

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of: *

FIRE ABOARD THE SPIRIT OF BOSTON *

NEAR THE BOSTON SPORTS DISTRICT * Accident No.: DCA23FM022

IN BOSTON, MASSACHUSETTS, *

ON MARCH 24, 2023 *

* * * * *

Interview of: CHRIS BIERKER, National Director of
Marine Engineering for Hornblower Group

via Microsoft Teams

Wednesday,
October 4, 2023

APPEARANCES:

KEITH FAWCETT
Civilian Marine Accident Investigator
First District, Formal Investigations
United States Coast Guard

CDR [REDACTED], Lead Investigator
United States Coast Guard

BRIAN YOUNG
Marine Engineer and Casualty Investigator
National Transportation Safety Board

MATT HARTNETT, Special Agent Certified Fire Investigator
Bureau of Alcohol, Tobacco, Firearms and Explosives

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And for City Cruises, Party in Interest

I N D E X

<u>ITEM</u>	<u>PAGE</u>
Interview of Chris Bierker:	
By Agent Hartnett	6
By Mr. Fawcett	17
By Mr. Young	21
By Agent Hartnett	24
By Mr. Fawcett	25
By Mr. Young	27

I N T E R V I E W

(10:00 a.m.)

1
2
3 MR. FAWCETT: Thank you, Mr. Bierker. How are you, sir? Can
4 you hear me? Can you hear me, sir?

5 MR. BIERKER: I hear everybody.

6 MR. FAWCETT: All right. Thank you, everybody, for joining
7 us. For the record, I just re-energized the MP3 recorder which we
8 use for the NTSB transcript of this interview. So the extraneous
9 information will not be contained. Thank you all for being here.

10 Mr. Bierker, I'd like you to officially acknowledge that we
11 are recording this interview to produce a transcript for the
12 accuracy of the record. If you'll just say I acknowledge that.

13 MR. BIERKER: I acknowledge that.

14 MR. FAWCETT: Thank you. This is a joint U.S. Coast Guard-
15 NTSB investigation. The U.S. Coast Guard is the lead
16 investigating agency for this, and we are conducting this
17 interview under the Coast Guard's regulations. We're here to
18 conduct an interview on October 4th, 2023, Wednesday, at 1000,
19 with Mr. Chris Bierker, National Director of Marine Engineering
20 for Hornblower Group. We're doing this via Teams.

21 We are conducting this interview to examine the events
22 surrounding the fire aboard the excursion vessel, *Spirit of*
23 *Boston*, which occurred on March 24th, 2023, in Boston Harbor.

24 What I'd like you to do, sir, is state and spell your name
25 for the record.

1 MR. BIERKER: My name is Christopher John Bierker. It's
2 spelled C-h-r-i-s-t-o-p-h-e-r, John, J-o-h-n, Bierker, B as in
3 boy, i-e-r-k-e-r.

4 MR. FAWCETT: And, counsel.

5 MR. DENLEY: This is Eric Denley, D-e-n-l-e-y, in-house
6 counsel for City Cruises. City Cruises is a party-in-interest to
7 the Coast Guard's investigation.

8 MR. FAWCETT: Okay. And for the Coast Guard, Commander
9 Wilcox.

10 CDR [REDACTED] Good morning, everybody. My name is Commander
11 [REDACTED], the lead investigator for this case and
12 welcome, everybody.

13 MR. FAWCETT: My name is Keith Fawcett, last name spelled F-
14 a-w-c-e-t-t. I am a member of the *Spirit of Boston* formal
15 investigation team. And now to the NTSB.

16 MR. YOUNG: Good morning. My name is Brian Young. I'm with
17 the National Transportation Safety Board. My last name is spelled
18 Y-o-u-n-g. Thank you for being here today, sir.

19 MR. FAWCETT: And now for the Bureau of Alcohol, Tobacco,
20 Firearms and Explosives.

21 AGENT HARTNETT: Good morning. My name is Matthew Hartnett,
22 H-a-r-t-n-e-t-t. I'm a special agent, certified fire investigator
23 responsible for origin and cause determination of the fire.

24 MR. FAWCETT: Mr. Bierker, memory is a perishable thing, and
25 if you remember anything different from this interview, you can

1 let Mr. Denley know. You can modify or change any of the answers
2 or content of this interview, but you'll let him know and he'll
3 let the Coast Guard know and the rest of the people involved with
4 this investigation.

5 Also, you may appeal the final results of this report of
6 investigation. There are detailed, detailed information about the
7 report of investigation and the investigation process in the Coast
8 Guard's *Marine Safety Manual*, Volume V. Mr. Denley can point you
9 to it or you could Google search it. And it talks about who,
10 what, why and how we do this.

11 So for the Teams interview, I'd like to set the ground rules.
12 Anybody that is not speaking, if you will, turn your camera off
13 and mute your microphone. For this interview, we're going to
14 begin the interview with Agent Hartnett conducting the questions
15 that he needs to. He is also shared his screen with you with some
16 images, Mr. Bierker. Can you see them before he gets started?

17 MR. BIERKER: Yes, I can.

18 MR. FAWCETT: Okay. Thank you very much. Agent Hartnett.

19 INTERVIEW OF CHRIS BIERKER

20 BY AGENT HARTNETT:

21 Q. Good morning, Mr. Bierker. My name is Matthew Hartnett. I'm
22 the special agent certified fire investigator for determining the
23 origin and cause of this fire. As some of the things we need to
24 do to determine the cause of the fire is to eliminate other things
25 that may be responsible for the fire. So by eliminating causes,

1 we finally come to a conclusion with what's left. One of the
2 things that we have not been able to explain in looking at the
3 photo shared with you on the screen is the condition of the wiring
4 above the engine room alarm junction box and then I'm going to
5 flip to another photo, and then we'll back up very quickly. And
6 then inside the engine room alarm junction box, we have several
7 photos of the wiring that I'm showing you flipping through on the
8 screen.

9 So we're going to start with the photo on the screen. Before
10 -- the first thing we want to know is if this resulting damage is
11 from the result of the fire. This is generally in the area below
12 where the fire occurred in the wait (ph.) station above. So we're
13 trying to determine if this is causation or effect of the fire
14 above. And, obviously we don't know that. That's why we're
15 conducting the interview today. So if you can describe the
16 performance of the circuits that you see that are damaged in this
17 photograph, pre-fire, and then we'll get into the evening of the
18 fire.

19 A. Okay. So is there a way I could share my screen and share
20 pictures so I could point things out?

21 Q. I hope so. I don't know how to do that.

22 A. I mean I can do it. You just need to close yours and I'll
23 open mine.

24 Q. Sure.

25 A. I'll open mine.

1 Q. Okay. Is that -- hold on a minute. Does that help?

2 A. Yeah. Okay. And since we didn't originate the meeting, they
3 put all the buttons in different places. So I have to find the
4 share screen button. Open share tray. Okay. Let's see if this
5 works.

6 Okay. So the circuit in question originated at the battery.
7 The shipyard had already removed all the cabling. So everything I
8 did was with interviewing the electricians here at the shipyard to
9 confirm exactly where these wires came from and went to. In some
10 cases, we have actual good physical evidence that proves where
11 they went to, and I'll move onto that.

12 So the wire was a power wire, that SO cable which was in your
13 picture that showed the tachometer cable right next to it, it had
14 melted a little bit, and that rubber cable being melted next to
15 it. So it originated here at the batteries with no circuit
16 protection, and then it continued --

17 Q. Where were those batteries located, sir? I don't mean to
18 interrupt you. Where -- what --

19 A. I'm sorry. The port, the port main engine batteries.

20 Q. Port main engine batteries, okay.

21 A. Yes, in the engine room, back aft of the portside, right next
22 to the port main engine, inboard of port main engine.

23 Q. Okay. Thank you.

24 A. And then that wire went to this panel. Let me see if have a
25 picture like your picture. It came to this panel, and it was wire

1 nuted into this faulty conductor cable that then went up to the
2 pilothouse, and it went to the pilothouse through this -- that's
3 where the cable was inside the wall. From what I understand --

4 UNIDENTIFIED SPEAKER: Hey, Chris. Chris. Can you just --
5 as you're describing this, could you just describe what that
6 picture is right there?

7 MR. BIERKER: I am. So this, this picture shows -- the
8 cables that you see in the picture, those are -- that faulty
9 conductor cable that goes up to the wheelhouse. They're inside
10 the wall, the bulkhead exterior, and then they go up.

11 UNIDENTIFIED SPEAKER: What space is that right there? I'm
12 sorry. This picture there, what space within the ship are you
13 showing and describing, Chris?

14 MR. BIERKER: So this is the wait station that's in question
15 where the fire originated.

16 UNIDENTIFIED SPEAKER: Okay. So this is the wait station
17 that -- where the fire occurred which is the subject of this
18 investigation, and that's where those wires ran through that
19 exterior bulkhead. Is that correct?

20 MR. BIERKER: Yes, correct. And then this is -- to your left
21 where -- this wall, I -- just from the video that I saw, it seemed
22 that the fire -- you see where my arrow is. It seems like the
23 fire kind of originated in this area. I mean you all would know
24 better than me. I didn't step foot on this boat until the end of
25 last week. But, at any rate.

1 So this is where that wire run -- went. This is the path it
2 took. It went up that window column, got into the ceiling area,
3 and then went through another deck penetration and continued all
4 the way up to the wheelhouse. So if you notice in this picture
5 you see that these are two of the conductors that went up to the
6 wheelhouse, and it's got that phone cable connected to those two
7 wires along with the power wires that are, that are cooked. This
8 is a photo up in the wheelhouse. As you'll see, here's that same
9 phone wire which confirms that this is indeed that multiconductor
10 that went up to the pilothouse, and then you'll see -- here's
11 where those power wires were connected to another rubber cable.
12 And that rubber cable went to the windshield wipers, and you'll
13 see it right here and provided power for the wipers and the
14 defrosters. And they're fused on this end but not on the other
15 end as you can see where the fuses are right there.

16 So my guess is that, you know, the cable when it passed
17 through that space got cooked by the fire, shorted out, causing
18 the damage to the wiring in the engine room since it wasn't
19 circuit protected. So the wire, after where the fire was, was all
20 in perfect shape because, you know, it wasn't shorted out.

21 BY AGENT HARTNETT:

22 Q. All right. So prior to the fire event, there was no
23 compromised performance of any of these circuits.

24 A. As far as I know. I don't operate the boat. I would have to
25 ask, you know, the local crew --

1 Q. That's one of the critical questions we have right now for
2 this interview, I thought we were going to have an answer for.

3 A. If the systems are working properly or not?

4 Q. Yes.

5 A. I didn't see. I just -- I was asked to figure out where a
6 wire went to and what happened to it.

7 Q. Okay. So going back to it, can I share my screen again?

8 A. Sure.

9 Q. Okay. So we see the photo of the top of the engine room
10 junction right now. Is that on your screen?

11 A. Yeah.

12 Q. All right. So the -- does my mouse appear as I scroll my
13 mouse?

14 A. Yes.

15 Q. Okay. So let's start from left to right. What is -- so we
16 have -- let's identify 1, 2, 3, 4 and 5 wires.

17 A. Okay.

18 Q. So let's start with number 1. What is this wire here?

19 A. That first one went to an intercom system.

20 Q. Intercom.

21 A. And that was actually those wires that I showed you with the
22 wire nuts.

23 Q. It's the wire nutted ones. Okay.

24 A. Yeah. Well, they were all wire nutted but it's the one
25 that's still intact that I showed you that proved that the cable

1 run.

2 Q. Okay.

3 A. With the small, the small wire nuts.

4 Q. I'm just taking notes. Thank you. All right. So moving
5 onto what we'll call wire number 2.

6 A. That wire went directly to the battery and was -- went to the
7 battery terminal. And then was wire nutted into that
8 multiconductor that went up to the windshield wipers.

9 Q. Okay. Wire number 3.

10 A. That wire did the same thing.

11 Q. Directly to the battery, windshield wipers.

12 A. Yeah, connected to the battery, came back, went to that
13 multiconductor that went up to the wheelhouse to the windshield
14 wipers.

15 Q. All right. We'll call that number 4.

16 A. That wire -- those are tachometer wires that went over to the
17 main engines.

18 UNIDENTIFIED SPEAKER: Matt, you might want to tell your
19 colleagues to settle down a little bit.

20 AGENT HARTNETT: Okay. I'm going to put you on mute real
21 quick to do that.

22 MR. FAWCETT: Sorry about that. I just want to make sure
23 that our transcripts don't get corrupted with extraneous
24 conversations.

25 AGENT HARTNETT: I apologize for that. We're back on.

1 BY AGENT HARTNETT:

2 Q. All right. So wire identifying as number 4 here is
3 tachometers wires to the main engines?

4 A. Yes. And the damage to those is caused by wire number 3
5 because you could, you could short those right out. It would not
6 get damaged like that. It's only a tachometer wire.

7 Q. Okay. So damage is caused line number 3 because it couldn't
8 short out. Okay.

9 A. Yeah. Even if it did, it's -- the current that's produced in
10 there is produced by a magnetic pickup on the flywheel. So it
11 could be completely shorted out without any issues.

12 Q. Okay. So describing this is wire number 5.

13 A. Yep, that's also a tachometer.

14 Q. Okay. Same thing, damaged by number 3?

15 A. Yes.

16 Q. Okay. And then looking at -- this is a better photo. All
17 right. So these are the ones you showed me.

18 A. Yeah, that's telephone.

19 Q. Okay. So we'll call that wire nut 1 -- 1 and 2 is the
20 telephone --

21 A. You can see where the spare telephone wire is wrapped around
22 itself right there.

23 Q. Right here.

24 A. Yes.

25 Q. Okay. And then down here, we'll call this wire nuts 3 and 4.

1 A. Um-hum. So the exact location of those cables aren't known
2 because the wires were melted and parted.

3 Q. Okay.

4 A. Like which exact wire from wire number 2 and 3 it goes to, is
5 really not explicitly known. I do know that the one yellow wire
6 that we were able to trace went to one of the wires that were in
7 the wire number 3, but since all the insulation was melted off,
8 we're not sure of the color.

9 Q. Okay. And then we'll describe this as number 3.

10 A. Wire nut number 3.

11 Q. Yeah. So wire number 3. So looking at these two wires into
12 this splice. So -- actually we'll call it splice 1, splice 2 and
13 splice 3. How's that?

14 A. Okay.

15 Q. So these two wires on splice 3.

16 A. So splice 2 and 3 are the positive and negatives that go up
17 to the pilothouse through that multiconductor.

18 Q. Okay. And then splice 3 is these two wires here.

19 A. Yes.

20 Q. And what are those two wires?

21 A. They're -- they go to wire number 2 and 3, and it could be to
22 either positive or negative, but since it was all removed, we
23 don't know exactly, but it definitely went back to the battery.

24 Q. Okay. So, we're looking at -- let me go back to the first
25 photo. We're trying to -- so based on what your knowledge is,

1 this is affect (ph.) of the fire above causing this damage to
2 occur?

3 A. Yes.

4 Q. Okay.

5 A. I believe that, I believe that since the wires got melted,
6 that negative and positive touched each other because they're
7 inside the same multiconductor and shorted out in the area of the
8 fire which caused a dead short on the circuit that was not fused
9 going to a battery that's capable of a couple thousand amps.

10 Q. So dead short from an unfused circuit. Is that correct?

11 A. Yes.

12 Q. Okay.

13 A. Or a dead short in an unfused circuit.

14 Q. Okay. Is it possible, because this is just an easy follow-up
15 question, Mr. Denley, if you're hearing this as well, just to
16 follow up to get someone to specifically say from the marine crew
17 prior to the fire during the excursion that night prior to the
18 fire that these circuits were performing properly.

19 MR. DENLEY: Sure. Yeah. I think, I think we already have
20 some testimony that, you know, that all the systems were working
21 already in the record from the captain --

22 AGENT HARTNETT: Okay.

23 MR. DENLEY: -- that was on board, and --

24 AGENT HARTNETT: We --

25 MR. DENLEY: -- that conducted the -- yeah. Now, if you -- I

1 think if you want to follow up about these particular systems,
2 like whether they were energized, but I think there's some general
3 statements already in the record that all the systems were
4 functioning and operational but if -- I mean we can certainly
5 arrange that if you want to ask about the, you know, the actual
6 windshield wipers and defroster and stuff like that. I don't know
7 that they were used that night, but we could certainly ask about
8 it, and we can certainly follow up on the condition of the ship.

9 MR. FAWCETT: Well, Mr. Denley, to expedite on timing, I
10 think what we'll do is write up a couple questions specific to
11 those circuits --

12 MR. DENLEY: Okay.

13 MR. FAWCETT: -- and we can even have a signed affidavit or
14 attestation from the captain or the mate that, you know, what
15 their recollection was instead of having to go through an
16 interview. And if we have more questions, we can follow up. We
17 can do that.

18 MR. DENLEY: Sure. Okay. Very well.

19 AGENT HARTNETT: But a question for Mr. Bierker, and he may
20 be able to answer this, and we can stop all the extra work.

21 BY AGENT HARTNETT:

22 Q. Would there be any indications in the wheelhouse, pilothouse,
23 that any of these circuits were not functioning properly, a
24 trouble light or a failure light or alarm, buzzer, et cetera?

25 A. No. So the way it's wired, it goes directly to the

1 windshield wipers, the power. So either the windshield wipers
2 worked or they didn't work.

3 Q. Okay. But just in your general capacity, in your position,
4 from looking at these photos and having -- well, said you never
5 stepped foot on the ship, but in your opinion, this is effect and
6 not causation?

7 A. Exactly. This is a result of the fire, not the cause of the
8 fire.

9 Q. Okay.

10 A. Beyond a reasonable doubt.

11 Q. That's pretty much all I have.

12 A. (Indiscernible) about the origin and the location of the fire
13 which was nowhere near where those cables were, but after the fire
14 got fully involved, those areas where the cable passes through got
15 compromised and the cables got burned up.

16 AGENT HARTNETT: Gentlemen, that's all I have. I don't think
17 we need to belabor the point.

18 MR. FAWCETT: Thank you, Agent Hartnett.

19 BY MR. FAWCETT:

20 Q. Mr. Bierker, a couple of follow ups. Could you describe how
21 long you've served as the national director of marine engineering?

22 A. For Hornblower? Since 2019.

23 Q. And how long have you been with Hornblower?

24 A. Since 2015.

25 Q. And Mr. Denley sent an email on September 28, 2023, the

1 investigation, that said we have and I quote, "We have continued
2 to search records and conduct internal interviews but have been
3 unable to identify a specific time or person who worked on those
4 specific connections." Is that correct?

5 A. I believe so. I don't remember getting that email. Was I
6 part of that email?

7 Q. Well, were you involved with trying to identify who might
8 have worked on those circuits?

9 A. I was asked to investigate this last week. So I came here.
10 Now, that we know what actual system was involved, that we could
11 go and find out who worked on it. So prior, we didn't know what
12 the system was until basically yesterday when we completely traced
13 it all out.

14 Q. Are you an electrical engineer or do you have a background
15 specifically in vessel electrical systems?

16 A. I do, yeah.

17 Q. Were those wire nuts and the terminations and connections for
18 those wires in the engine room alarm junction box made in
19 conformance with industry standards?

20 A. Well, it was -- it's not necessarily the way that I would
21 have done it but, you know, as for the CFRs, it's acceptable.

22 Q. And would -- that circuit box, would there have been a cover
23 plate? If I opened the door, would there have been a cover plate
24 over that wiring?

25 A. I don't, I don't believe so, and I -- that panel was created

1 by the shipyard when they built the vessel. And it's just
2 basically a steel junction box with a door on it.

3 Q. Do you know if there's a procedure or policy within the
4 company to periodically inspect those type circuits that we see in
5 the image on our screen?

6 A. I don't know if we have -- I'm not sure if we have something
7 that's specific to this or not.

8 Q. So, Mr. Scott Smith, is the senior vice president of
9 Hornblower Group. He sent an email out on September 2nd, 2019.
10 In that, he talked about the tragic fire on the *Conception*.
11 Towards the end of that email which is Coast Guard Exhibit 059, he
12 says -- he's talking about keeping vessels shipshape. He says,
13 "Although this should be a part of your normal daily routine, I am
14 directing each of you to perform a safety check on each space of
15 your vessels to ensure tidiness. In addition, ensure the
16 satisfactory operation and clear paths to and from all escape
17 hatches. Please provide me with written acknowledgement of this
18 email confirmation that the tasks were completed and your vessels
19 are in compliance prior to 1000 Eastern Standard Time, Thursday, 5
20 September 2019." Are you familiar with that effort to make sure
21 the vessels were, as Captain Smith said, "shipshape?"

22 A. I'm not familiar with that email even though chances are I
23 was probably a recipient of it as well, but I do know that that's
24 the culture that we try to instill. How it pertains to this
25 particular box, I mean now that the wires are burnt up, we really

1 don't know how well those wires were secured, what they really
2 looked like prior to being burnt up. They could have looked
3 shipshape. They could have been secured inside the panel in a
4 better manner. I don't know what it looked like prior to the
5 damage. So it could have been inspected, and they could have
6 looked in there and said, oh, okay. It looks fine and closed the
7 door.

8 Q. On February 6th of 2020, and this is still a portion of
9 Exhibit 059, he's talking about improper electric safety, and he
10 says, "Including the misuse of electrical circuits, power strips
11 and plug multipliers is one of the unsafe practices that is
12 commonly found on board vessels. Improper electrical safety can
13 lead to fire and shock. Electrical safety is an extremely
14 important part of shipboard safety, and it is everyone's
15 responsibility to ensure we are following some basic rules." And
16 there's a list of rules. One of them is, "Ensure all of your
17 electrical outlets, switches and lights are in good working order
18 with approved and intact covers." At the end of the email, he
19 says, "Electrical safety is everyone's responsibility. We will
20 add basic electrical safety training to orientation training to
21 provide our crew with the knowledge to keep themselves and others
22 safe." Do you know if basic electrical safety has been added to
23 the orientation program for vessel crews?

24 A. So I don't, I don't work at any particular port any more. So
25 that's not something that I deal with, but that would be a

1 question for one of our DMOs.

2 Q. And the DMOs would be the directors of marine operations?

3 A. Yes, for each port.

4 MR. FAWCETT: That's all the questions I have. We'll go --
5 Commander, do you have any questions?

6 CDR WILCOX: Not at this time.

7 MR. FAWCETT: Mr. Young.

8 BY MR. YOUNG:

9 Q. Good morning, Mr. Bierker. Thank you very much for your
10 insight into that. That's much appreciated. Could you just talk
11 a little bit about your marine experience and background prior to
12 coming to Hornblower just so we have a basic understanding of your
13 industry.

14 A. Sure. So, I've been doing marine work since I was 14 years
15 old, starting as a mechanic in the marina. Then I went to SUNY
16 Maritime for marine engineering with a minor in EE. From there, I
17 went to work for a shipyard as a welder and millwright, and we
18 designed and built hydraulic systems and repaired commercial
19 fishing boats. Then I got a job as the director of vessel
20 engineering with the C Street Ferry which was originally called
21 Hydrolines back in 1990, and I worked with them until 2015. And
22 then from 2015 I've been with Hornblower. And I also have my own
23 business on the side where I build ship automization equipment,
24 you know, for monitoring and starting and stopping equipment on
25 board vessels, and I do laser -- my company also does laser

1 alignments.

2 Q. Great. Thank you very much. I just wanted to have some
3 insight into that. And I kind of made notes as you were talking
4 about the circuit in question here, and would it be fair to say
5 that the 24 volts from the batteries, both the positive and
6 negative leads are feeding the windshield wipers, the defroster
7 and the intercom? Is that how it's all connected?

8 A. Yes. Well, the intercom wasn't, and the intercom is now --
9 we traced those intercom cables. The one in the engine room just
10 goes over to the entrance to the engine room and is connected to
11 nothing. And the one up in the wheelhouse is just in the wiring
12 harness to the wheelhouse and connected to nothing. So wire nuts
13 number -- circuit number 1, they're not doing anything. The other
14 wire nuts in the picture, you know, they're direct power from the
15 battery to those wires. They go up to the pilothouse, and from
16 the other end of that multiconductor get connected directly to the
17 windshield wipers. That's the only function of that
18 multiconductor cable.

19 Q. Okay. And, just by any chance, you showed a picture of the
20 control box in the wheelhouse with the windshield wipers and the
21 two fuses.

22 A. Yeah.

23 Q. Any chance those fuses were checked for -- if they were blown
24 at all?

25 A. Oh, I could check them but obviously the short happened

1 before the pilothouse so that I would imagine those fuses are -- I
2 mean I'll go check and let everybody know, but so since the short
3 and we're making an assumption the short happened in the area
4 where the cables got melted in the fire, the only cabling that
5 would be compromised would be from that point back to the
6 batteries. And as you can see from the pictures, the cable where
7 it's up in the wheelhouse is in perfect condition, and the cable
8 that's in the back of that -- the panel for the windshield wipers
9 was in perfect condition as well.

10 Q. Got it. Understood. And the tachometer cables, were they
11 connected in any way at all to the 24 volt circuit or were they
12 completely separate?

13 A. No, they're completely separate, and they got into the one
14 big -- there's a -- in that picture, there's one large
15 multiconductor that goes up to the wheelhouse that contains all
16 this. If you open up like 2857 -- not that one. Keep going.
17 That's a good one. So you see the very large cable, all the
18 cabling that's on the bottom of that box, go to the wheelhouse.
19 All the cabling at the top of that box stays in the engine room.

20 Q. Okay.

21 A. So that large multiconductor cable which is connected to all
22 of those terminals on the right-hand side, that carries the alarms
23 and the tachometer and everything up to the pilothouse.

24 Q. Understood. Got it. And that just for reference, that's the
25 large cable completely to the right of the box coming down at the

1 bottom?

2 A. Exactly. And there's no, there's no current carrying
3 conductors in there except for the small amount of voltage and
4 frequency that the tachometer creates.

5 Q. Understood.

6 A. Just alarm switches.

7 Q. Excellent. Thank you very much for your help. We appreciate
8 all your assistance.

9 A. Absolutely.

10 MR. FAWCETT: Agent Hartnett, any follow-up questions?

11 AGENT HARTNETT: I have one, yes.

12 BY AGENT HARTNETT:

13 Q. If I understood you correctly, you said it was clear that the
14 short occurred between the battery and the short in the box. Is
15 that correct? Not downstream or I should say upstream --

16 A. The short actually was created where the fire happened.

17 AGENT HARTNETT: Okay. That's all I have.

18 MR. DENLEY: I think the point is that it occurred between
19 where the fire happened and where the batteries are located, not
20 on the other side where -- up in the pilothouse. Correct, Chris?

21 MR. BIERKER: Yeah, the short was in the area of the fire
22 where the cables got melted together. And the multiconductor
23 cable that goes up to the pilothouse is, you know, is a marine PVC
24 jacketed cable capable of maintaining a lot more heat than that
25 rubber. So the cable that really melted bad was the SJOW cable

1 which is a rubber cable, that black cable that's -- if you go back
2 to your picture. So you can see, you can see there's like a -- I
3 don't know what type of industrial cable. So there was two cables
4 that went to the battery. If you go to your -- the photo where we
5 numbered. Yeah. Okay. So cable 1 was phone. Cable 2 is more of
6 like an industrial cable, like a THHN, like a PVC insulated cable.
7 Cable number 3 is a SJOW which is like an extension cord cable
8 where the insulation is made out of rubber which is, you know,
9 can't handle the heat that the PVC cabling can. So that's why --
10 and that cable -- that's why that cable took the brunt of the
11 heat, you know, from the -- that the heat from being shorted. And
12 then wherever you make a connection, those are always a weak spot
13 in the link also. So all the connection points would be a first
14 spot to melt and a dead short as well. So that's why the wire
15 nuts all melted and then the heat just started to transfer through
16 the wire. And then the same where the connection was made at the
17 battery.

18 AGENT HARTNETT: I don't have any follow up at this time.

19 BY MR. FAWCETT:

20 Q. Mr. Bierker, just for clarity, you said that you were
21 speaking about a couple of thousand amps in an unfused circuit.

22 A. Um-hum.

23 Q. Just for clarity, which circuit are you speaking of?

24 A. This circuit that we're discussing with the SJ cable that was
25 feeding the windshield wipers, that went right there to that --

1 where the pointer's on.

2 Q. And it was fused in the wheelhouse. Is that correct?

3 A. It was, but that's at the other end of the cable.

4 Q. Correct.

5 A. So if you short it out, those fuses aren't going to blow.
6 It's going to -- the fuses have to be at the battery, not at the
7 wheelhouse. So the fuses are there to protect the wire and to
8 protect the wire, you have to protect it at the source which is at
9 the battery.

10 Q. And is it good marine practice to have a fused wire leaving
11 the battery heading up towards the wheelhouse?

12 A. Well, yeah, absolutely. And it's a rule.

13 Q. And is there a fuse when that circuit left the battery?

14 A. There was not. That's why we have this problem.

15 Q. Okay. So the regulations required a fuse for good --

16 A. Yes.

17 Q. Okay. And there wasn't a fuse?

18 A. No.

19 Q. So, you know, you showed us some very good pictures to help
20 us understand the wiring runs.

21 MR. FAWCETT: Mr. Denley, if we could get those images for
22 all parties involved, and if you could put just simplified labels
23 on them to, you know, main deck, wait station, whatever's
24 appropriate, so we don't have to do follow-up questions on the
25 images themselves.

1 MR. DENLEY: Sure.

2 MR. FAWCETT: Before we conclude, does anybody have follow-up
3 questions?

4 MR. YOUNG: I do.

5 MR. FAWCETT: Yes, sir.

6 BY MR. YOUNG:

7 Q. Could we pull up -- Chris, could you pull up just the image
8 that you showed of the actual wait station and the wire runs going
9 through the wait station?

10 A. Sure. So that's a shot of the wait station looking down
11 through the windowsill. So right next to the window.

12 Q. I'm not seeing it.

13 A. Oh, you're not seeing it.

14 Q. It might be taking a while to come up.

15 A. Let me see.

16 Q. Yeah, I have the thumbnail. You may want to just click on
17 it. It's the image that you showed earlier of the cables running
18 up through the exterior bulkhead of the wait station.

19 A. Do you guys see it now?

20 Q. Yes.

21 A. Okay.

22 Q. Yeah. So there's -- perfect. So I just -- I really have a
23 pretty simple question. So we've been talking a lot about this
24 particular circuit and this particular wire run or where these
25 wires run. Just to be clear, these wires run through the engine

1 room which is below this particular image. They go through a deck
2 penetration at the exterior bulkhead of the wait station, and is
3 that correct?

4 A. Yes.

5 Q. Okay. And just to be clear, none of these wires run through
6 the bulkhead which is on the left-hand side of this particular
7 image. None of these wires run through the bulkhead that
8 separates the wait station from the cold prep area. Is that
9 correct?

10 A. Yes.

11 Q. Thank you.

12 MR. YOUNG: I don't have any questions -- any further
13 questions.

14 MR. FAWCETT: Anyone else before we conclude the interview?

15 (No response.)

16 MR. FAWCETT: Hearing none, Mr. Bierker, thank you very much
17 for your time and expertise. The time is 10:43, and we've
18 concluded the interview with Mr. Chris Bierker. Thank you, sir.

19 MR. BIERKER: Okay. Thank you, guys. Have a great day.

20 (Whereupon, at 10:43 a.m., the interview was concluded.)
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CERTIFICATE

This is to certify that the attached proceeding before the
NATIONAL TRANSPORTATION SAFETY BOARD

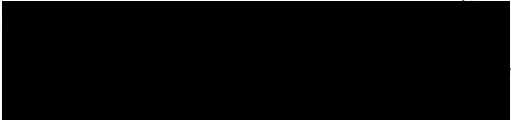
IN THE MATTER OF: FIRE ABOARD THE *SPIRIT OF BOSTON*
NEAR THE BOSTON SPORTS DISTRICT
IN BOSTON, MASSACHUSETTS
ON MARCH 24, 2023
Interview of Chris Bierker

ACCIDENT NO.: DCA23FM022

PLACE: via Microsoft Teams

DATE: October 4, 2023

was held according to the record, and that this is the original,
complete, true and accurate transcript which has been transcribed
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Kathryn A. Mirfin
Transcriber