UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FRANCIS SCOTT KEY BRIDGE

COLLAPSES AFTER VESSEL * Accident No.: DCA24MM031 COLLISION IN BALTIMORE. *

COLLISION IN BALTIMORE,
MARYLAND ON MARCH 26, 2024

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Interview of: LAWRENCE BROOKS, Captain

Retired Coast Guard

via telephone

Monday, July 15, 2024

APPEARANCES:

DANIEL WALSH, Highway Factors Investigator Office of Highway Safety National Transportation Safety Board

MARCEL MUISE Office of Marine Safety National Transportation Safety Board

BRIDGET QUINN, Marine Casualty Investigator, Group Chair Office of Marine Safety
National Transportation Safety Board

SCOTT PARENT, Highway Factors Engineer Office of Highway Safety National Transportation Safety Board

LIEUTENANT COMMANDER Agency Counsel U.S. Coast Guard

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INTERVIEW

(12:03 p.m.)

MR. WALSH: So today is Monday, July 15, 2024. Time is about 12:03 p.m. Central Daylight Time. This interview is in regard to the Key Bridge collapse in Baltimore, Maryland, that occurred on March 26, 2024. Specifically, the interview will focus on an incident that occurred on August 29th, 1980, with the vessel *Blue Nagoya*, B-1-u-e, N-a-g-o-y-a.

My name is Dan Walsh, D-a-n, W-a-l-s-h, highway factors investigator in the Office of Highway Safety, and with me is Mr. Muise.

MR. MUISE: This is Marcel Muse, M-u-i-s-e. I'm with the NTSB's Office of Marine Safety.

MR. WALSH: And Ms. Quinn.

MS. QUINN: This is Bridget Quinn, B-r-i-d-g-e-t, Q-u-i-n-n.

I'm a marine casualty investigator with the Office of Marine

Safety, the group chair of operations for this investigation with the NTSB.

MR. WALSH: Mr. Parent.

MR. PARENT: Hello, everyone. I'm Scott Parent. I am a highway factors engineer with the Office of Highway Safety, NTSB.

MR. WALSH: Lieutenant Commander

MS. Hello, everyone. I'm

24 and I'm U.S. Coast Guard agency counsel.

MR. WALSH: And Captain Brooks.

MR. BROOKS: Good afternoon. I'm Lawrence Brooks, L-a-w-r-e-n-c-e, B-r-o-o-k-s, retired Coast Guard.

MR. WALSH: Thank you, Captain Brooks.

INTERVIEW OF LAWRENCE BROOKS

BY MR. WALSH:

- Q. Captain Brooks, can you please talk about the events leading up to the incident in which the vessel *Blue Nagoya* drifted into Pier 17?
- 9 A. Okay. In August of 1980, I was an investigative officer

 10 assigned to the Marine Safety Office, Baltimore, and on the night

 11 of 28 August, going into the 29th of August, I was the duty

 12 investigating officer on call.

I remember receiving a call in the early morning hours of 29 August at approximately 1 or 2 a.m., and I was notified by the duty officer at the Marine Safety Office that there was a report of a ship that lost power and was now anchored on the south side of the Francis Scott Key bridge. And they wanted me -- they arranged for a small boat from our Coast Guard station at Curtis Bay, Maryland, to take me out at first light.

So next morning, and it was still dark, but I went down to Station Curtis Bay. The boat crew told me that my office wanted him to talk to me. I called the office, and the duty officer, I don't remember his name, but he explained that there were reports from mariners of sections of the camel for the fendering system of the Francis Scott Key bridge that were apparently floating in the

harbor. So the duty officer asked me to look around on my way out to the ship.

So we got underway in the small boat, and it didn't take us too long to get to the vicinity of the Francis Scott Key Bridge, and I quickly reported that the bridge fendering system had been struck. Severe damage on the north side, most of the fendering system and concrete barrier protective system had been destroyed. Rebar was sticking up in different directions, and it was still dark, and there were sections of the camel wooden fendering system that were floating in the area.

We proceeded on and found the ship anchored on the south side, southeast side of the Francis Scott Key Bridge, and I observed and quickly reported to the office there was a rather large hole in the bow of the ship. So in talking to the duty officer over the radio, he said he would notify Maryland Department of Transportation and provide support if they needed (audio drop) section on the water side.

I proceeded to go aboard the ship. So at that point, I met with the master of the vessel. I do not remember his name, but he was very cooperative. I don't remember what his primary language was, but we did pretty well communicating. He spoke broken English, and he explained to me why the ship had lost power. We'll come back to that in a minute.

My primary concern is why we were not notified that the bridge had been struck, and the master was upset when I told him

that and he appeared confused. He explained that the Maryland pilot who was on board had been doing all of the radio communications when the ship lost power and struck the bridge. And so that became one our concerns during the investigation, obviously, that the information was never transferred to the Coast Guard by the pilot.

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So back to the ship and the loss of power. The master took me below to meet with the chief engineer, and they explained that the ship had an overflow tank for the cooling of jacket water on the main engines. That tank sits up high in the engine room. And in port, while in port, a junior third assistant engineer making rounds noticed the tank was empty, and he thought that was a problem and so he filled the tank with water.

The ship got underway. The cooling water for the engine in the jacket started to heat and expand, and what it's supposed to do is go to the overflow tank and fill it up, but the tank was now already filled. So the water overflowed, and the gooseneck for venting the tank was inside the engine room and it flowed out. It flowed down onto the gratings on the walkways in the engine room, up on the upper levels, and then fell down to the lower levels. The ship's power board, main engine boards were down there in that area, and so it shorted out all the electrical and the ship lost power. So when I got on board at about 6 a.m., the power had been restored and we moved on from there basically.

So I can -- that's what I remember. I can certainly answer FREE STATE REPORTING, INC.

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- 1 questions in relationship to that event if you have questions.
- 2 Q. Thank you. Thank you, Captain Brooks. Do you recall how the
- 3 vessel was wedged into the pier by any chance?
- 4 A. I thought it was amazing. The supports for the Key Bridge
- 5 come down in that area on the west side, the main support
- 6 structure, in an inverted V. And the ship had moved, had
- 7 relocated already when I got out there, but it was apparent that
- 8 it struck and then went right in the middle of that V. I mean, I
- 9 thought we were all very fortunate that night that the ship went
- 10 in there without hitting a main support structure.
- 11 Q. And I also understand that it was able to back out on its
- 12 own.
- 13 A. Yes.
- 14 \blacksquare Q. And was able to come to a nearby anchorage system; is that
- 15 correct?
- 16 A. It backed out, and then went through the bridge. Backed out
- 17 from the north side, and backed up enough to get back into the
- 18 main channel and navigate through the bridge and anchor on the
- 19 southeast side. Yes.
- 20 \mathbb{Q} . Can you describe the damage to the bow?
- 21 A. I remember approaching the ship and looking at the hole
- 22 thinking to myself, my lord, you could drive a truck through that.
- 23 It was extensive. And, I mean, it was opened up and just -- and a
- 24 large hole there.
- 25 \blacksquare Q. You mentioned the delay of time that you were notified.

- 1 Approximately what -- from the time that the bow hit the pier and
- 2 the time that you were notified, what would you estimate that time
- 3 to be?
- 4 A. Four hours. Based on my -- we didn't know the bridge had
- 5 been hit until I was there. So essentially my being on scene was
- 6 the notification that the Coast Guard received.
- 7 Q. Thank you. I have no further questions at this time.
- MR. WALSH: Scott, can you continue with the questioning,
- 9 please?
- 10 BY MR. PARENT:
- 11 Q. Hello, Captain Brooks. How are you?
- 12 A. I'm great.
- 13 Q. Just a real quick question on the bow damage. Was that
- 14 around the waterline? Was it on the port/starboard side?
- 15 A. It appeared to be directly on the bow, and I'd say it wasn't
- 16 ▼ very high above the waterline at all. I mean, it was -- so but
- 17 there was a couple of feet of clearance so I don't know if they
- 18 shifted any of their weight, you know, reloaded, shifted ballast
- 19 or anything to bring it up. I don't remember if I even asked,
- 20 sir.
- 21 Q. Okay. And the columns were inspected and there was no
- 22 visible damage on any of the columns of the pier?
- 23 A. I understood that the Maryland Department of Transportation
- 24 \blacksquare in daylight was able to see like a scrape on one of the columns,
- 25 \blacksquare and that was the extent of the damage to the support structure.

- 1 Q. Do we know if the dolphin that protects Pier 17 was struck
- 2 during this incident?
- 3 A. The dolphin, I don't understand Pier 17.
- 4 Q. So there's a large, it's about a 25 foot diameter circular
- 5 concrete-filled dolphin. It's about 500 feet, it would be north
- 6 of Pier 17, in direct line with Pier 17.
- 7 A. Oh, now that you mention it, I remember the dolphin structure
- 8 being on the chart. I don't remember how that was involved in the
- 9 accident.
- 10 Q. So you're not even sure if it was inspected or --
- 11 A. Correct.
- 12 Q. Okay.
- 13 A. To tell you the truth, I'm not sure it was there in 1980.
- 14 Q. All right.
- MR. PARENT: I think that's all I have, Dan. I don't have
- 16 any other questions.
- 17 Thank you, Captain Brooks.
- 18 MR. WALSH: Thank you, Scott.
- 19 Bridget will continue with the questioning.
- 20 MS. QUINN: Thanks, Dan, and thanks, everybody, for coming
- 21 out today for this.
- 22 BY MS. QUINN:
- 23 Q. The only question that I have right now is would this report
- 24 be able to -- does it still exist anywhere? I can't find it on
- 25 any of the databases.

- 1 A. Well, Captain Neubauer (ph), who was in the Office of
- 2 Investigations at headquarters, asked me to look through my files
- 3 up in my attic, and I couldn't find anything. Almost all my files
- 4 are administrative in nature, so I didn't keep any personal
- 5 copies. So the copy that would have been submitted would have
- 6 been retained at the office, and I assume eventually filed in the
- 7 National Archives.
- 8 Q. Okay. Thank you. And to follow up, do you know if the
- 9 vessel possibly grounded prior to hitting the bridge?
- 10 A. No, I don't. I don't remember.
- 11 MS. QUINN: That's all I have, Dan.
- MR. WALSH: Thank you, Bridget.
- 13 Marcel will continue with the questioning.
- 14 MR. MUISE: And I just have a couple follow-ups on that.
- 15 BY MR. MUISE:
- 16 Q. You mentioned notification. Was the group in the MSO co-
- 17 located or what was the relationship there between the group's
- 18 comm center and the duty officer at the MSO?
- 19 A. The group was located at Curtis Bay, Maryland Coast Guard
- 20 Yard, and that's the base structure, and the Marine Safety Office
- 21 was located at downtown in the Federal Building, 40 South Gay
- 22 Street.
- 23 \blacksquare Q. Okay. So was there a notification to the group comm center
- 24 when it happened and word just didn't get to the MSO? Is that
- 25 where the breakdown was?

- A. Oh, no. No, we had the voice recordings on the radio, the pilot reporting the ship losing power, and the pilot never -
 (Audio drop)
- Q. Oh, I see what you're saying. You just didn't know that it hit the bridge. Okay. Do you remember talking to the pilots at all? What was their side of the story?
- 7 A. They wouldn't let me talk to them.
- 8 Q. Was the -- Blue Nagoya, was she a break wall (ph) ship or a 9 tanker or what type of --
- 10 A. Combination break wall/container.

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- Q. And last, do you remember was there any changes done to either the waterway or the buoys or the bridge itself after the fact? Like what were the consequences of this hit?
 - A. I don't know. I've thought about some of that, but I was -I only spent six months in the Office of Investigations. I was in
 a training program while at the Marine Safety Office so, you know,
 back then you qualified as everything in four years. So you were
 a hull inspector, did time in the repair yard, new construction,
 the investigating officer. I was pollution response for a little
 over a year. A licensing depth examiner officer -- we still had
 licensing offices in the field -- and the three months at a marine
 safety basic indoctrination course. So my tour of four years
 included getting qualified as a hull inspector, and for new
 construction repair, T-boat inspection, barge inspector,
 investigating officer, and pollution response officer.

- 1 Q. That's a lot of quals to do in four years.
- 2 A. Well, you got it done and you move on to the next one. And
- 3 every once in a while you got called back for something, or an
- 4 incident came up and they wanted me because I was already a marine
- 5 inspector and an IO and a pollution response officer, and I had
- 6 the combination of skills that the command felt was important for
- 7 that incident.
- 8 Q. Okay. Just out of curiosity, what was your background before
- 9 this? Did you come from a cutter or --
- 10 A. Yes, sir. I came out of Coast Guard Academy in '75, sailed
- 11 on an old Wind-class icebreaker for two years. Coast Guard had
- 12 like 10 icebreakers and then we kind of narrowed it down to just a
- 13 few, so I found a new career in marine safety.
- 14 0. Okay. Great. That's all I have for you. Again, thanks for
- 15 your time. We knew very little about this accident except for
- 16 what's been in the media so this is a huge help. Do you have any
- 17 questions for us?
- 18 MR. WALSH: Marcel, I may just have a few follow-up
- 19 questions.
- MR. MUISE: Yeah, go ahead.
- BY MR. WALSH:
- 22 Q. Captain Brooks, were you aware of any other incidents of
- 23 vessels drifting into Pier 17 or 18 prior to the Key Bridge
- 24 collapse?
- 25 A. No, sir.

- Q. And just one last question. I'd like to get your impression of whether you think Pier 17 had an adequate fendering system and pier protection system.
- After I retired from the Coast Guard, I taught at your Coast Guard training center, and I helped author a waterways management course for the Coast Guard. And the port operations has been my specialty in the Coast Guard after I started in marine safety. So I spent about 26 years doing port operations, and I'm well aware that bridges get hit. Essentially, we all know that any object in the water is a hazard to navigation, whether it's marked or unmarked. I mean, white ships, lighthouses in the water, we keep reducing their signature and they still get hit

So I believe there was a study back in the early 1980's on break collisions, and it was never clear in there who has authority to require breech fendering systems that were adequate. Florida has shown some initiative after that Tampa Bay and a couple incidents down there, and a few other states have looked at it closer. I know the Coast Guard regulations in 33 C.F.R. subchapter J, and they don't cover the actual bridge structure. So, yeah, it should be addressed somewhere. I mean, somebody should have some standards. It's sooner or later, it's going to happen again.

Q. Thank you.

from time to time.

1	A. Yes, sir.							
2	MR. WALSH: Are there any additional questions?							
3	(No audible response)							
4	MR. WALSH: Okay. Seeing none, the time is now 12:24 p.m.							
5	Central Daylight Time. We are going to go ahead and conclude the							
6	interview. Thank you very much, Captain Brooks, for your							
7	participation.							
8	CAPTAIN BROOKS: Thank you. Have a great day.							
9	(Whereupon, at 12:24 p.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: FRANCIS SCOTT KEY BRIDGE COLLAPSES AFTER

CARGO VESSEL COLLISION IN BALTIMORE,

MARYLAND ON MARCH 26, 2024

Interview of Captain Lawrence Brooks

ACCIDENT NO.: DCA24MM031

PLACE: via telephone

DATE: July 15, 2024

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.

Terri Trauth Transcriber

National Transportation Safety Board

Office of Highway Safety

Washington, DC 20594



Interview Clarification Form	Sheet 1 of 2					
NTSB Interview of: LAWRENCE BROOKS, Captain Retired Coast Guard						
Date of Interview: 15 July 2024	NTSB Case Number: DCA24MM031					
INSTRUCTIONS: After reading the transcript or summary of your interview, please note any clarifications or additions on this sheet. If additional space is needed, make as many additional copies of the second page as necessary. When completed, please sign the bottom of each sheet. DO NOT make any marks or notations on the actual transcript.						
If there are no changes, please check this box and sign the bottom of this sheet.						
Page: 5	: 22					
Now reads: him to talk to me.						
Should read: to talk to me.						
Reason for Change: basic clarification						
Page: 6 Line	. 17					
Now reads: (audio drop) section on the water side.						
Should read: access to the water side of the bridge.						
Reason for Change: clarifying intent an	nd readability					
Page: 6 Line	. 24					
Now reads: My primary concern is	why we were not notified					
Should read: My primary concern was why we were not notified						
Reason for Change: readability - maintain proper tense.						
Page: 7	_. 9 and 10					
Now reads: cooling of jacket water on the main engines.						
Should read: main engine cooling water jacket system.						
Reason for Change: clarity of system terminology.						
I declare that I have read my foregoing interview transcript or summary and, together with any clarifications and/or additions made above, the facts stated herein are true.						
Name: LAWRENCE BROOKS						
Signature	Date: 11 August 2024					
Signature. // www.	Date:					

National Transportation Safety Board

Office of Highway Safety

Washington, DC 20594



Interview Clarifications (continued)	Sheet 2 of 2
NTSB Interview of: LAWRENCE BROOKS	, Captain Retired Coast Guard
Date of Interview: 15 July 2024	NTSB Case Number: DCA24MM031
Page: 11 Line: 16, 17	', 19, 23
Now reads: group	
Should read: Group	
Reason for Change: proper context: the Gr	oup is a USCG unit.
Page: 12 Line: 2 ar	nd 3
Now reads: and the pilot never (Audio	drop)
Should read: and the pilot never mention	ed the bridge allision.
Reason for Change: important clarification	due to "Audio drop"
Page: 12 Line: 7	
Now reads: They wouldn't let me talk to	them.
Should read: They (the Maryland Pilots)	wouldn't let me talk to him.
Reason for Change: important clarification.	
	1.40
Page: 12 Line: 8 ai	10 10
Now reads: break wall (ph)	
Should read: break bulk	
Reason for Change: Proper terminology	
Page: 14 Line: 12	
Now reads: white ships,	
Should read: light ships,	
Reason for Change: Clarification	
7	
declare that I have read my foregoing interview tr clarifications and/or additions made above, the fac	
Name: LAWRENCE BROOKS	
	Date: 11 August 2024