of automation, the other
24 safety protective equipment that may have prevented this casualty
25 from occurring, had the vessel been underway a lot of things would

1 have been much different. And trying to understand which of those
2 safety systems and automation systems were in play during the
3 layup period. And a (indiscernible) is not a lot of correlation
4 there because you don't have the level of automation that would
5 have helped identify zones and how things went.

6 Some fire alarm systems will tell us a lot more information
7 and this one just doesn't have as much on there and that's due to
8 the manning level and that's something that I just wanted to
9 confirm with you.

10 And there are some correlations between what you do when
11 you're sailing and when you're laid up and just trying to
12 understand those responsibilities as they fall to you from being,
13 you know, you're a tech and engineer full-time now you're a winter
14 engineer. So trying to understand how those duties have their
15 relations and how they're different.

16 MR. BENVIN: Okay.

17 UNIDENTIFIED SPEAKER: Good.

18 CWO [REDACTED]: That's it for me.

19 UNIDENTIFIED SPEAKER: Thank you.

20 UNIDENTIFIED SPEAKER: Thanks.

21 UNIDENTIFIED SPEAKER: Yeah.

22 UNIDENTIFIED SPEAKER: (Indiscernible).

23 CWO [REDACTED]: That concludes the interview.

24 (Whereupon, the interview was concluded.)

25

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: *ROGER BLOUGH* CASUALTY
 IN STURGEON BAY, WISCONSIN
 ON FEBRUARY 1, 2021
 Interview of Christian Benvin

ACCIDENT NO.: DCA21FM015

PLACE: Sturgeon Bay, Wisconsin

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.




Transcriber