UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

FIRE ABOARD GRANDE COSTA D'AVORIO AT BERTH 16 IN THE PORT OF NEWARK IN * Accident No.: DCA23FM039 NEWARK, NEW JERSEY ON JULY 5, 2023

Union Township City Council Chambers 1976 Morris Avenue Union, New Jersey 07083

Friday, January 12, 2024

Hearing Day 3 of 6

APPEARANCES:

CDR CHRISTIAN BARGER,
Presiding Officer and Lead Investigating Officer
United States Coast Guard

LCDR STEPHANIE MOORE, Investigating Officer United States Coast Guard

WILLY PITTMAN, Investigator National Center of Expertise (NCOE) United States Coast Guard

LT BRANDON REED, Investigating Officer United States Coast Guard (Recorder)

LCDR KATHERINE WARD, Attorney Advisor United States Coast Guard

BART BARNUM, Investigator in Charge National Transportation Safety Board

NANCY McATEE, Investigator National Transportation Safety Board

Parties in Interest:

JOHN KARPOUSIS, Attorney (On behalf of American Maritime Services of New York)

GINO ZONGHETTI, Attorney (On behalf of Ports America)

JOHN LEVY, Attorney (On behalf of Grimaldi Deep Sea)

JOHN REILLY, Attorney (On behalf of Port Authority of New York and New Jersey)

GARY LIPSHUTZ, First Assistant Corporation Counsel City of Newark Law Department (On behalf of City of Newark and the Department of Public Safety, Division of Fire)

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PROCEEDINGS

(8:30 a.m.)

CDR BARGER: Good morning, ladies and gentlemen. The time is now 8:30 a.m. local time here in Union, New Jersey. We are back on the record in the formal hearing into the fire and subsequent fatalities on the Grande Costa D'Avorio that occurred on July 5th, 2023, while conducting cargo operations in the port of Newark, New Jersey.

I ask those attending in person to silence all cell phones at this time, and please exit the hearing room to make or receive phone calls. Today is Friday, January 12th, 2024. It is the third day of the formal hearing into the previously mentioned matter. I am Commander Christian Barger, the Lead Investigating Officer for the First Coast Guard District Formal Investigation and the presiding officer over these proceedings.

The Commander First Coast Guard District convened this investigation under the authority of Title 46, United States Code, Section 6301, and Title 46 Code of Federal Regulations, Part 4, to investigate the facts and circumstances surrounding the fire and subsequent fatalities on the Grande Costa D'Avorio.

These hearings, while more formal and public still firmly remain within our fact finding phase of the investigation. These hearings are administrative and non-adversarial in nature. Today we will hear testimony from two expert individuals that conducted their own independent investigations into the incident and made

their own conclusions and findings. The facts and/or opinions elicited today will be used by the Coast Guard and NTSB to inform and supplement our fact finding and we appreciate their testimony today to support these efforts.

Upon hearing their testimony, the Coast Guard will consider and incorporate these findings appropriately weighing other potentially differing opinions when finalizing our final report and making our own independent findings and recommendations. We also appreciate the parties in interest who have been designated to assist in our fact finding during this investigation and hearing in support of this pursuit today and continuing after these proceedings.

These collective efforts will ensure the Coast Guard and NTSB as the lead investigating parties to compile a thoughtful and comprehensive report that ultimately will serve to effect real change.

The investigation team members present today, other than myself, are Lieutenant Commander Stephanie Moore, Mr. Willie Pittman, and Lieutenant Brandon Reed, who is also the recorder. The legal adviser to this investigation is Lieutenant Commander Katherine Ward. The National Transportation Safety Board is participating in this hearing and represented by Mr. Bart Barnum and Ms. Nancy McAtee.

The Coast Guard has designated five parties in interests to this investigation. We will now take appearances for the parties

from my left to right. When I call on the party, please state
your name, spell your last name for the record. Grimaldi Deep
Sea?

MR. LEVY: Good morning everyone. This is John Levy from the Law Firm of Montgomery, McCracken, Walker & Rhoads. Levy is spelled L-e-v-y and representing Grimaldi.

CDR BARGER: Ports America?

MR. ZONGHETTI: Good morning. My name is Gino Zonghetti.

I'm from the firm of Kaufman & Dolowich. I represent Ports

America. My last name is spelled Z, as in zebra, o-n-g-h-e-t-t-i.

MR. PALLAY: Good morning.

CDR BARGER: And American Maritime Services of Newark, New Jersey?

MR. PALLAY: Good morning. This is Matthew Pallay, P-a-l-l-a-y, for American Maritime Services.

CDR BARGER: And the Port Authority of Newark, New Jersey?

MR. REILEY: Good morning. This is John Reilley from the

firm of Squire Patton Boggs. Reilly is spelled R-e-i-l-y.

CDR BARGER: Okay. And for the City of Newark?

MR. LIPSCHUTZ: Good morning, Gary Lipschutz,

L-i-p-s-h-u-t-z, First Assistant Corporation counsel, City of

22 Newark. Thank you.

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CDR BARGER: Okay. Thank you.

Mr. Barnum, do you have any opening remarks on behalf of the NTSB?

MR. BARNUM: Yes, Commander. Thank you and good morning. My name is Bart Barnum. I'm the investigator in charge for the National Transportation Safety Board for the investigation into this casualty. The NTSB has joined this hearing to avoid the duplicating of the development of facts.

Nevertheless, I do wish to point out that this does not preclude the NTSB from developing additional information separately from this proceeding if that becomes necessary. At the conclusion of this hearing, the NTSB will analyze the facts of this casualty and determine the probable cause independent of the Coast Guard.

We will issue a report of our findings and if appropriate, the NTSB will issue recommendations to correct safety issues during the -- that were discovered during the investigation. Thank you.

CDR BARGER: Thank you, Mr. Barnum. We will now take a ten minute recess to prepare the first witness, Special Agent Matthew Hartnett. The time is now 8:35 a.m. We will reconvene at 8:45 a.m. Thank you.

(Off the record at 8:35 a.m.)

(On the record at 8:45 a.m.)

CDR BARGER: The time is now 8:45 a.m. and the hearing is now reconvened and back on the record regarding the fire on board Grande Costa D'Avorio. Our next witness is Special Agent Matthew Hartnett. Lieutenant Reed, please swear the witness in.

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SPECIAL AGENT MATTHEW HARTNETT

was called as a witness and, having been first duly sworn, was examined and testified under oath, as follows:)

LT REED: Thank you. You may be seated. Okay.

6 Mr. Hartnett, I've got a few preliminary questions. Will you

please state and spell your last name for the record?

THE WITNESS: Matthew Hartnett, H-a-r-t-n-e-t-t.

LT REED: Counsel, will you please state and spell your last name for the record?

MR. MYERSON: Good morning. It's Matthew Myerson, Mike, Yankee, Echo, Romeo, Siera, Oscar, November.

LT REED: Thank you very much.

Mr. Hartnett, on July 5th, 2023, what was your profession?

THE WITNESS: Special Agent.

LT REED: And who were you employed by at that time?

THE WITNESS: The Bureau of Alcohol, Tobacco, Firearms & Explosives.

LT REED: How long had you been employed in this position at the time of the casualty on July 5th, 2023?

THE WITNESS: Fourteen years.

LT REED: What professional certificates or certifications do you hold related to this position?

THE WITNESS: I have two. I am an International Association of Arsen Investigators, Certified Fire Investigator, and I am also

an ATF Certified Fire Investigator.

LT REED: Thank you, Mr. Hartnett. Commander, the witness is ready to proceed.

CDR BARGER: Okay. Thank you. Ms. McAtee will be conducting the direct examination of this witness. Ms. McAtee, you may proceed.

MS. MCATEE: Good morning, Special Agent.

THE WITNESS: Good morning.

DIRECT EXAMINATION

I began my career in the fire service. I was a firefighter

BY MS. MCATEE:

Bureau for eight years.

- Q. Please describe your fire investigation training and expertise and experience, excuse me.
- in Prince William County, Virginia, Metropolitan Washington, D.C.

 I subsequently left the fire department and then I was an Ohio

 State Deputy Fire Marshall and Fire and Explosion Investigations

I left the Fire Marshall's office and began my career in 2008 with ATF. I worked in gangs and gun cases as well as arson cases as a general office case agent. And in 2014 enrolled in the Certified Fire Investigator Program with ATF graduating in 2016.

My education includes a bachelor's degree from Eastern

Kentucky University in Fire and Safety Engineering Technology. I

have a master's degree in safety management from West Virginia

University. And I have a master's degree from Oklahoma State

University in forensic science specializing in arson investigation.

- Q. Please describe the process to become a CFI at the ATF.
- A. The CFI program for ATF requires you to investigate 100
 fires, I'm sorry, 200 fire scenes, author 100 fire investigation
 reports. There is 26 books in a library we are required to read.
 We are required to do a research paper which accumulates in
 receiving a master's certificate of completion in arson
 investigation for -- forensic science arson investigation.

Additionally, after I received the certification I continued and receive the actual master's degree from Oklahoma State. I -- additionally you are required to become an International Association of Arson Investigator, CFI.

I previously had that certification through my employment through the Ohio State Fire Marshall's office. That is a tested process where it's a point-based based on your length of experience in a job training, both attended and instructed, the number of fire scenes you've conducted as a primary investigator, reports authored, and court testimony.

All of that is required to even be able to take the test which you then pass. I received that certification in 2005 and it's a five year recertification. I recertified in 2010, 2015 and 2020.

- 24 Q. How many vehicle fires have you investigated?
 - A. I can comfortably say over 15.

- Q. As a CFI, do you investigate accidental fires?
- 2 A. Yes.

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- 3 Q. Under what circumstances does this occur?
- A. The determination of the fire is after we get called. The

 ATF is what I'll colloquially describe as an assist agency. Most

 fires are not straight federal cases where there would be federal

 property or a straight federal nexus that we would do. So I would

 be called in by a local fire service agency or a state agency to
- 9 assist.

 10 My current assignment is the Massachusetts State Police Fire
 - and Explosion Investigations Unit. I am assigned to them, so I go to incidents where they respond to. So when we arrive at a fire scene you don't know what happened yet. I would say 99 percent of the time we respond to a fire to investigate the cause and have not determined it to be an accident before we arrive to investigate the fire.
- Q. All right. I'm going to now go back to the incident that we are discussing here. What was the ATF's role in the investigation of this fire?
- 20 A. The scope of our investigation was to determine the origin 21 and cause of the fire.
- 22 | Q. How are you and the ATF team notified?
- A. We were notified through the field division locally. They responded to the incident. The local field division certified fire investigator would evaluate with the division to determine

the necessary resources to investigate a magnitude fire of this size. It was determined that they needed more assistance.

The division would recommend to $\--$ through headquarters to assign the national response team to deploy to investigate the fire.

- Q. And for the record, we are discussing the fire of July 5th, correct?
 - A. That's correct.

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- Q. At what point did the ATF team arrive?
 - A. We arrived on July 7th. The fire was on July 5th. We were notified and responded with the local agents on July 6th. They requested the team to respond on July 6th. We arrived on July 7th and had an in-brief at 5:00 on July 7th and began our scene examination and the investigation on -- at that time and then to continue through on July 8th with the team fully assembled.
- Q. Do you recall which date you actually made entry into the ship to do the interior examination?
- 18 A. I believe it was the third day we were here. We -- the fire
 19 was still ongoing, and I believe it was July 8th or 9th.
- Q. What type of capabilities and expertise were provided by the team that responded to the fire of July 5th?
- A. There were eight other ATF CFIs that responded plus myself,
 so nine AFT CFIs responded with the team. We were supported by
 the CFIs from the State Fire Marshall's office. ATF additionally
 brings electrical engineers, fire protection engineers. We had an

explosives -- certified explosives specialist candidate with the team as well as support staff, administrative staff, investigative resources.

Q. Describe the general method you use to make your determinations in a fire investigation.

A. Fire investigation is a forensic science discipline. As such we employ a methodology which is the scientific method, and the scientific method is used in forensic science disciplines to develop hypotheses which once identified in order to determine one final hypotheses you disprove all other hypotheses.

The idea is that that eliminates bias and tunnel vision in an investigation to focus on a specific piece of information and give it too much weight. So we don't try to prove anything, we disprove hypotheses.

MS. MCATEE: Can we bring up (inaudible)?

THE WITNESS: The examination started on the dock. Looking at this particular photo this is the star boards, I'm sorry, this is the port side Grande Costa D'Avorio and what we're looking at in this photograph is the upper decks.

If you look at the welded seams -- I can move the mouse here -- counting down because they're on the bottom of the ship. This is going to be deck 10, I'm sorry, deck 12, deck 11, and as you countdown for the record to reflect the welded seams in between each part are the separation of the decks. So the deck separation is this seam, deck 11, deck 10, deck 9, deck 8, deck 7, and deck

6, deck 5, 4, and 3.

We started at the bow of the ship and when we arrived on scene we had no idea what had happened other than the ship itself was on fire. Not knowing what happened the exterior of the ship itself was examined starting from the bow to the stern and around from the starboard side to the aft to the port side back to the bow noting fire damage to the exterior of the ship as it was several days before we got on board and didn't know what was happening on board.

We just looked at the presentation of the ship itself to determine where the fire may have started. Of note you can see the considerable oxidation on the decks here. This is the ramp leading from deck 10 to deck 11 where the entire area here where the mouse is moving in the upper left hand corner above the word Grande painted on the side of the ship.

BY MS. MCATEE:

- Q. Could you describe for the record what you are pointing to on the picture?
- A. Yes, the angular oxidation is the ramp from deck 10 to deck 11 and that is from the left hand portion of the slide continuing to the end of the letter E in the word Grande. And then the oxidation minimizes towards the letter V in the word D'Avorio. Additionally, there's oxidation on deck 10 between the letter C in Costa and the letter V in D'Avorio. Additionally on deck 7 there is heavy oxidation and paint blistering in the center portion of

the aft as displayed on the slide.

MS. MCATEE: Can we advance to the next picture, please?

BY MS. MCATEE:

- Q. Could you just please describe for the record what we're seeing in this exhibit?
- A. Of note that we soften the exterior of the ship without boarding was the considerable consistent heavy oxidation to the exterior of the ship on deck 10. Deck 10 is labeled in this slide as deck 10 and outlined with red highlight.

As you can see from the slide the entire deck 10 including up the ramp to deck 11 is significantly oxidized. This is significant because it is the only deck on the ship that presents this oxidation pattern.

MS. MCATEE: Can we advance to the next picture, please?

BY MS. MCATEE:

- Q. Could you please describe what we are seeing in this photograph?
- A. This is the watertight door which has been described in previous testimony this week as watertight door number 12. This is the watertight door at the top of the ramp from deck 11 to deck 12. It's also a close up and you can see the oxidation of the
- 21 | 12. It's also a close up and you can see the oxidation of the 22 | ramp from Deck 10 to deck 11 below it.
- MS. MCATEE: Can we advance to the next picture, please?

 BY MS. MCATEE:
 - Q. Can you describe for the record what this picture is

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- A. This is an aerial photo taken from a drone of deck 12 and the bridge deck.
- MS. MCATEE: Can we advance to the next picture?

5 BY MS. MCATEE:

- Q. For the record, can you please describe what this picture is showing?
 - A. As labeled in the photograph this is deck 10 midship aft, which is if you -- I will correspond that if you go back one slide I'll correspond where this is in the ship and then describe the -- that slide.

So as you see the word safety first painted on deck 11. Directly below the words safety first on deck 10 facing aft is where the next slide that you just showed me previously is for orientation.

So moving to this photograph you are looking in the opposite direction of the previous photo onto deck 10 where the words safety first are painted one deck above where these two vehicles are located. And these two vehicles are located along that aft wall -- that hall wall.

- MS. MCATEE: Next picture, please.
- BY MS. MCATEE:
- Q. For the record, can you please describe what this picture is showing?
 - A. This is a 2010 Toyota Venza. It was the -- it was later

- determined to be the inoperable vehicle that the subject vehicle
 was pushing aboard the ship prior to the fire event.
 - Q. For the record can you please describe what we are seeing in this photograph?
 - A. This is the most severe deformation to any deck beam on the ship that we discovered during the investigation. This is a significant finding as it is the only deck beam on the ship that demonstrated this amount of deformation.
- 9 MS. MCATEE: Advance to the next picture, please.

 10 BY MS. MCATEE:

- Q. For the record, what does this photograph show?
- A. This is the safety stabilization of the subject vehicle due to the ship -- it's in the water. Considering safety considerations of the vehicle possibly moving during the investigation and safety of pinching, sliding, crushing injuries, etc., we stabilized the vehicle with jack stands and this is just a process photo to demonstrate that we manipulated the vehicle for the scene investigation.
- MS. MCATEE: Can we see the next photo, please?

 BY MS. MCATEE:
- Q. For the record, please describe what is being shown in this photograph.
 - A. This is the VIN number of the subject vehicle. This photograph was taken on the passenger side of the vehicle underneath the front passenger door on the frame rail.

- 1 Q. For the record, could you please tell us what subject vehicle
 2 means?
- A. For the purpose of my examination report the 2008 Jeep
 Wrangler as previously described in testimony, for my testimony
 I've described it as the subject vehicle.
- 6 MS. MCATEE: Next picture, please.
- 7 BY MS. MCATEE:

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- Q. For the record, could you please describe what this photo is showing?
- A. This is a photograph of the process of examining the vehicle.

 This is the rear of the subject vehicle and as noted it is

 supported by jack stands for safety consideration as we

 manipulated the vehicle for our own safety for the examination.
- MS. MCATEE: Next photograph, please.
- 15 BY MS. MCATEE:
- Q. For the record, could you please describe what's in this photograph?
- 18 A. This is the driver side of the subject vehicle pre
 19 examination.
- Q. For the record, could you please describe what is in this photograph?
- 22 A. This is a close up photograph of the wheel well compartment 23 of the subject vehicle on the driver side.
- Q. For the record, could you please describe what is in this photograph?

- 1 A. This is the passenger side of the subject vehicle pre examination.
- Q. For the record, could you please describe what is in this photograph?
- A. This is a photograph of the front of the subject vehicle pre examination.
- Q. For the record, could you please describe what is in this photograph?
- 9 A. This is a photograph of the front of the subject vehicle with 10 the hood lifted showing the engine compartment pre examination.
 - Q. For the record, could you please describe the photograph -- what is in the photograph displayed?
 - A. There are two photographs in this slide. The photograph on the left is an exemplar photo taken from the internet which was prepared to demonstrate all of the appropriately installed components of a 2008 Jeep Wrangler as compared to the photograph on the right, which is the subject vehicle post fire, pre
 - Q. For the record, could you please describe what this photograph is showing?
- A. This is the gasoline tank, heat -- skid plate seen through
 the rusted hole in the skid plate. You can see the gasoline tank
 and additionally on the left, I'm sorry, additionally to the right
 of that you can see part of the heat shield material.
 - Q. Where in the vehicle is this located?

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examination.

A. On the bottom. These two photographs are depicting on the left catalytic converters and exhaust components, the transmission bell housing, the clutch plate and flywheel of the transmission.

And on the right is also a catalytic converter -- the vehicle had four catalytic converters. And additionally heat shield material seen in the right photo between the vehicle body and the catalytic converter.

- Q. And for the record, when were these photographs taken?
- A. We were on the ship taking photographs over several days.
- I'm not sure looking at this photo, which -- oh, I'm sorry, I take that back. These photos were taken on October 18th, 2023, after the vehicle had been removed from the ship. These photographs were taken when the vehicle was examined. When we were on the ship we were unable to examine the undercarriage of the vehicle.

The vehicle was subsequently shrink wrapped and removed from the ship for further examination. And on October 18th we took the shrink wrap off, put the vehicle on a lift and the undercarriage of the vehicle was specifically examined and those photos were taken on October 18th.

- Q. And the previous photo, same?
- 21 A. Yes.

- MS. MCATEE: Okay. Can we scroll through to the next new photograph?
- THE WITNESS: This photo was also taken on October 18th.

 This is a close up of the transmission bell housing cover, the

clutch flywheel and pressure plate as well as you can see two of the catalytic converters to the left side of the screen.

BY MS. MCATEE:

- Q. For the record, please describe what this photograph is showing.
- A. This photo may or may not have been taken on the 18th. It may have been taken on the ship. I can't tell specifically looking at the photograph as we took duplicate sets of photos of what we had previously seen on the ship to make sure there was no differentiation in the condition of the vehicle from the ship at examination to the examination post seen on October 18th.

However, this photo is depicting the transmission fill tube. There is a red flag with a clip attached to the opening of the transmission filler tube in the upper left corner where it's labeled transmission fill tube in the photograph.

This photograph was taken on October 18th. It's a demonstration of where the top of the transmission fill tube was directly in line with the ruler. The tape measure that was hung from the top of the transmission filler tube down to -- straight down.

Just to give a visual reference and orientation to where the transmission fill tube opening is compared to the underside of the vehicle.

Q. For the record, could you please describe what is shown in this photo?

A. This photograph is a close up of the transmission fill tube. It's indicated with a clip with a red flag. Additionally, you can see that there is a strand of an electrical conductor adhered to the opening of the transmission fill tube that was not disturbed or manipulated in any way.

MS. MCATEE: Next exhibit. That's it?

LT REED: (No audible response.)

BY MS. MCATEE:

- Q. What subsequent investigative activities took place after the initial on scene investigation?
- A. As I said previously, we examined the Jeep on board over several days from July -- we were there for three days on the ship, so I want to say 8, 9, and 10. Off the top of my head, I'd have to look at the calendar. But subsequently the vehicle was removed on -- I'm trying to remember the date.

The vehicle was subsequently removed, shrink wrapped, stored in Bound Brook, New Jersey at Evidence Collection Technology on October 18th. We reexamined the under -- we reexamined the vehicle for any differentiation between the original on scene examination and to look at the undercarriage of the vehicle, which was not accessible on the ship for safety concerns or accessibility.

And specifically looking for any type of mechanical failure on the underside of the vehicle for a drive training component failure, engine component failure, exhaust component failure.

- Q. To the best of your recollection, who besides the ATF attended that examination?
 - A. I'm sorry, could you repeat that? The microphone was --
 - Q. To the best of your recollection in addition to the ATF, who
- 5 -- what other parties attended that examination?

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- A. I do have a list. There was a very large contingent of people there. There is a list of all of the parties that were there. I do know Ports America, Grimaldi, AMS, somebody representing the families. I believe all of the parties in
 - Q. During the examination was it necessary to remove or manipulate the subject vehicle in any manner?

interest were there as well as the Coast Guard and NTSB.

A. Yes, the debris was removed from the interior of the vehicle and sifted in order to determine what could have caused the fire in examination of the vehicle itself through visual observation as well as an excavation of debris. We did find of significant note there were lithium ion batteries in the floorboard on the passenger side of the subject vehicle. The debris itself was shifted.

It was also collected and stored with the vehicle for further examination and was available on October 18th as well. All of that debris has been preserved as well as the vehicle was reshrink-wrapped on October 18th in front of all of the interested parties to demonstrate that it was not possible to molest the vehicle in any way after the scene examination on October 18th.

- Q. In addition to the physical examination of evidence, did you or the team do any other investigative activities related to this
- 3 | investigation?

practice.

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- A. Yes, when we positively identified the vehicle, one of the things that we do in any fire investigation involving a vehicle is to run the vehicle identification number through the National Highway Traffic Safety Administration -- a VIN recall check. It's an online portal. Every vehicle fire we do, that's a standard
- MS. MCATEE: Can we please have Exhibit 4, please?

 (Coast Guard Exhibit No. 4 marked for identification.)
- 13 BY MS. MCATEE:
- Q. As you'll see on the screen, Exhibit 4 is the maintenance records for the subject vehicle. What does the page 1 and 2 of this exhibit describe?
- A. The highlighted area describes recall number J30 from
 Chrysler and the wording, I'll read it, "Transmission fluid
 temperature warning launch date February 19th, 2010, repair date
 August 20, 2010."
- Q. Was this work done in relation to the recall listed in Exhibit 5?
- 23 A. Yes, the corrective action was taken on -- as it says August 20, 2010.
- 25 MS. MCATEE: Could you pull up Exhibit 5, please?

(Coast Guard Exhibit No. 5 marked 1 for identification.)

BY MS. MCATEE:

- For the record, Special Agent, do you have previous knowledge of these exhibits?
- Α. Yes.

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- How do you have knowledge of these exhibits?
- 8 We received these documents during the investigation when the 9 NRT was deployed in July.
- 10 And getting such records like this is standard procedure in 11 any investigation?
- 12 Α. Yes.
- So now that we have completed the examination of the scene 13 14 and the Jeep, what were your fire origin area hypotheses?
 - We had to consider incendiary causes, natural causes, and accidental causes. A natural cause fire would be a weather event such as lightning, seismic event, and obviously weather did not contribute to the cause of this fire. So then we began to look at possible incendiary causes.

An incendiary cause could be somebody simply pouring the vehicle with a flammable liquid and igniting it. The deployment of an incendiary device -- a time delay device. And then accidental causes could be animal contact, possibly an animal infestation, animal nesting materials, mechanical failure, smoking materials, lithium ion battery failure, and electrical causes.

Q. Were any of these hypotheses disproven in this investigation?

A. Yes, beginning with natural causes. As I said, we disproved weather or a natural event occurring. There was no weather event that affected this vessel or the vehicle inside of it. The incendiary causes were hypothesized. Through witness statements we have no evidence that there was somebody deploying some type of incendiary device that would require a manipulation and a

We -- and as we have heard with previous testimony this week, no one saw anybody carrying or possessing such a container or manipulating such a container. The debris was sifted. No evidence of a container was found. As far as a time delay device that would require components. The debris was sifted.

container. We have no witness statements.

There was no evidence of a time delay device such as a clock, clothes pin, wiring, etc. of or matchbooks, staples, anything that we would consider in other experience in training to be a component of a time delay device. No one saw anybody use any exposed ignitable liquid applied to the vehicle and subsequently use a competent ignition source to initiate igniting ignitable liquid on the exterior of the vehicle.

- Q. So we have discussed cause, how were your origin areas hypothesized?
- A. I'm sorry. The origin area -- the origin investigation began at the rear of the vehicle. We used the examination process from the least amount of damage to the most damage. The least amount

of damage was at the rear of the vehicle. However, the first thing we had to do was we started with the exterior of the ship.

We realized that through interviewing the -- we did receive information that the Jeep -- the subject vehicle was witnessed to be where the fire origin area was. However, we didn't start with that piece of information. We still began looking at the ship infrastructure for the lighting fixtures, any type of electrical systems of the ship that were in proximity.

Of significant note, as shown on one of the previous slides,

I don't recall which photograph number it was, but the significant

deformation of the one deck beam was -- that was the only deck

beam that demonstrated that amount of deformation, which indicated

that it was significantly more heated in a more intense heating

event than anywhere else in the ship.

If we could pull that slide up if I can describe -- yes. The deformation of this beam is significantly different than all of the other observations of the deformation of the beams elsewhere on the ship.

This one is significantly more heated and demonstrates that compared to the heating of the other beams that -- moving to the left hand side forward in the ship where they were sagged uniformly.

So as the fire migrated from this area -- so before we identified the actual -- what caused the fire or the origin area, we know it began in this area and migrated from here as the

heating incident to the ship infrastructure in this location was significant.

Additionally, as the fire migrated from this area and exposed the other vehicles forward you had a longer heating event that sagged all of the forward beams in this area uniformly. I don't know that there's an actual photograph of that in this that I have seen yet presented. But there is — there are photographs of that.

So as we looked at the ship infrastructure in this particular area there were five light fixtures that were in the area of this deck beam. They were all examined. We had an electrical engineer on the team examine all of those and they were eliminated as being evidence of a cause of a fire.

There were no propulsion systems on the ship. There was no mechanical systems of the ship in this area. There were no fuel lines in this area. There was nothing that could have broken, malfunctioned, or impacted or exposed this area of the ship to cause that particular deformation of this specified beam.

So then we start looking at what is in the area of this particular deformation and there were two vehicles. If we back up several slides, there are -- yes. So the deformation of this beam is -- I can demonstrate with the mouse -- right here. Describing this area as directly above the engine compartment of the subject vehicle.

Looking at the vehicle in the left hand side of the slide is

the Toyota Venza as previously described. The fire patterns and damage on the Toyota Venza are consistent with the vehicle start -- I'm sorry with the fire originating toward the rear of the vehicle rather than the front based on the damage.

As we move toward the rear of the Toyota Venza it doesn't line up with the significant deformation on the specified beam. And it appears that and was concluded to be exposed by the fire where the fire originated. So the Toyota Venza was eliminated. It was disproven as a cause of the fire.

Subsequently, we began looking at the subject vehicle, as it's the only other fuel source there that's capable of having an ignition source as we eliminated the ship's infrastructure.

Additionally, through witness statements, we also examined decks 9 and deck 11. Deck 9 was empty and had no cargo. The floors on deck 10 and deck 11 have holes in them as we've heard in previous testimony for lashing the vehicles for securing them during navigation.

We went to deck 11 to look at if it was possible that any influence from deck 11, such as something falling through the floor contacted the subject vehicle on deck 10, that was eliminated.

There was no electrical source, liquid, anything else, as well as relying on witness testimony that nothing came through the deck 11 lashing holes to come in contact with anything on deck 10 to influence the vehicle in any way to include causing a fire. So

once we eliminated deck 10, I'm sorry, I misspoke -- once we eliminated deck 9, deck 11, ship infrastructure and the Toyota Venza we focused on the subject vehicle. Once we began looking at the subject vehicle, we started at the rear of the vehicle. It had the least amount of damage. The examination of the damage as you look at the subject vehicle increases in severity from the rear of the vehicle to the front of the vehicle.

Additionally, through witness statements the fire occurred at the front of the vehicle. Additionally, witness statements support the subject vehicle was the origin area of the fire based on the fire hose location and the fire extinguisher locations.

As we began looking at the interior portion of the vehicle, the cargo compartment into the passenger compartment, as I mentioned earlier, there were five lithium ion 18650 cells found on the floorboard of the passenger side of the vehicle.

They were what we would call an indeterminant failure from the physical examination of the cells, meaning that we could not tell just based on the physical evidences recovered of the 18650 cells if they were a cause of or an effect of a fire.

However, through witness statements as the fire was discovered, the vehicle was being operated. A failure of a lithium ion battery cell would produce an olfactory visual and audible sensual -- sense queue if the battery had failed in the passenger compartment while the vehicle was being operated.

The operator would have to know through a visual audible or

olfactory queue that it failed. That did not occur. We have no evidence of that.

Additionally, as the vehicle was being operated we eliminate the -- as was testified two days ago, the operator stated there was no smoke prior to the fire, which also eliminates the potential for a smoldering fire occurring inside the cabin of the vehicle which supports the disproving hypotheses of electrical fires smoldering for any amount of time. Animal infestation or contact with nesting materials or animals and anything inside the cabin being a cause of the fire.

Additionally, the vehicle was running so we have the potential for a failure of the vehicle being manipulated or operated at the time the fire occurred. So once we eliminated the exterior of the vehicle with the information we had and the data collected, we began focusing on the engine department of the vehicle consistent with witness statements and the fire patterns and the fire dynamics and the effects to the -- obviously, the specified deformation to the deck beam.

And we can move on to the slide of the front of the vehicle with the hood closed and we'll move on to the one with the hood open. So, we are looking at the front of the vehicle with the hood closed. Specifically of note is the fire pattern on the push bumper on the left hand side in the lower left corner of the photograph.

As you can see there is a differentiation in the amount of

oxidation and damage to the left hand side of the bumper compared to the right hand side of the bumper. If we can move on to the slide with the hood opened. As you look at and it -- we'll dwell on this for a minute and then I want to go to the next slide with the comparison side to side. You can look at the amount of damage to the left hand side of the engine compartment compared to the right hand side which is noticeable in the motor itself and components as well as the hood. So, the hood is lifted. You are looking at the bottom side of the hood. You can see the differentiation in the left hand side of the underside of the hood

- Q. Special Agent, could you -- is that left hand as the driver is facing?
- 14 A. I will describe -- okay, yes.

compared to the right hand side.

- 15 | Q. Yes, please be more specific.
 - A. So starting over with the description using left hand and -I'm sorry. So looking at this photograph, there is a significant
 deformation. I'm sorry, significant differentiation in the amount
 of damage on the passenger side of the vehicle as compared to the
 driver side of the vehicle.

You can see the underside of the hood has more significant oxidation damage to the passenger side. Looking at -- and we'll get into a close up in a moment, but looking at the overall you can see the differentiation on the push bumper on the passenger side.

It's difficult to see in this photograph and understand but there's more components missing of the engine and other related parts on the passenger side of the vehicle. And we can -- if we can move to the slide of the comparison that's close up. So looking at this slide, this is a side to side comparison of the stock image of a 2008 Jeep Wrangler engine compartment and the right hand photograph is the subject vehicle engine component as we are examining it.

And when you look at the passenger side of the vehicle the components on the passenger side are -- there's a lot of combustible materials there. Plastic, fuse box cover, battery cover, engineer cleaner, etc. All of these are combustible components.

And then moving to the right hand side of the -additionally, the transmission filler tube would be located
approximately where the letter I is in the word intake, where it
is written intake manifold cover.

As we move to the driver side you can see that there are more fluids and containers on that side where we have the coolant overflow tank, master cylinder for the brake fluid reservoir attached to that, windshield washer fluid, etc.

And looking at the, excuse me, looking at the photograph on the right -- while it's not specifically seen in the exemplar photo on the left, you have a significant amount of damage to the valve cover on the left if you can see and if you're familiar with

motors or engines the valves are visible, the metal for the valve cover has been consumed and I can use the mouse. This is where the valve cover was. For the record, we're directly in -- to the left of the center of the engine. And then just below that is -- the exhaust manifold is here.

For the record, it's below that to the left and the transmission fill tube is up here. It is directly between the valve cover here -- I'm trying to think of how to describe this. The valve cover is here. The exhaust manifold is here and then straight up here is where the transmission filler tube is at the top of the engine. Orienting that to the exhaust manifold.

If we go to the photograph with the tape measure hanging down, the manifold is -- the exhaust manifold is attached to the exhaust components which are -- yes, back up one slide -- is attached -- okay. Oh, this is it here. This is a much better photograph to see this. So, you see the valves. This is the -- where the valve cover would have been.

- Q. For the record, the Special Agent is using the mouse to circle the valve cover area on the picture.
- A. The exhaust manifold is here. And you can see the transmission fill tube is roughly -- if I move the cursor straight, it's right down the middle. Although it is on an angle, it is demonstrated where it would be with the photograph we had where we hung the tape measure from which would fall straight down in this area here behind the exhaust manifold and the engine valve

cover.

So looking at this photograph there's a significant amount more damage differentiating the, I'm sorry, the passenger side from the amount of damage on the driver side of the engine components. Which using fire dynamics and fire damage -- fire pattern analysis, the fire occurred on the passenger side of the engine compartment.

- Q. What is located in the area of the engine compartment?
- A. The exhaust manifold, valve cover, and transmission fill tube. And if we go back to the previous slide I can -- of the side by side. The battery -- yes. So, the fuse box, battery, engine air cleaner and power steering fluid reservoir.

MS. MCATEE: Can we go back or go forward a couple of pictures, please? No, other direction. Sorry. That one.

BY MS. MCATEE:

- Q. Special Agent Hartnett, could you please describe the damage in this photograph, the location where this photograph was taken and how it relates to the damage that you've already described on the passenger side of the engine compartment?
- A. This photograph is directly below the area in the previous photograph. You can see one of the catalytic converters is here, exhaust component connecting to another catalytic converter here. So just for the description of the record, upper left corner diagonally to lower left corner of the photograph are two catalytic converters connected by an exhaust pipe.

And then the right hand central portion of the photograph is the transmission bell housing cover and clutch plate which you can see because the transmission bell housing cover has been consumed from a heating event. This is towards the front of the vehicle directly under where the transmission fill tube is located. And if we can reference that and then come back to this photograph with the photograph with the measuring tape.

So you can -- in this photograph additionally you can see the damage and where it is in orientation to the transmission fill tube and the two catalytic converters are also seen in this photograph.

So for the upper central portion of the photograph, for the record, it is the transmission bell housing cover. In the upper portion of the photograph directly to the left of that is a catalytic converter connected by an exhaust pipe to the central portion of the photograph. On the screen is another catalytic converter. And then we can go back to the previous photograph for further explanation.

- Q. So, now that we've gone through your exclusions and the items that you have included, what is your current working fire origin and cause hypothesis?
- A. The working hypothesis is the fire originated in the engine compartment of the subject vehicle and the only hypotheses that cannot be disproven is a mechanical failure. The potential mechanical failures were a drivetrain component, which was

- disproven. In the end the only thing we cannot disprove is a
 mechanical failure that is consistent with the recall condition as
 described by Chrysler.
 - MS. MCATEE: That is all of the questions I have for you at this time, Agent Hartnett. I will now provide an opportunity for any follow up questions from the rest of the investigative team.

I'd like to turn first to my cohort or my colleague from the NTSB.

- MR. BARNUM: Yes, thank you, Ms. McAtee. And thank you Special Agent for your testimony. Just one line of questions here. Lieutenant Reed, could you please bring up Exhibit 5?
- BY MR. BARNUM:

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- Q. Special Agent, you just gave us your working hypothesis and this exhibit, I wanted to be clear. How did you become aware of this exhibit? Was this a document obtained through the ATF's investigation?
- 16 A. Yes, we --
- Q. And to be clear, we're looking at the safety recall that you referenced earlier in your testimony, is that correct?
- 19 | A. Yes.
- 20 Q. Okay. And this recall you said was completed.
- 21 A. Yes, the corrective action was s taken.
- Q. Okay. And having reviewed this, what was the corrective action that was taken?
- A. The recall -- is there more to this? Are there more pages -this is the entire thing -- do you want me to describe the recall

condition?

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- Q. Yes, sir. I would just like to know what was -- they completed the recall and in order to -- what did the recall have -- what did the recall consist of? What was the fix in order to
- 5 close the recall?
- A. The -- I won't use the word fix. I will use the word corrective action.
 - Q. Thank you.
- A. The recall condition as described by Ford is an -- I'm sorry,

 Chrysler. The recall condition described by Chrysler was that the

 transmission may fail causing transmission fluid to expel from the

 filler tube contacting a hot surface and then suddenly catching

 fire.
 - The corrective action for that because there was no transmission warning lamp or warning system -- the corrective action taken by Chrysler was to retrofit a warning lamp that said hot oil and a chime that should ring.
 - MR. BARNUM: Thank you. Sorry to interrupt. Lieutenant Reed, could you scroll to page 12, please.

20 BY MR. BARNUM:

- 21 Q. Please continue, Special Agent Hartnett.
- A. Reading from page 12, hot oil -- owner's manual addendum, hot oil transmission temperature warning message. The hot oil cluster message accompanied with a continuous audible chime indicates that there is excessive transmission fluid temperature that might occur

with severe usage such as trailer towing.

It may also occur when operating the vehicle in a high torque converter slip condition such as four wheel drive operation. Example snow plowing or off-road operation. If this hot oil message accompanied with a continuous chime comes on, stop the vehicle and run the engine at idle or faster with the transmission in neutral until the light turns off.

Next paragraph says caution. Continuous driving with the transmission temperature hot oil warning message illuminated will eventually cause severe transmission damage or transmission failure. Next paragraph says warning continued operation with the transmission temperature hot oil warning message illuminated could cause the fluid to boil over, come in contact with hot engine or exhaust components causing a fire that may result in personal injury.

- Q. Thank you for that. And your working hypothesis, was that similar to what was -- is described here?
- A. It's consistent, yes, because the -- what I'm describing is the corrective action was to install a warning lamp, but it didn't stop the corrective --
- Q. The -- so the -- sorry to interrupt -- so the corrective action was to install a warning lamp and a chime that says hot oil, but there was no -- the corrective action didn't consist of any mechanical changes or any limiting devices to the vehicles, it was strictly a warning light and an alarm.

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MR. BARNUM: Okay. Thank you. That's all of the questions I have.

MS. MCATEE: Coast Guard, do you have any additional questions?

BY CDR BARGER:

- Q. Good morning, Special Agent Hartnett.
- 8 A. Good morning.

available to you?

- 9 Q. Just a couple of follow up questions from me. So well just
 10 to be clear we talked about the -- just talked about the recall
 11 and the information that was provided in that. At what point in
 12 your investigation did you consider that and have that information
- A. It was several days in the -- into the investigation that we got that information. I recall it was over the weekend, so it was several days before we got that information.
 - Q. And when you read from the owner's manual addendum it spoke to a remedial action that if you started -- if you saw the hot oil light illuminate and heard the chime that you were supposed to take -- and we can bring it back up on the screen -- which is Coast Guard Exhibit 5, and we'll go to page 12. And so if you could refresh us from this document. What is the remedial action or what actions did somebody take if driving the vehicle when the hot oil lamp comes on.
 - A. Reading from the owner's manual addendum from Chrysler it

says if this hot oil message accompanied with a continuous chime comes on stop the vehicle and run the engine at idle or faster with the transmission in neutral until the light turns off.

- Q. We have previously heard that in some cases vehicles or pusher vehicles were put off to the side to await I guess mechanical attention. So if -- and but this describes revving the engine. If that -- if the process described in this owner's manual wasn't follow, would there be any potential impact from that over time?
- A. I can't specifically answer that. What I can say it is known that after operating a vehicle for any amount of time that when you turn a vehicle off -- as the vehicle is running the cooling systems are functioning and the vehicle would -- at a steady rate of usage, eventually reach a constant temperature.

When a vehicle is shut off and I can speak from personal experience of this as well -- when you shut a vehicle off you are no longer using the vehicle's cooling systems and the temperature will elevate for a short amount of time before the vehicle begins to cool. Excuse me. From personal experience many years ago I was driving in a snowstorm and my personal vehicle ran into a snow bank.

MR. ZONGHETTI: Objection.

CDR BARGER: Sustained. Let's avoid --

THE WITNESS: That's fine.

CDR BARGER: -- talking about a personal experience unrelated

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BY CDR BARGER:

- Q. I'm sorry. I know we interrupted a story --
- A. No, no, that's --
- 5 Q. -- did you have more --
- 6 A. No, my point was made before the personal experience.
 - Q. Okay. You said one of your working theories also had been related to a drivetrain component and that was subsequently disproved.
- 10 A. Yes.
- Q. Can you describe to us -- and I apologize if I missed it previously, but can you describe to us how that particular element was disproven?
 - A. If we go back to the photograph, the drivetrain -- again moving from the least amount of damage to the most amount of damage we start at the back of the vehicle. There was an isolated pattern of oxidation on the muffler.

So we noted that -- it was determined that that oxidation pattern was caused by liquid from the passenger compartment leaking through a melted plug and dripping onto the muffler.

Moving forward all of the mechanical and exhaust component systems were intact. There was no evidence of a physical anomalous damage. Additionally a catastrophic failure of a drivetrain component the vehicle was still operating at the time the fire was discovered.

Had there been a catastrophic failure of the drivetrain component that affected the maneuverability of the vehicle it would have been either -- it would have been detected by the operator and the operator was continuously operating the vehicle until the fire was discovered. Additionally, the damage we see in this photo, Exhibit 6, is consistent with thermal damage and not mechanical damage. And is also supported by the lack of damage to the internal components. The clutch plate and flywheel are intact. It's only the bell housing for the transmission that's damaged by thermal damage.

- Q. And during the course of your investigation did you review a vehicle history record related to this vehicle based off its VIN number?
- 14 A. Yes.

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- 15 Q. What information did you find out about the vehicle's history 16 through that review?
 - A. Obviously, the recall notice -- that's public record.

 Additionally, we received all of the mechanical repair records from Newark Auto Body and I believe it was Dwayne -- there was another -- this vehicle was serviced at two different repair shops.

We received the vehicle repair receipts for the work done on these two vehicles. We do know that there was a transmission, as previously testified, a transmission fluid change approximately one year before the date of the fire. The vehicle had four new tires installed and then at the same time approximately a year before the fire two of those tires were replaced.

Calculating the mileage of the two tires that were replaced they only had about 5500 miles on them before they were replaced, which to me is significant at the tires were losing a lot of tread quickly in whatever manner the vehicle was being operated.

CDR BARGER: Okay. Thank you. And we have Coast Guard Exhibit 4 displayed on the screen, Lieutenant Reed if you could scroll down to I believe it's page -- starting on page 5. I'm sorry, page 4 -- no, page 5.

BY CDR BARGER:

- Q. So starting on page 5 here, is this representative of some of the records that you are describing?
- 14 A. Yes.

- Q. Okay. And how are you familiar with these records or how were they obtained?
- A. They were obtained by another special agent during the -fire investigator during the investigation by going to the actual
 shop and retrieving these documents from the shop itself.
- Q. Okay. Thank you. We've -- Special Agent Hartnett, we have heard in some previous testimony discussion about some work that was done with relation to the vehicle's radiator. Was this a component that was considered as part of your theory or theories as a possible cause or origin -- I'm not a fire investigator so -- but as far as which of those phrases is correct but was that

something you all considered?

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A. Yes, all potential causes of a fire in the engine compartment were considered. One thing we specifically asked the operator was did they smell gasoline, gasoline has a distinct odor that we're all familiar with. No one reported a gasoline odor smell. We did hear testimony that there were flaming fireballs dripping from the bottom of the vehicle.

That's obviously consistent with a fluid burning since that was -- at the onset of the fire a liquid had to be burning at the onset of the fire and as there was no gasoline smell we had to consider other fluids that could have been leaking due to a failure of a part of the motor failing or other component. However, they weren't consistent with what was witnessed and described to us during our investigation.

CDR BARGER: All right. Thank you. I have no additional follow up questions. Lieutenant Commander Moore?

BY LCDR MOORE:

- Q. (Inaudible.)
- 19 A. Good morning.
- 20 Q. How about now? Okay. I just want to clarify a few things we spoke about previously. You described the investigation as a
- 22 group of CFIs from ATF. How are hypotheses ruled out or in that
- 23 | group setting?
- A. We were all on the deck of the ship to examine the vehicle in situ, so to speak, on the -- on deck 10 and subsequently there

were additional CFIs on October 18th when the vehicle was examined.

The theories are all discussed amongst the cadre. This is a concurrent decision and determination, not a consensus, meaning that the difference between a consensus and concurrence is if it was a consensus decision more than 50 percent of the people would agree or disagree.

In this case, again, it is a concurrent decision. All fire investigators must reach the same conclusion with the same data in whatever way they interpret it to reach the same decision. So while I am authoring the report, we rely on subject matter experts as our engineers that were on the team and the other certified fire investigators that participated in the investigation to come to the conclusion.

I am only writing the opinion of the concurrent decision of all certified fire investigators with support from the engineering team examining the vehicle.

- Q. You mentioned engineers as part of that team. What are the backgrounds of some of the other CFIs who investigated the fire on July 5th, 2023?
- A. I don't know all of the backgrounds of all. I do know one of them was a West Virginia State Fire Marshall in his previous experience.
 - Q. Okay. Let me clarify. You had mentioned an electrical engineer earlier. You had mentioned an electrical engineer

- 1 | earlier.
- 2 A. Yes.
- Q. Was there any other specialties you could recall from the group?
- A. There is a -- there was a Fire Protection engineer on the scene and I can say that all the other certified fire
- 7 investigators from ATF have the same background and training as I 8 do to be an ATF certified fire investigator as well.
- 9 Q. Sure. But I guess for -- it was a diverse group of backgrounds.
- 11 | A. Yes.

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- Q. Okay. And then you had mentioned many witness statements
 throughout your testimony. In general, what groups of people did
 you collect those statements from or conduct interviews of?
- 15 A. The crew on the ship, the lashers, stevedores, the mechanics
 16 where we received the documentations from the subject vehicle
 17 maintenance and repairs.
 - LCDR MOORE: Okay. And then just one other area I wanted to dig into a little bit more. Lieutenant Reed, can you pull up page 5 of Exhibit 6?
- 21 BY LCDR MOORE:
- Q. You spoke about the area of origin, and you mentioned a Venza and a Jeep specifically. Were there any other vehicles in that area with fire damage to note during your investigation?
 - | A. No, they were all at -- no. They were all exposed to the

fire. Obviously, they were all damaged by fire, but they were exposure vehicles after the fire had occurred and were subsequently exposed to the fire event.

- Q. And during -- earlier in your testimony you described the fire pattern on the Venza as being different than the Jeep. Can you provide a little bit more detail on the fire patterns and the differences between these two vehicles?
- A. Yes, there is -- actually this photograph has several things of note. You can see, first of all the differentiation in -- before we even get to the Venza, moving the mouse as I described where my mouse is now that was the specified deck beam damage -- where my mouse is right here on the --

LCDR MOORE: Let the record reflect Special Agent Hartnett is pointing to the overhead beams just above the driver door of the Jeep.

THE WITNESS: So this photograph indicates here the sagging I was speaking about from the uniformity of a later fire exposure here. And that's the -- just for describing for the record the foremost deck beam shown in the photograph in the upper left hand corner of the photograph is the previously described damage which is inconsistent with the previously specified damage.

So looking at the Toyota Venza itself in this photograph you can see a directional fire pattern where the severity of the damage is lessening from the front of the vehicle to the rear of the vehicle.

So as we move from the front of the vehicle to the rear of the vehicle where the -- in our methodology least to most amount of damage eliminating the Toyota Venza as the cause of the fire we move to the subject vehicle.

LCDR MOORE: All right. Thank you, Special Agent Hartnett. That's all of the questions I have, Commander.

CDR BARGER: Lieutenant Reed, any follow up questions?

LT REED: I have no questions.

CDR BARGER: Lieutenant Commander Ward, any follow up questions?

LCDR WARD: (Inaudible).

CDR BARGER: Mr. Pittman, any follow up questions?

MR. PITTMAN: No follow up questions.

CDR BARGER: Okay. Thank you. We will now take a 35 minute recess before cross examine -- before cross examination by the parties in interest. The time is now 10:02. We will reconvene at 10:40 a.m.

(Off the record at 10:02 a.m.)

(On the record at 10:43 a.m.)

CDR BARGER: The time is now 10:43 a.m. local time in Union, New Jersey and the hearing is now reconvened and back on the record regarding the fire on board the Grande Costa D'Avorio. Our current witness is Special Agent Matthew Hartnett. This is a continuation of his testimony from before the recess.

Special Agent Hartnett, as a reminder you are still under

1 oath.

THE WITNESS: Yes.

CDR BARGER: As we have done with previous witnesses, in order to ensure equitable time and opportunity for each party in interest to ask questions, each party in interest will have approximately 12 minutes for cross-examination within the scope of the direct examination questions. As a reminder for counsel, please ensure that your questions are eliciting relevant information that meets the purpose of this investigation. We'll begin with Grimaldi Deep Sea.

MR. LEVY: Good morning, Mr. Hartnett.

THE WITNESS: Good morning.

MR. LEVY: My name is John Levy and I represent Grimaldi. Is my mic being heard?

(No audible response.)

MR. LEVY: Thank you.

CROSS-EXAMINATION

18 BY MR. LEVY:

Q. I want to make sure I understand how you came to the opinions that you have come to so far and I'm going to lead you a little bit in doing that. If you disagree with anything, please let me know.

But as I understand it, in forming your opinions in this case you looked at the body of evidence -- photographs, your own inspection, you had a team of inspectors or other people working

- 1 with you. Is that all correct so far?
- 2 A. Yes.
- Q. You also took photographs and you looked at all of those photographs very carefully and your team looked at those
- 5 | photographs very carefully. Is that correct?
- 6 A. Yes.
- 7 Q. And looking at all of that evidence and applying your
- 8 considerable and substantial background as a fire investigator
- 9 cause and effect -- cause and origin investigator you came to the
- 10 conclusion -- you reached several conclusions. Let me make sure I
- 11 understand. Number one, you concluded that the origin of the fire
- 12 was the Jeep, that it was started somewhere in the engine
- 13 compartment on the left or the passenger side. Is that correct?
- 14 A. That's correct.
- 15 Q. And the cause of the fire, as I understand what you said was
- 16 | it was consistent with the recall that the vehicle had been
- 17 | subjected to years earlier. And I think by that you meant -- and
- 18 | correct me if I'm wrong -- but that the fire started with the
- 19 | transmission fluid overheating and coming out of the filler tube.
- 20 A. My determination is consistent with the presentation from the
- 21 witness statements that is described by Chrysler in the recall
- 22 notice.
- 23 \mathbb{Q} . And by that do you mean that the fire started with the
- 24 | transmission fluid boiling over out of the filler tube?
- 25 | A. I mean, that's very -- that is consistent with the recall

- notice language and the witness statements and the physical evidence.
- Q. I want to ask you some questions about the recall notice and as I understand it the recall recommendation was to add a light -- a warning light and an audible alarm to the panel for the Jeep, so the driver could get notice that the transmission was overheating.
- 7 A. Can you describe what, excuse me, can you describe what pal 8 is in your question?
- 9 Q. That's my south Jersey accent. Panel
- 10 A. Okay.
- Q. The control panel, you know the cluster panel there. It was a light and a bell or something -- a warning sign it was added to that vehicle.
- 14 A. The corrective action was to reprogram the digital display in the dash to display hot oil in the event.
- 16 Q. Okay. So, they didn't actually have to drill a hole and put
 17 in a new light.
- 18 A. That's correct.
- Q. Okay. And if I understand your testimony that doesn't fix
 the problem of the transmission potentially overheating. It just
 adds a warning to the driver so they can know when it's
- 22 overheating.
- 23 A. Correct.
- Q. So, the underlying cause of why a Jeep overheats -transmission overheats, I want to talk with you about that because

in the owner's manual addendum that you mentioned and read. You read that this overheating may occur "when operating the vehicle in a high torque converter slip condition such as 4 wheel drive operation, e.g. snow plowing, off-road operation. Can you explain what is operating a vehicle at a high torque converter slip condition? What does that mean?

CDR BARGER: Can you -- so we make sure it's on the record, can you make sure you speak into the microphone, Mr. Zonghetti and so I can hear also.

MR. ZONGHETTI: I'm just going to object. The witness, I don't believe was presented as an automobile driving expert or mechanical expert with respect to an automobile. And he didn't give testimony on direct as to what is being asked right now.

MR. LEVY: This witness is substantially qualified to offer testimony on this subject. And in addition he did mention specifically this section of the owner's manual and I'm asking for his understanding of what that is.

CDR BARGER: Mr. Levy, to the extent that you verify that Special Agent Hartnett has knowledge about that information, I do think it plays into possible contributing factors that Special Agent Hartnett may have considered as he was considering different hypothesis for his theory. So, within that framework, I'll allow it.

MR. LEVY: Okay.

BY MR. LEVY:

- 1 Q. Okay. Can you answer the question, or would you like me to
- 2 -- I'll rephrase it. Do you have knowledge of what operating a
- 3 | vehicle on a high torque converter slip condition is?
- 4 A. The examples given in the owner's manual addendum state snow
- 5 plowing or off-road operation.
- 6 Q. Okay. And do you have an understanding as to why that would
- 7 | cause the transmission to overheat?
- 8 A. I can say this, the vehicle was equipped with a push bumper.
- 9 It was a four wheel drive vehicle. We do know, based on the
- 10 | witness testimony, the vehicle was not in 4 wheel drive at the
- 11 | time the fire event occurred, but the vehicle had a push bumper
- 12 and was pushing objects immediately prior to the fire event
- 13 occurring.
- 14 Q. So sort of using it like snow plow except not using pushing
- 15 snow but pushing a car, is that correct?
- 16 MR. ZONGHETTI: (Inaudible.)
- 17 | CDR BARGER: Objection on what grounds?
- 18 MR. ZONGHETTI: Same grounds as before and now he's adding
- 19 | another level to it suggesting it's being used as a snow plow.
- 20 This witness has not testified as to that or doesn't have the
- 21 | qualifications to say that pushing a car is the same as using it
- 22 | as a snowplow. He's trying to wrap this into this warning by
- 23 using a fire expert.
- 24 MR. LEVY: May I respond?
- 25 CDR BARGER: Oh, just one second. So, Mr. Levy, if you would

rephrase your question with regards to the owner's manual addendum. I'll allow questions to be asked about Special Agent -- how Special Agent Hartnett considered the information that's in the owner's manual and how that impacted his determination.

BY MR. LEVY:

- Q. Special Agent, how did you, if at all, take into consideration the operation of the vehicle at the time of the incident with respect to your opinion that the transmission fluid overheated?
- 10 A. Through witness testimony, we are --
 - MR. PALLAY: Objection. There was no testimony that the transmission fluid indeed overheated.
 - CDR BARGER: I don't know that Special Agent Hartnett had got
 -- even gotten to the point of where he was going to say what the
 testimony was that he was considering.
 - MR. PALLAY: I'm objection to the question. Did -- counsel suggested that the hydraulic fluid overheated or the transmission fluid, I'm sorry.
 - CDR BARGER: Okay. Sustained. I'll ask -- Mr. Levy, I'll ask you to rephrase how you are asking that question.
 - MR. LEVY: Okay.
- 22 BY MR. LEVY:
 - Q. Did you take into consideration how the vehicle was being used at the time of the incident in forming your opinion of the likely cause of the fire was consistent with the recall notice?

1 MR. PALLAY: Objection to the extent that the witness has not 2 provided any type of hypothesis.

CDR BARGER: Yeah, I believe the question is consistent. The theory that Mr. -- or Special Agent Hartnett has presented and is consistent with eliciting his interpretation of the recall notice in relationship to that theory how it was proved or disproved. So, I'll allow it.

THE WITNESS: I'm sorry, could you please repeat the question.

BY MR. LEVY:

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- Q. I don't know if I can. Okay. Did you take into consideration how the vehicle was being operated in forming your opinion or hypothesis that the transmission overheated consistent with the recall warning?
- A. The fact that the vehicle was being operated at the time the fire occurred was considered.
- Q. And what facts about that did you consider in forming your opinion?
- A. That there was no evidence of a catastrophic failure of a drivetrain component that the vehicle was still maneuvering at the time the fire occurred.
- Q. Did you consider also how it was being used as a push vehicle?
- 24 A. Yes.
- 25 | Q. And what -- how does the fact that it was being used as a

1 | push vehicle support or not support your opinion?

- A. It's one data point that is considered that the vehicle is being operated at the time the fire occurred.
- Q. It's a data point that's consistent, is it not, with your opinion that the vehicle overheated, and the transmission fluid came out starting the fire, is that correct?
 - A. Yes.

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- Q. That use of being used as a pusher car, do you understand that use in terms of the phrase excessive weight loading?
- MR. ZONGHETTI: Objection. The same objection as before.

 The witness is saying that he (inaudible). That is what he is saying.

MR. LEVY: Do you want me to respond?

CDR BARGER: Yeah, you can respond, Mr. Levy.

MR. LEVY: Nonsense. The -- seriously, this man is eminently qualified to offer these opinions, and these are the opinions that he holds and that he's given that it was caused by the transmission fluid fire. And one of the factors was that it was being used as a pusher vehicle. That is his testimony and I'm exploring that.

MR. ZONGHETTI: Okay. He's now said -- the witness has now said three times he considered it being used as a pusher vehicle because it was being operated. What counsel is trying to now for the fourth time trying to get the witness to say is that the fact that it was pushing means something other than what he's testified

to three times. We are wasting our time with this number one because he's answered it and number two, he's not qualified to go beyond that, and he's already given his testimony.

MR. LEVY: I can clarify with the witness whether his opinion was based solely on the vehicle being used as a -- and how -- that being the data point or ruling out a cause of whether it was also a data point for why the vehicle caught fire.

CDR BARGER: Mr. Levy, I'll allow it in a limited form as a -- to establish a data point with which he considered how the vehicle was being used. But then I think we have covered the fact that Special Agent Hartnett considered the factor that it was being used as a push vehicle and we'll move on from there.

MR. LEVY: Okay. So am I -- is he allowed to answer my question?

CDR BARGER: So, you can ask it -- I would say you can ask the question to the extent of a data point to which he considered it, or he was able to consider it, but I don't believe his expertise extends to how a vehicle was used in this particular case or if it is -- or if he could even speak to what constitutes overuse.

MR. LEVY: I was not asking him about overuse.

BY MR. LEVY:

Q. You considered that the vehicle was pushing another vehicle at the time for, as I understand it at least that the drivetrain was operating one data point, but also as a data point that there

was pressure being put on -- pressure or -- I can rephrase the question. Did you consider -- I'm sorry, you're talking to your counsel. All right. Let's try this one more time.

Did you consider how the vehicle was being used as a push vehicle for any other purpose other than that the vehicle's drivetrain was operating in forming your opinion that the vehicle overheated?

- A. I'm sorry, repeat that.
- 9 Q. Look, we're going to stop and go somewhere else. You took
 10 into consideration the wear on the tires of the vehicle, did you
- 11 | not?

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- 12 A. Yes.
- Q. What was the significance of the wear on the tires? There was only 5000 miles of tire and they had to be replaced in one
- 15 year.
- 16 A. Yes.
- 17 | Q. What was the significance of that to your opinion?
- 18 A. Strenuous use of the vehicle.
- 19 Q. What do you mean strenuous use?
- 20 A. I would not think that brand new tires within two years old
 21 would have been worn down to the point where they had to be
- 22 | replaced after 5000 miles of use.
- Q. Does that suggest to you the tires may have been spinning and the rubber on the tire had been worn down?
- 25 MR. ZONGHETTI: Objection.

CDR BARGER: Objection on what grounds?

MR. ZONGHETTI: (Inaudible) testified about wear on the tire, the tires spinning. There is no evidence of that in his testimony about the tires.

CDR BARGER: All right. The objection is sustained.

MR. LEVY: Okay. I'll move on.

BY MR. LEVY:

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- Q. The opinions that you formed in this case so far, I know you have reserved the right to add new opinions or to expand on the basis of your opinions, but your feelings or to expand on the
- basis of your opinions. But the opinions that you have given so far in this case, are they given with a reasonable degree of
- 13 scientific certainty?
- 14 A. We don't use that term. That's -- this isn't like a trial
 15 for a medical drug. It either is or it isn't.
- 16 Q. Okay. So, in your opinion as of today the cause of the fire 17 is the transmission fluid overheating?
- 18 A. I did not testify to that.
- 19 Q. You testified that it was consistent with the recall.
- 20 A. Correct.
- 21 | Q. And by consistent with the recall you mean what?
- A. As the recall notice stated, the presentation of the fire taking in all of the other data points, it cannot be disproven that the presentation of the fire with all of the evidence that we
- 25 have gathered is inconsistent with the recall notice language.

- 1 Q. I don't understand what you mean. Can you explain that,
- 2 | inconsistent with the recall language notice?
- A. The cause of the fire, based on all of the data is consistent with the language written in Chrysler's recall notice.
- 5 Q. Specifically what language are you referring to?
- 6 A. I'm trying to find it. Yes, that's it right there.
- 7 CDR BARGER: So, currently displayed on the screen is Coast 8 Guard Exhibit 5, page 11.
- 9 MR. LEVY: Thank you, Commander.
- 10 THE WITNESS: I am going to read the language in the recall
 11 notice as published by Chrysler. The problem is the transmission
 12 fluid in your vehicle may overheat under certain driving
 13 conditions. Continuous operation under these conditions may cause
 14 the transmission fluid to boil over and come in contact with hot
 15 engine or exhaust components. This could cause an under fire --
- MR. LEVY: Okay. I have no further questions.
- 18 CDR BARGER: Ports America.

an under hood fire without warning.

- 19 BY MR. ZONGHETTI:
- 20 Q. Good morning, Special Agent. My name is Gino Zonghetti. I'm
- 21 | the attorney for Ports America. I have some questions for you.
- 22 Okay?

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- 23 A. Good morning, sir.
- 24 | Q. It appears to me you testified in a very precise manner and
- 25 I'm going to ask you a couple of questions about that precise

- 1 testimony. You use the -- in explaining where you are today with
- 2 respect to your investigation you used the phrase that you had
- 3 drawn a working hypothesis, did I get that correctly?
- $A \sqcup A$. That's correct.
- 5 Q. And would you agree that the hypothesis is a tentative
- 6 assumption made in order to draw out and test its logical or
- 7 | empirical consequences?
- 8 A. Yes.
- 9 Q. And you then said that your working hypothesis was consistent
- 10 with, you used that phraseology, correct?
- 11 A. That's correct.
- 12 | Q. And would you agree with me that consistent with means
- 13 | compatible with something?
- 14 \mid A. I'm going to stick with my language as I understand it and
- 15 | not compare it to another adjective.
- 16 Q. Okay. So, consistent with is what you're sticking with?
- 17 | A. Yes.
- 18 $\mid Q$. Okay. And consistent with in the normal use of the English
- 19 | language means it's in agreement with something or it's compatible
- 20 with something, along those line you would agree, right?
- 21 | A. I would agree if that's a -- not presented to me dictionary
- 22 answer.
- 23 | Q. Now in this exhibit that we had up with the photographs.
- 24 MR. ZONGHETTI: Can we have that up again?
- 25 CDR BARGER: Which exhibit

MR. ZONGHETTI: First page -- the one we had up with the witness today -- 6, was it 6?

CDR BARGER: Yeah, we'll display Coast Guard Exhibit 6.

(Coast Guard Exhibit No. 6 marked

for identification.)

MR. ZONGHETTI: If we can go to the top of it. Okay.

7 BY MR. ZONGHETTI:

- Q. Now, sir -- Special Agent, that photograph you made the point of saying in testifying that showed an oxidation pattern, would --
- 10 did I get that correctly?
- 11 | A. Yes.

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- 12 \mathbb{Q} . And specifically that was on the 11th deck leading up to the
- 13 12th deck -- heavy oxidation.
- 14 A. Yes.
- 15 | Q. And that's on the port side of the vessel, is that correct?
- 16 | A. Yes.
- 17 $| \cdot |$ Q. And if we look in the middle of the picture it shows, you
- 18 called it the watertight door on deck 12, right?
- 19 A. Yes.
- 20 \mathbb{Q} . But that watertight door at any point in time you were on the
- 21 | vessel was never closed, correct?
- 22 A. Correct.
- 24 | about oxidation and playing a role in some of -- in your
- 25 hypotheses, what is the significance of oxidation in -- with

- 1 respect to a fire and in a fire investigation?
- 2 A. The amount of damage causing that pattern is indicative of
- 3 sustained heating for a long duration.
- 4 Q. So oxidation is indicative of sustained heating for a long
- 5 duration.
- 6 A. Yes.
- 7 | O. Now --
- 8 A. At that amount. There is varying degrees, but to that
- 9 | extent, yes.
- 10 Q. Now, in that precise area which you testified to and pointed
- 11 | out, would that mean that there was extensive heating for a long
- 12 duration on that ramp going up to that open watertight door?
- 13 | A. Yes.
- 14 $\mid Q$. But the fire started -- if we're -- if I'm understanding your
- 15 | opinion, on deck 10, correct?
- 16 | A. Yes.
- 17 | Q. And does that mean that there was extensive heat and fire
- 18 | that traveled up the ramping system up that ramp to the watertight
- 19 door?
- 20 A. Yes.
- 21 | Q. Now the recall notice, which is Exhibit 5, was that issued in
- 22 2010? Is that your understanding?
- 23 | A. The screen is displaying a document that says revised May of
- 24 2010.
- 25 $\mid Q$. Okay. And this is the document you looked at and obtained

- 1 with the other special agents as part of your investigation,
- 2 | right?
- 3 | A. Yes.
- 4 Q. And if we look on that first page of the recall notice under
- 5 the subject, it says the transmission fluid on about 157,000 of
- 6 | the above vehicles may overheat under certain driving conditions.
- 7 Did I read that correctly?
- 8 A. Yes.
- 9 Q. And when it speaks to the certain vehicles, the above
- 10 | vehicles, it references 2007 to 2008 Jeep Wranglers, correct?
- 11 A. Correct.
- 12 Q. Now, how many Jeep Wranglers were manufactured by the
- 13 Chrysler Corporation in 2007 and 2008 and sold to the public?
- 14 A. I don't know.
- 15 | Q. Did you investigate that in any way, shape or form?
- 16 A. No.
- 17 | Q. Do you know what percentage of those vehicles actually
- 18 | subjected to the problem that gave rise to the recall? There were
- 19 | 157 vehicles that Chrysler -- thousand vehicles that Chrysler
- 20 | identified that problem, correct?
- 21 A. I do have the exact number of vehicles that was -- I don't
- 22 | have it off the top of my head, but I do have that documentation.
- 23 As far as a ratio or a percentage, I do not know.
- 24 Q. Okay.
- 25 \mid A. I do know the exact number of vehicles that were subject to

1 | the recall.

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- Q. And what was that, sir?
- $3 \mid A$. If you give me a minute I can find that number for you.
- 4 \mathbb{Q} . Sure, we can -- go ahead. Sir, I -- maybe we could do this
- 5 at a later time. I just don't want it to take all of the time
- 6 allotted to me on this.
- 7 A. Okay. If you're willing to move on without the exact number 8 right now.
- 9 Q. I'll move on. Was every Jeep Wrangler that was produced
- 10 | during those two years, did it have the issue that gave rise to
- 11 the recall?
- 12 A. Could you repeat the question, please?
- 13 | Q. Yeah. Did every -- you don't know how many Jeeps were
- 14 produced in those two years, but did every Jeep that was produced
- 15 | by Chrysler during those two years have whatever issue there was
- 16 | that gave rise to this recall? Do you have any awareness of that?
- 17 | A. If I'm understanding the question correctly, you are asking
- 18 | me if every Jeep manufactured subject to the recall was
- 19 potentially susceptible to the recall condition?
- Q. Right, was manufactured with whatever condition gave rise to
- 21 the recall.
- 22 MR. LEVY: Objection, beyond the scope.
- 23 CDR BARGER: And I'm going to sustain. I don't believe
- 24 | Special Agent Hartnett has an expertise in how many Jeeps nor how
- 25 many were subject to the recall.

1 BY MR. ZONGHETTI:

- 2 Q. Right, but the recall notice is something that you have
- 3 | looked at and relied upon in forming an -- or a working
- 4 hypothesis, correct?
- 5 A. The recall condition in this particular vehicle had the
- 6 corrective action taken.
- 7 Q. Right.
- 8 A. That's my answer.
- 9 Q. But the notice -- the documentation from Chrysler is
- 10 something that you relied upon and reviewed informing your working
- 11 | hypothesis, right?
- 12 | A. Yes.
- 13 | Q. Okay. Did -- you testified the drivetrain was not an issue
- 14 | because this Jeep was running, correct?
- 15 | A. Yes.
- 16 | Q. Now on Exhibit 5, the recall notice, it indicates that Jeep's
- 17 | subjected to this condition that gives rise to -- gave rise to
- 18 | this recall if this condition came about it could cause severe
- 19 | transmission damage or transmission failure. You are familiar
- 20 | with that, correct?
- 21 A. Yes.
- 22 MR. LEVY: Objection, beyond the scope.
- 23 \parallel MR. ZONGHETTI: How could it be beyond the scope?
- 24 CDR BARGER: Sustained, I think this goes back to the
- 25 previous issue we discussed about -- the previous line of

questioning.

MR. ZONGHETTI: The witness has said that the car was running and that gives him evidence that he's using in his determination of the working hypothesis. I'm asking him using the recall notice, which he's also relied upon whether if this condition had come about -- a transmission overheating so much so that it could have affected -- that caused this fire where the recall notice says this will affect or cause severe transmission damage or failure to run whether that's consistent.

CDR BARGER: And as it relates to this to this particular Jeep and how it played into his theory or is determination, I'll allow it and within his knowledge.

THE WITNESS: All right. Please repeat the question.

BY MR. ZONGHETTI:

- Q. Yeah, the recall notice says this condition will cause severe transmission damage or will stop the vehicle from running, right -- or failure? But this vehicle was running at the time, you've concluded that, right?
- 19 A. Yes.
 - Q. Okay. So that condition didn't come about -- the Jeep, the transmission was not severely -- couldn't have been severely damaged and couldn't have resulted in failure from an overheating, right?
- A. I can read continuous operation under these conditions may
 cause the transmission fluid to boil over and come in contact with

hot engine or exhaust components. This could cause an under hood
fire without warning.

- Q. All right. But that's not the portion that we were reading from. The portion that I was reading from said will eventually cause severe transmission damage or transmission failure. You've read that, right?
- 7 A. Yes.

Q. Okay. And that was not the case here. You would agree with me?

10 LCDR WARD: What page it is on?

CDR BARGER: Mr. Zonghetti, if you can point us to the page?

MR. ZONGHETTI: Page 12 of 12. The copy I have.

CDR BARGER: So, what I am going to say is, Special Agent Hartnett you have said you considered this document within your investigation and making your determination as to possible theories that you proved or disproved related to your determination of cause and origin. In your reading of the paragraph that Mr. Zonghetti is referencing, what is -- what did you consider with -- in relation to determining your theories that you proved or disproved and what is your interpretation of that paragraph as it relates to it?

THE WITNESS: Well, the paragraph speaks for itself. Let me --

CDR BARGER: And if you can point us to the specific paragraph, Mr. Zonghetti.

- 1 THE WITNESS: Yes, please.
- 2 BY MR. ZONGHETTI:
- 3 Q. Sure, on my exhibit it's under the -- I believe it's page 12
- 4 of 12, it says caution, continuous driving when transmission
- 5 | temperature hot oil warning message illuminated will eventually
- 6 cause severe transmission damage or transmission failure. Do you
- 7 have that?
- 8 A. Yes, now I'm reading it.
- 9 Q. Now, you testified about --
- 10 CDR BARGER: And Mr. Zonghetti, real quick we have -- you
- 11 have a one minute warning.
- 12 MR. ZONGHETTI: All right.
- 13 BY MR. ZONGHETTI:
- 14 $\mid Q$. You said the tire -- you testified about the tires, you
- 15 | understand that these tires were -- they rode over things that
- 16 caused them to become flat frequently, correct?
- 17 | A. I wouldn't use the word frequently. I have heard testimony
- 18 | that vehicles did receive flat tires.
- 19 $\mid Q$. Right, you heard the mechanic. One of his jobs was to fix
- 20 | flat tires all of the time, right?
- 21 A. Yes.
- 22 | Q. And what he did was he plugged the tires, correct?
- 23 A. Yes.
- 24 Q. And there's only so many plugs you can put in a tire before
- 25 | it becomes unusable, right?

1 MR. LEVY: Objection, beyond the scope. He's not a tire 2 expert.

- MR. ZONGHETTI: Well, the witness --
- 4 CDR BARGER: Sustained.
- 5 MR. ZONGHETTI: Okay.
- 6 BY MR. ZONGHETTI:
 - Q. You don't know why those tires were changed, correct?
- 8 | A. No.

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- 9 Q. Now, in addition to that, this vehicle -- the recall notice
- 10 was complied with by the prior owner, correct?
- 11 | A. Yes.
- 12 Q. And then there were subsequent recall notices for other
- 13 issues that were complied with, correct?
- 14 A. Correct.
- 15 Q. There was evidence that there was a full safety servicing of
- 16 | this vehicle in August of 2022, right?
- 17 | A. I wouldn't agree with that. I don't know what that is.
- 18 $\mid Q$. Transmission -- there was a servicing of the transmission.
- 19 You said the fluid was changed. The filter was also changed,
- 20 | correct?
- 21 A. Correct.
- Q. And do you know how you do that on a Jeep? Do you have to
- 23 | remove the transmission -- the pan for the transmission?
- CDR BARGER: Special Agent Hartnett, only answer within the
- 25 | scope of your knowledge about how to do a mechanical repair to a

- 1 | vehicle. But Mr. Zonghetti, I think the relevance of --
- 2 MR. ZONGHETTI: I'll withdraw it then. Can I -- if I could
- 3 | just have another moment? If we could go to Exhibit 6, please.
- 4 The photographs.
- 5 BY MR. ZONGHETTI:
- 6 | Q. If we can go on Exhibit 6 top page 14, yeah. Now, Special
- 7 Agent, that shows a picture of the vehicle in the way it was found
- 8 on the vessel, correct?
- 9 A. That's correct.
- 10 0. And there's substantial oxidation on the hood of the vehicle
- 11 on the driver's side, correct?
- 12 A. That's correct.
- 13 Q. And if we go to the next picture, 15, that shows the hood
- 14 open. Someone had opened the hood to look inside, correct?
- 15 A. Correct.
- 16 Q. And there's substantial oxidation on the driver side of the
- 17 | inside of the hood, is that correct?
- 18 | A. Yes.
- 19 | Q. Now, if we go to -- well, you were going for a long time.
- 20 CDR BARGER: One last question.
- 21 MR. ZONGHETTI: Okay.
- 22 BY MR. ZONGHETTI:
- 23 \parallel Q. Picture -- page 20, now you -- the transmission fuel tube was
- 24 | tagged, correct?
- 25 A. Correct.

- 1 Q. If we go below that transmission fuel tube and a little bit
- 2 to the right of it and I don't know if we could zoom in -- up a
- 3 | little from there. You see there's a fuel line nipple right
- 4 there, right?
- 5 A. I see a component.
- 6 Q. Yeah, what is that component?
- 7 A. I don't know what you are referring to specifically, but --
- 8 Q. It's hard -- yeah, right there.
- 9 A. Okay.
- 10 Q. Correct.
- 11 A. I don't specifically know --
- 12 Q. Okay.
- 13 $\mid A$. -- what that is.
- 14 | Q. You don't know that that's a fuel line that came into the
- 15 | engine block?
- 16 A. No.
- 17 | Q. Okay. And if that is a fuel line, that's how many inches
- 18 away from the fill cap for the transmission?
- 19 A. Less than five.
- MR. ZONGHETTI: Yeah, and -- well, I don't know if I have any
- 21 more time.
- 22 CDR BARGER: Yeah, well, last question.
- 23 MR. ZONGHETTI: Thank you, Agent. Thank you.
- 24 CDR BARGER: All right. And for the record, we have been
- 25 | accounting for time that responding to objections and taking those

- 1 into consideration. So we have gone beyond an exact 12 minutes 2 for both cross examinations so far.
- 3 American Maritime Services.
- 4 BY MR. PALLAY:
 - Q. Good morning, Special Agent.
- 6 A. Good morning.
- Q. You agree with me that you reviewed all evidence you felt was important to your hypothesis, correct?
- 9 A. I reviewed all evidence. I wouldn't specify myself in couching the word important or you know all evidence was
- 11 | considered.

- Q. All right. Am I correct with respect to the recall and the corrective action taken, the only records you reviewed are
- 14 | contained in Exhibit 04 and 05.
- 15 | A. Could you repeat the question?
- 16 Q. Have you -- I'll rephrase it. You'll agree with me that the
- 17 only records you reviewed with respect to the recall and the
- 18 corrective action of the subject vehicle is contained in Coast
- 19 | Guard Exhibit 04 and 05.
- 20 A. I would need -- yeah, I would think there might even be more
- 21 | than that. I'm not sure. I'd have to look at all of the ones
- 22 that were in the exhibit.
- 23 | Q. Okay. Well --
- A. We didn't read all of -- they weren't all displayed on the screen for me to answer that question.

- 1 Q. If you wanted to --
- 2 CDR BARGER: I will clarify. The exhibits are Coast Guard
- 3 exhibits. They are ones that we have selected to put in to the
- 4 | record to help augment the witness' testimony. They were provided
- 5 to us by ATF --
- 6 MR. PALLAY: Okay. So --
- 7 CDR BARGER: -- without being redundant in documentation.
- 8 BY MR. PALLAY:
- 9 Q. All right. So, let me just then narrow that down. Coast
- 10 | Guard Exhibit 05, that's the safety recall J30, correct?
- 11 | A. Yes.
- 12 Q. And that's a 12 page document?
- 13 | A. Yes.
- 14 | Q. And you've reviewed that document?
- 15 | A. Yes.
- 16 Q. Okay. Exhibit 04 on the first two pages has on the top
- 17 | called a VIP summary report. Did you review those two pages?
- 18 | A. Yes.
- 19 $\|Q$. Okay. Did you review any other pages in the Exhibit 04 that
- 20 goes to page 21?
- 21 A. I would have reviewed all of those pages.
- 22 | Q. Okay. So, like I said before, am I correct that with respect
- 23 | to the recall, the only records you reviewed are contained within
- 24 | Exhibit 04 and 05?
- 25 \mid A. I can testify that I reviewed all of the pages in those two

documents but I'm not going to testify that they were the only documents that I reviewed in consideration for the recall. I

am --

CDR BARGER: I'm also going to -- I'm going to stop a second. I'm going to clarify, Coast Guard Exhibit 4 again is a Coast Guard exhibit, the same as Exhibit 5 being a Coast Guard exhibit.

They are -- Exhibit 4 in particular is a compilation of multiple maintenance record documents into one. Special Agent Hartnett has testified to his -- previously testified to his knowledge of the first two pages and then knowledge of subsequent pages that are maintenance records from starting at 5, I believe, from the Newark Auto Body Service.

MR. PALLAY: Okay. All right.

BY MR. PALLAY:

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- Q. So, let me just simply here. What other records have you reviewed with respect to the recall and the corrective action on the subject Jeep other than Exhibit 05 and 04?
- A. I can only attest to one that I recall off the top of my head. It's a National Highway Transportation Safety

 Administration document.
- 21 Q. Okay. All right.
 - A. There may be others, but I recall that specifically.
- MR. PALLAY: Okay. So in looking at Exhibit 04. If we can pull up the first page.

BY MR. PALLAY:

- 1 Q. And if you can read, I guess it's highlighted where it says
- 2 August 20th, 2010, with the transmission fluid temperature
- 3 warning. You'll agree with me that the only description of that
- 4 corrective action is repair date.
- 5 A. Is what?
- 6 Q. Repair date on that record.
- 7 A. It also lists the launch date of the recall as well.
- 8 Q. Okay. But is there any other information as to the nature of
- 9 the repair and what the repair was done?
- 10 A. It says description, transmission fluid temperature warning.
- 11 | Q. That's the issue, is it not?
- 12 A. It says description as described by Chrysler.
- 13 Q. Okay. But in just looking at Exhibit 04 and looking at this
- 14 | record, you'll agree with me that there is no indication on this
- 15 | record as to what the nature of the repair and the corrective
- 16 action was.
- 17 | A. No.
- 18 \mathbb{Q} . No, so where else on this record does it describe the nature
- 19 of the repair and the corrective action?
- 20 A. At the page I'm looking at, it does not say.
- 21 | Q. Well, there is -- if you want to take your time and look
- 22 | through the rest of it. You have reviewed this document. I'm
- 23 | asking if there is anywhere else on this document you see the
- 24 | nature of the repair?
- 25 $\mid A$. And it may not be in this document, but another document that

I reviewed. But the answer to your question exists on a document
whether it's the one we're looking at now or another one. We have
the document. It was considered.

CDR BARGER: Yeah, Mr. Pallay. I don't know that I see the relevance with respect to whether information about that particular recall was contained in this specific document which again is a compilation --

MR. PALLAY: Let me --

CDR BARGER: -- that the Coast Guard developed through maintenance records of the Jeep while --

MR. PALLAY: Well, I'll connect it.

CDR BARGER: -- Ports America was the owner.

MR. PALLAY: I'll connect it.

14 BY MR. PALLAY:

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- Q. So in looking at Exhibit 04 and 05 which you have testified reviewing, there is nothing that indicates the corrective action was actually done.
- 18 A. Yes, it's -- yeah, we already read it. It is on page 1. It is on page 1. It was done on August 20th, 2010.
- Q. Well, it says repair date. Does it say what the nature of that repair was?
- A. No, but your question was just a minute ago, did the corrective action take place? And yes, it's documented in the page 1 of this exhibit that it was repaired -- the corrective action was taken on August 20th, 2010.

- 1 Q. And you'll agree with me that there were Jeeps that the
- 2 corrective action did not apply to correct?
- 3 A. I don't know.
- 4 Q. Okay. All right. We'll move on. Special Agent, you noted
- 5 | earlier that informing your hypothesis, you've been following
- 6 | facts and evidence, correct?
- 7 A. Correct.
- 8 Q. Okay. And then you know, that's -- your example you gave,
- 9 you know, the examined the hull of the ship, you looked at --
- 10 | ruling out causes one by one, things like that. Are you following
- 11 | -- would you agree with me that you are following the facts
- 12 | objectively and you're ruling out causes.
- 13 A. Yes, the scientific method. That's correct.
- 14 | Q. And that includes, you know, reviewing statements?
- 15 | A. Yes.
- 16 | Q. And that also includes reviewing testimony that's been given
- 17 | over the last few days, correct?
- 18 | A. Yes.
- 19 | Q. Indeed you have been here in the room listening to testimony,
- 20 | correct?
- 21 A. Yes.
- 22 | Q. Okay. And while you were here you would agree with me that
- 23 | you heard sworn testimony by the operator of the Jeep pusher,
- 24 | correct?
- 25 A. Yes.

- Q. Indeed, you know, you even cited to testimony from that
 operator with respect to how you came to the conclusion that the
 lithium ion battery found in front of the Jeep was not a factor in
 the fire, correct?
 - A. Yes.

- Q. In reviewing that testimony you heard -- you would agree with me that you heard sworn testimony that there was no audible chime or visual indicator consistent with the recall, correct?
- A. There was testimony to that. There was testimony given over the past several days that the hot oil lamp in the dash did illuminate. I don't recall any testimony that the chime was heard.
- 13 0. I'd like to move to strike.

MR. ZONGHETTI: I object and move to strike.

THE WITNESS: Then I didn't understand the question.

MR. ZONGHETTI: There was no testimony to that fact.

LCDR WARD: On the day of (inaudible) or in general?

MR. ZONGHETTI: Here at this hearing there was no sworn testimony as to that light being one and that indication -- and that audible chime. And the witness here is testifying that he heard that. Yeah, you know, we'll search the reach if we have to about his -- about the testimony that he heard.

LCDR WARD: Testimony that we have already heard with respect to the potential to having ever seen it on the (inaudible).

MR. PALLAY: Correct, there was no --

MR. ZONGHETTI: Woah, no. The testimony in this case has been by the driver that he had received no visual or audible warning before this occurred.

LCDR WARD: (Inaudible).

MR. ZONGHETTI: Yes, that's -- that was the question.

LCDR WARD: That's why I was seeing which --

MR. PALLAY: On the date of testimony. Yeah. Okay, so move to strike the testimony that --

LCDR WARD: Well, I think that you need to reword the question then because you (inaudible).

BY MR. PALLAY:

- Q. You'll agree with me -- Special Agent, you'll agree with me that there was no -- there was sworn testimony from the operator of the vehicle on the day of the fire, July 5th, there was no audible chime or visual indicated prior to the fire?
- A. Correct.

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17 Q. And now --

that information.

- A. May I clarify one thing? I misunderstood your question. We had previously interviewed witnesses in July and there was interviews that stated such. And I misunderstood the question and have that statements from people that did originally in July state
 - Q. But you'll agree with me that under oath there was no testimony that that audible chime and that light was on prior to the fire?

- 1 | A. Yes.
- 2 \mathbb{Q} . And those interviews, were they under oath, if you know?
- 3 | A. I don't recall if those were under oath or not.
- 4 Q. Okay. And you already testified here that you have
- 5 | meticulously reviewed all of the facts and evidence, correct,
- 6 | in --
- 7 A. Yes.
- 8 Q. -- forming your hypothesis? So, you'll agree with me now
- 9 then you are choosing to ignore sworn testimony that there was no
- 10 | audible chime or visual light in forming hypothesis, correct?
- 11 | A. I'm not ignoring that.
- 12 Q. However, isn't that -- how is it not then inconsistent with
- 13 your testimony earlier today?
- 14 A. We have previous statements.
- 15 CDR BARGER: All right. Mr. Pallay --
- MR. PALLAY: I have one more. I think we -- aren't we
- 17 | waiting to answer? Just last question -- last one.
- 18 LCDR WARD: It's not a follow up from the one before?
- 19 MR. PALLAY: No, just one last question and that's it.
- 20 BY MR. PALLAY:
- 21 Q. So, Special Agent, the fact that there was no chime on the
- 22 date of the incident prior to the fire is inconsistent with your
- 23 | hypothesis, correct?
- 24 A. I don't know that.
- 25 MR. PALLAY: Nothing further.

- 1 CDR BARGER: Port Authority of Newark, New Jersey.
- 2 MR. REILLY: We have no questions.
- 3 CDR BARGER: Okay. City of Newark?
- 4 MR. LIPSCHUTZ: Thank you.
- 5 BY MR. LIPSCHUTZ:
- 6 Q. Special Agent. Good morning.
- 7 A. Good morning.
- 8 Q. My name is Gary Lipshutz, L-i-p-s-h-u-l-t-z. I work -- I
- 9 represent the City of Newark. Okay. Just a few follow up
- 10 | questions, please. First, I think you said you have been present
- 11 | -- physically present during these -- during the testimony in
- 12 | these hearings, correct?
- 13 A. Correct.
- 14 Q. Okay. And I take it then have you considered the testimony
- 15 | that you have heard as part of the hypothesis that you have
- 16 | presented?
- 17 | A. Yes.
- 18 | Q. Okay. The driver of the Jeep said he saw burning blobs of
- 19 some liquid dropping onto the ground on deck 10. Do you recall
- 20 that?
- 21 A. I believe -- yes.
- 22 | Q. Okay. There was also testimony that was presented that --
- 23 || from the driver that there was an issue with the light on the
- 24 | instrument panel. Do you recall that?
- 25 A. Yes.

- Q. And that there was also some dirt potentially on the instrument panel?
 - A. Yes.

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- Q. When was the first time that you learned of a problem with the light on the instrument panel?
- 6 A. During interviews in July.
 - Q. Okay. Am I correct that your hypothesis also relied upon

 Lasher Costanzo's statement that -- let me please ask the question

 -- that the hot oil lamp came on at times prior to this incident?
 - MR. PALLAY: Objection, outside the scope. We've already, you know, this body has already decided that prior statements outside of the evidence that's been presented is not admissible here.
 - CDR BARGER: Yeah, Mr. Lipschutz, are you referring to testimony that has been brought at the hearing?
 - MR. LIPSCHUTZ: Thank you. I'm just following up on what the Special Agent said earlier for clarity. He has already said it. I'm just trying to find out what he was talking about. That's all.
 - CDR BARGER: But in your question please clarify the time frame or source of the -- the testimony that you are talking about.
- MR. LIPSCHUTZ: Respectfully, I don't know the source of that
 Special Agent relied on. I'm trying to ascertain what he said.
 - CDR BARGER: Rephrase the question and I'll allow it.

- 1 MR. LIPSCHUTZ: Thank you.
- 2 BY MR. LIPSCHUTZ:
- 3 Q. Special Agent, I believe you have stated that you relied upon
- 4 some information that the hot oil lamp was -- came on on this
- 5 | yellow Jeep prior to this incident, am I correct about that?
- 6 A. Prior meaning?
- 7 Q. Before the fire.
- 8 A. That's a very long time. So to include all of the time prior
- 9 to the fire event, yes.
- 10 Q. I'm going to move on. Transmission fluid, it's a combustible
- 11 | fluid?
- 12 | A. Yes.
- 13 0. Gasoline is also a combustible fluid.
- 14 A. Gasoline is a flammable liquid.
- 15 | | Q. Flammable, okay. Thank you for clarifying. As a layperson
- 16 ATF has the ability to test for products of combustion from a
- 17 | fluid?
- 18 A. Yes.
- 19 \mathbb{Q} . In your investigation, was -- were any test -- chemical tests
- 20 | run to ascertain what combustible fluid or flammable fluid was the
- 21 | source of the fire, if at all?
- 22 $\mid A$. There was an attempt to draw liquid transmission during the
- 23 \parallel examination on the ship. We were unable to do so because of an
- 24 obstruction to the filler tube for the transmission.
- 25 | Q. What about the debris that was collected, was that tested?

- 1 | A. No.
- 2 Q. Is it -- as part of your investigation, is that something
- 3 | that can be done?
- 4 A. Yes, as a matter of fact, on October 18th when the Jeep was
- 5 preserved that discussion if needed, based on the findings of this
- 6 hearing needed to be done it is possible that because of the
- 7 | condition of the Jeep being stored.
- 8 Q. Two more lines of question. Did your investigation ascertain
- 9 where on the instrument panel of this Jeep the message would show
- 10 up if there were a hot transmission fluid issue? We have an image
- 11 of the instrument panel. Have you seen that?
- 12 | A. Yes.
- 13 Q. So my question is, do you know did your investigation
- 14 | ascertain where on that panel that would show?
- 15 A. Yes, and it's also listed in the recall corrective action.
- 16 MR. LIPSCHULTZ: Could we please put up Exhibit 3?
- 17 MR. ZONGHETTI: Isn't this beyond the scope of direct. I
- 18 mean, the witness didn't testify to this at all.
- 19 CDR BARGER: So, say it was within the scope as it relates to
- 20 the information that's in the recall that Special Agent Hartnett
- 21 has spoken to previously. Mr. Lipschutz, I would ask you to
- 22 | clarify the relevance to which this question applies.
- 23 MR. LIPSCHUTZ: Sure.
- 24 BY MR. LIPSCHUTZ:
- 25 | Q. There is testimony about a recall a corrective action, we

have a dashboard panel, we have testimony in this case about the back lights not working. We have testimony in this case about things like that, I'm just trying to find out where it would show up on that dashboard, that's all. If his investigation ascertained.

MR. ZONGHETTI: Yeah, I renew the objection. He has made clear that was not brought up on direct.

CDR BARGER: yeah, if it specifically stated within the recall I'll allow it. If we can have -- we can have Special Agent Hartnett review the recall as the information states within there, but I don't know that Special Agent Hartnett has ever operated a Jeep to have witnessed seeing such a light himself.

MR. LIPSCHUTZ: That -- respectfully --

CDR BARGER: And we also didn't introduce that exhibit with him today.

MR. LIPSCHUTZ: Thank you. I was not asking him about his personal knowledge, sir. I asked about whether his investigation uncovered where it would show up on the dashboard. That's all I asked.

20 CDR BARGER: So, we're going to bring up Coast Guard Exhibit
21 5.

MR. LIPSCHUTZ: I believe 3 is the -- that's fine -- Exhibit 3 is the diagram of the dashboard.

CDR BARGER: Lieutenant Reed, it's down the next page, sir. Oh, thank you, sir. So bring up Coast Guard Exhibit 5, page 12.

And within the scope of what is -- Special Agent, you can scroll on the mouse yourself.

THE WITNESS: All right. So, reprogram.

CDR BARGER: So, Special Agent Hartnett, to your knowledge what was reprogrammed -- or, I'm sorry, what was the corrective action that was completed under this recall notice?

THE WITNESS: The corrective action was to reprogram a dashboard digital display to indicate hot oil and a continuous chime if the condition that might lead to the recall failure was determined by whatever sensors were included in that lamp or chime instrument.

BY MR. LIPSCHUTZ:

- 13 Q. All right. And my specific question was did his
- 14 | investigation ascertain where on the dash -- instrument panel that
- 15 | light would show? That's all my question is.
- 16 A. Yes, I do. No, I do not see a document here that presents
- 17 | that information to answer your question visually.
- 18 | Q. But you know the answer?
- 19 A. Yes, I do.
- 20 | Q. And if you looked at the dashboard instrument panel would you
- 21 be able to show us?
- 22 A. Yes.

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- 24 | Special Agent, this is the -- an exemplar of the dashboard panel,
- 25 Exhibit 3, could you kindly show us where the message would show

- 1 | -- the warning associated with the recall?
- 2 \mid A. Based on the language of your question, the item labeled #31.
- 3 Q. Okay. Thank you. Last question, different topic. One of
- 4 the photos you showed, number 17, was the skid plate, which I
- 5 think you added the word rusted. And my question to you is was
- 6 the rusted skid plate -- what significance did it have to your
- 7 | working hypothesis, if any?
- 8 A. The rust was noted because the -- there was a -- this line
- 9 here indicates that there was a shield, another skid plate shield
- 10 over top of the gas tank shield -- skid plate. And that was
- 11 | removed because one of the questions we were specifically
- 12 wondering was if there was a fuel -- a gasoline fuel failure, such
- 13 | as puncturing the gas tank or something like that causing the fire
- 14 | because we had testimony consistent with a liquid fire under the
- 15 | vehicle.
- 16 | Q. And for those of us laypersons, what is the purpose, if you
- 17 | know, of the skid plate?
- 18 $\mid A$. To prevent the puncture, abrasion, damage from contact to the
- 19 gasoline tank.
- 20 \parallel Q. So the last question that I have was, was there damage
- 21 punctures to the gasoline tank on this Jeep that you observed?
- 22 A. No.
- 23 MR. LIPSCHUTZ: Thank you, Special Agent. I don't have any
- 24 other questions. Thank you.
- 25 CDR BARGER: Thank you. Does the Coast Guard Investigative

- 1 | Team have any follow up questions?
- 2 LCDR MOORE: Yes, Commander, just a few.
- 3 REDIRECT EXAMINATION
- 4 BY LCDR MOORE:
- 5 Q. Did you consider any other recalls as part of this
- 6 | investigation for the Jeep?
- 7 A. We looked at all of them. None of them were fire related.
- 8 Q. Were they ruled out other than this one?
- 9 A. Yes.
- 10 LCDR MOORE: Lieutenant Reed, can you pull up Exhibit 4, page
- 11 | 1? Can you zoom in a little bit, please? In the table that -- I
- 12 | t has the highlight.
- 13 BY LCDR MOORE:
- 14 | Q. Special Agent Hartnett, is there a recall number listed for
- 15 | the highlighted work?
- 16 | A. Yes.
- 17 | Q. I'm sorry, go ahead. What is the recall number listed?
- 18 A. J30.
- 19 LCDR MOORE: Can you pull up Exhibit 5, page 2, please?
- 20 BY LCDR MOORE:
- 21 \mathbb{Q} . Can you tell us what the safety recall number is on this
- 22 | exhibit?
- 23 | A. J30.
- 24 $\mid Q$. Thank you. And just one more point of clarification.
- 25 | Earlier you talked about an ATF CFI concurrence process. Is that

- 1 | throughout your investigation or only for your report later on?
- 2 A. Throughout.
- 3 Q. So, is it fair to say when we are saying you and your today
- 4 | that's really part of the concurrent process for the whole team?
 - A. Yes.

- 6 LCDR MOORE: Thank you. That's all of the questions I have.
- 7 CDR BARGER: Any other follow up questions from the
- 8 | investigative team? Ms. McAtee?
- 9 MS. MCATEE: Can we pull up the recall and go to page 9?
- 10 BY MS. MCATEE:
- 11 | Q. Agent Hartnett, does the recall notice discuss work
- 12 | completion procedures and reporting?
- 13 | A. Yes.
- 14 | Q. So if the work was done by a garage to the recall, do you
- 15 | know what the procedure is based on this recall?
- 16 | A. Yes.
- 17 | Q. Is NHTSA -- the National Highway Transportation Safety
- 18 | Administration notified when a recall work order is completed?
- 19 A. I don't know.
- 20 MS. MCATEE: I have no further questions.
- 21 CDR BARGER: All right. Special Agent Hartnett thank you for
- 22 | your testimony today. You are subject to recall and in my --
- 23 | well, you are subject to recall until released by me. You will be
- 24 | notified by Lieutenant Reed once that decision has been made. The
- 25 | hearing will now take a recess for lunch. The time is now 11:57

a.m. We will reconvene at 1:00 p.m.

(Off the record at 11:57 a.m.)

(On the record at 1:00 p.m.)

CDR BARER: The time is now 1:09 p.m. and the hearing is now reconvened and back on the record regarding the fire on board the Grande Costa D'Avorio.

The next witness is Mr. Michael Richardson. He will be providing fact based testimony through his own independent investigation under NIOSH mandate to conduct a line of duty death investigation. As such, we will not be eliciting any opinion-based testimony from him today. This scope is applicable to all parties in interest on cross-examination as well.

Lieutenant Reed, please swear the witness in.

14 LT REED: Mr. Richardson, please stand and raise your right 15 hand.

(Whereupon,

MICHAEL RICHARDSON

was called as a witness and, having been first duly sworn, was examined and testified under oath, as follows:)

LT REED: Thank you. You may be seated. Mr. Richardson, I will now -- good. Mr. Richardson, I will now ask you a few preliminary questions. Will you please state your name and spell your last name for the record?

THE WITNESS: Michael Richardson, R-i-c-h-a-r-d-s-o-n.

LT REED: And on July 5th, 2023, what was your profession?

1 THE WITNESS: Firefighter fatality investigator.

LT REED: And who were you employed by at that time?

THE WITNESS: NIOSH, National Institute Occupational Safety and Health.

LT REED: How long had you been employed in that position at the time of the casualty on July 5th, 2023?

THE WITNESS: Approximately 18 months.

LT REED: What, if any, professional certificates or certifications do you hold related to that position?

THE WITNESS: Yes, sir. I have previously held or currently hold certifications for Firefighter Apparatus Driver Operator,

Company Officer, Chief Officer. I also hold certifications for Incident Safety Officer and Health and Safety Officer as well as certifications for Fire and Explosion Investigator and Fire Investigation Instructor.

LT REED: Thank you very much, Mr. Richardson. Commander, the witnesses ready to proceed.

CDR BARGER: Thank you. I will be conducting the direct examination of this witness.

DIRECT EXAMINATION

BY CDR BARGER:

- Q. Mr. Richardson, you mentioned that you worked for on July 5th, 2023, you worked for NIOSH. I'll use --
- 24 A. Yes, sir.

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Q. I'll use the acronym because you have already spelled it out

- 1 and it's a little easier to say.
- 2 A. Yes, sir.

- Q. Do you currently still work for NIOSH?
- 4 A. Yes, sir, I do.
- 5 Q. And do you still hold the same position with NIOSH?
- 6 A. Yes, sir.
- Q. And is there a particular group within NIOSH -- branch,
- 8 department, division for which you work?
- 9 A. Yes, sir. I work for the Firefighter Fatality Investigation
- 10 and Prevention Program.
- 11 Q. And in your own words, because I -- I am going to assume that
- 12 many don't know what that group does. What is the mission of the
- 13 | Firefighter Fatality Investigation Prevention Program?
- 14 A. Yes, sir. In 1998 that program was established under a
- 15 congressional mandate to conduct the investigation of firefighter
- 16 line of duty deaths anywhere in the United States.
- 17 | That program has two components. It has a medical component
- 18 | which is tasked with investigating line of duty deaths related to
- 19 | things such as heart attack or stroke. It also has a trauma unit,
- 20 which is the unit that I work for, that unit is tasked with
- 21 | investigating line of duty deaths related to any type of trauma
- 22 event. So that could include things like a structure fire or
- 23 motor vehicle accident.
- 24 It is the mission of that unit to investigate line of duty
- 25 deaths to identify contributing factors. Ultimately, develop

recommendations on how to improve firefighter safety and health and share that through various means.

Q. And in an estimation, how many line of duty death investigations have you personally conducted?

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- A. Yes, sir. I have personally been part of 11 investigations, either in a direct lead role or in a support role.
 - Q. Thank you. And I think we've already touched on this just a little but what professional background do you have that assists you in investigating firefighter fatalities?
 - A. Yes, sir. Prior to my current position with NIOSH, I had served 28 years in the fire service. I served in all roles in the fire service as a firefighter apparatus driver operator, as a company officer and also as a chief officer.

I retired just prior to starting with NIOSH as the Division Chief of Training for the Saint Matthews Fire Department which is located in Louisville, Kentucky. Throughout my fire service career I have served as a health and incident safety officer which included conducting investigations for injuries and near misses. I also served as a fire investigator conducting origin and cause investigations for fire.

- Q. And so over your many years then as a professional firefighter, what types of fires have you personally responded to?
- A. I have responded to the majority of types of fires. So,
 residential structure fires, commercial fires, high-rise fires. I
 have responded to smaller marine type incidents, so personal craft

or barges, but I have not responded to a -- specifically a marine
fire incident of this size or magnitude.

- Q. Okay. So to that point then in a case like this where you have not personally responded to in your words, a fire of this -- maritime fire of this magnitude --
- 6 A. Yes, sir.

- Q. -- how do you overcome that in order to ensure that you're doing a thorough investigation?
- A. Yes, sir. We have addressed that through multiple aspects and approaches. When I was physically on site for two weeks conducting the investigation I brought along as part of a member of my team an individual, Bill Burket, who has a substantial background and is a subject matter expert in marine firefighting. Bill Burket assisted during our two weeks here throughout that investigation process.

After that I also put together a panel of subject matter experts, which includes six individuals who are once again recognized subject matter experts in the area of marine or ship firefighting. At any point in time if I had any questions, issues, or concerns I would reach out to those individuals for their feedback. And that's still an ongoing process as this is still an ongoing investigation as far as NIOSH is concerned.

Q. And how does NIOSH Firefighter Fatality Investigation and Prevention Program become involved with a firefighter line of duty death?

A. Yes, sir. So our program is 100 percent voluntary. So, the agency or the fire department that is -- that experiences the line of duty death they have to make a formal request to NIOSH for us to conduct the investigation. So we do not have authority to conduct an investigation without a formal invitation and without their cooperation.

Once we have that request, we will verify that it is something that meets the criteria to be investigated. It has to be recognized by the US Fire Administration as a firefighter line of duty death before we can investigate it. We have a priority criteria that we utilize. We are currently investigating around 35 percent of firefighter line of duty deaths.

In this particular case, this incident was chosen to be investigated due to the fact that it was a multiple line of duty death. That's one of our priority criteria and also this is a unique event or situation. This is actually the first shipboard line of duty death that NIOSH has investigated.

- Q. And as a NIOSH investigator what authorities or jurisdiction do you bring with that --
- 20 A. Oh.

- \mathbb{Q} . -- or given to you?
- A. Once again, we have to have the cooperation of the agency
 that is requesting us to conduct the investigation. In this case,
 we were part of the joint investigation team which included the
 Coast Guard, NTSB, ATF and us, so we were partnered in on that

joint investigation to participate and assist.

- Q. What regulations, policies or procedures govern your conduct of investigations whether from your agency or otherwise specified, if any?
- A. We would have policies and procedures within NIOSH that would advise us -- our -- if you will, our objectives, our duties, our limitations as far as what actions we can take. Once again if at any time anyone chooses not to voluntarily participate in the process then we either have to disengage or cease.
- Q. And what is the, I guess -- I don't know if purpose is the right word or possible outcome of your investigations?
- A. Yes, sir. So, as stated we come in and conduct an investigation in order to gather all of the facts related to the incident. So we're going to determine anything to the best of our ability that's a fact related to the incident. We will take all of those facts and we will look for what we call contributing factors to the firefighter line of duty death.

So the actual scope of our investigation is limited to the firefighter line of duty death. So once we've identified those contributing factors, we will compare that to national consensus standards, guidelines, regulations, and then we will develop recommendations which we believe could hopefully prevent a similar or a future event from occurring.

We will put that together in a report. That report is published, and it's made available publicly to the general public

and to the fire service. So the ultimate goal is to learn from
the incident in the hopes that once again we can prevent a future
or a similar type event from occurring.

Q. And now to the way that you conduct your own personal investigations. Do you have a standard methodology of how you approach an investigation?

A. Yes, sir. So, when we come in, both the team and both myself there is five primary key areas that we are going to look at. We are going to look at personnel. So, anything that could be related to personnel. A typical example of that would be professional development. Professional development would include education, training, the experience and then self-development. So we are looking for were those contributing factors, was there potentially a deficiency there, was something lacking. We're going to look at equipment.

So, we're going to look at the equipment that was utilized in the incident. Was the proper equipment utilized? Was equipment not available? Were there issues with equipment? Did it malfunction or fail to work as intended? We're going to look at the environment.

We look at both the natural environment and the man made environment. Natural environment could be weather events if they were a contributing factor. Man made environment in this case would have been the ship. So, how the ship could have negatively impacted the incident. We're going to look at policies,

guidelines, procedures. So, any guiding documents, once again, are the necessary documents in place? Are they effective? Are they being followed? Are they being utilized?

And then the final area that we would look at would be leadership management. Is that appropriate as needed? And that could be leading up to the event. So things that potentially could have contributed before and then during the event.

We will look through those five key areas once again looking for any factors that could have contributed to the line of duty death.

- Q. So just to make sure we have those on the record. Did you investigate the incident that occurred on board the Grande Costa D'Avorio on July 5th, 2023?
- A. Yes, sir. Once again, I physically arrived in Newark on July 23rd. At that point in time I started my investigation process and was here through August 5th.
- Q. And how did you become -- NIOSH become engaged with this particular incident?
- A. Yes. At this particular incident, the request was made through the Newark Fire Department to conduct the investigation.
- 21 Q. And then you said you arrived on scene on July 23rd.
- 22 | A. Yes, sir.

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- A. Sure. Yes, sir. During that two week period of time I took
- 25 \mid a number of actions. One of the first actions that I took was I

secured the radio traffic that was -- that occurred during the incident. I reached out to the Essex County 911 Radio Communication Center and ultimately we were provided a copy of the radio traffic. I took that radio traffic, reviewed it, created a timeline of the events that took place based on that radio traffic.

During that time, I also collected reports from the different fire departments that were involved in this incident. Those would typically be referred to as National Fire Incident Reports -- NFIRs reports. That's something that's filed by the fire department with the US Fire Administration. I acquired those reports, reviewed those.

I went through statements that had been previously taken. I reviewed statements from a number of different sources. Many of the fire departments involved had their members produce statements. We were provided a copy of those. We reviewed those. A number of the investigating agencies had taken statements. We also reviewed those.

During that two week period of time, conducted numerous interviews, interviewed individuals from six different departments and did 30 plus interviews during that time frame. Those interviews during that time frame were done as part of the joint investigation. So those were interviews conducted by Coast Guard, NTSB, and us together, jointly.

I also went through physical evidence. So I actually

conducted or participated in two tours of the ship. So, I

physically went on board the ship, documented the conditions as

best I could. Having arrived on July 23rd there were a number of

things that had changed and were different than they were

obviously at the time of the incident. That being the case, I

went back through and reviewed documentation from other agencies

such as ATF that arrived immediately on scene, reviewing the

I also went through and reviewed the equipment that was utilized in the incident. In particular, the personal protective equipment that was worn by the two deceased firefighters. Also was provided ultimately -- this came later but we had an initial briefing on the autopsy results from the two deceased firefighters. Those were the actions that I took during that two week period of time.

- Q. All right. Thank you. So, I am going to shift now to a discussion on some of the findings --
- 18 A. Yes, sir.

documentation that they had.

- Q. -- that come through your investigation. So what -- next

 week we're going to hear testimony from and about the Newark Fire

 Department --
- 22 A. Yes, sir.
- Q. -- in particular at these hearings. So, I want to spend most of our time focused on the facts that you have collected related to the rescue efforts that took place --

- 1 A. Yes, sir.
- 2 | Q. -- once the mayday was called by Newark Fire Department. And
- 3 then in particular related to the mutual aid departments that
- 4 participated in that search.
- 5 A. Yes, sir.
- 6 Q. So based on your investigation, when were the first mutual
- 7 | aid resources requested to the scene?
- 8 A. So with that being asked, I will start with when the initial
- 9 alarm was dispatched. So, the initial response to the incident
- 10 | was the Newark Fire Department. Along with that initial response,
- 11 | North Hudson Regional and the New Jersey Fire Boat Task Force
- 12 Group were also dispatched. So there were two mutual aid assets
- 13 or resources that were dispatched as part of the initial alarm.
- 14 | Those resources were actually canceled.
- So specifically at around 2143 and 20 -- I'm sorry, at 9:43
- 16 p.m. and at 9:45 p.m., those mutual aid resources are responding
- 17 | along with Newark. At around 9:47 there is communications with
- 18 Deputy 1 who would be Deputy Chief who was in charge of the
- 19 | incident that he did not believe that those resources were needed
- 20 | at that time. As such, there is communications between radio and
- 21 those responding units and they are advised that they are not
- 22 | needed. So at that point in time they cease their response.
- 23 | Q. And how do you know that that's what transpired? Where did
- 24 | you get that information from?
- 25 A. Yes, sir. So that information came from a number of sources.

So that information came from the radio traffic. I also was part of communications, had the phone conversations that were taking place between personnel and the 911 Communications Center, and that information was also verified in interviews that we conducted

- 6 Q. Okay. So then moving on in the time --
- 7 A. Yes, sir.

with individuals.

- Q. -- timeline, when then were mutual aid departments then actually requested?
 - A. Yes, sir. So at 11:13 a request is made for the Elizabeth Fire Department to respond. Elizabeth is a neighboring fire department that would have been a mutual aid request. As well, Jersey City was requested, and those two units were dispatched, and they responded.

For clarification purposes, those two units were considered to be requests for mutual aid. Those two units are also considered to be part of what's called the UASIG Group, that's the Urban Area Security Initiative Group. That's a group of departments within a number of counties, your -- that's 12 agencies in seven counties that make up the Urban Area Security Initiative -- that response group. That group is primarily a specialized rescue group that responds. Once again, there is 12 agencies that make that up.

These two -- first two departments, Elizabeth and Jersey
City, were considered a mutual aid response but because they are

- 1 members of UASIG that triggered a full UASIG response. So from
- 2 then the additional units also responded. So the first two mutual
- 3 | aid companies to respond would have been the Elizabeth Fire
- 4 Department in the Jersey City Fire Department.
- 5 Q. So as I mentioned we are going to focus mostly on search
- 6 efforts that took place on the vessel. But to first establish a
- 7 | timeline for us -- or timeframe, I'm sorry, what time was the
- 8 | first mayday called in by fire department personnel?
- 9 A. The first mayday call that we can benchmark would have been
- 10 at 10:23. Excuse me.
- 11 0. And what is that based on?
- 12 A. And so at 10:23 there were two radio transmissions made and
- 13 those radio transmissions were made by Firefighter Acabou and --
- 14 | Q. And if you'd like we can bring up Coast Guard Exhibit 17.
- 15 | (Coast Guard Exhibit No. 17 marked
- 16 for identification.)
- 17 | A. Sure. And that should be Exhibit 17 on page 2.
- 18 Q. Yeah. And so Mr. Richardson, is this exhibit familiar to
- 19 | you?
- 20 A. Yes, sir. Correct. This is the timeline that was put
- 21 | together listening to the radio communication traffic as mentioned
- 22 | and that was Newark Fire Channel 2. This is a summary of those
- 23 | radio transmissions. This has some paraphrasing in it, so it is
- 24 | not 100 percent word for word, but it is very close and very
- 25 representative of the radio transmissions that took place.

Q. Okay. And I'm sorry for -- we were at 10:23 as far as a reference time.

A. Yes, sir. Correct. So it would be next page, page 3. So, if you will notice in the exhibit where the hand is located, we start off with an audible transmission. It was not clear what was being said and then we're able to hear the words, we cannot find our way out. We are lost. And once again that was made at 10:23.

There was a response to that from headquarters, which is the Radio Communications Center. So for the purposes here when you see the abbreviation HQ, that is the Newark Radio Dispatch -- the Newark 911 Center -- the Essex County. That was made to Battalion 4. Battalion 4 at that time was on the ship and was operating at deck 10 which is where these firefighters had made entry. And then additional from Headquarters to Division 1 or sorry, Deputy 1. Deputy 1 in this case if you see D1, that would be Deputy Chief Carlucci. He was acting as the incident commander at that time.

They advised, did you just hear Engine 16's last transmission? Deputy 1, the incident commander responds negative. Headquarters, be advised, it sounds like he said that he cannot find his way back out. That was immediately followed at 10:24 by an additional transmission.

Once again, it was not clear what the initial first few words were followed by we are lost. And this would have been once again the transmission from Firefighter Acabou who at that time was also

- 1 -- had been with Firefighter Brooks. So these were the two
 2 firefighters at this point that had become lost and disoriented
- 3 | from their crew.
- Q. And I think we've already used and we'll -- I'm sure I'll likely use again the phrase mayday.
- 6 A. Yes, sir.
- 7 Q. What does that mean in firefighter terminology?
- A. So a mayday is a term that's used by personnel to signify
 that they are in distress and need assistance. And that distress
- 10 could be a number of things from being lost to being low on air to
- 11 being trapped or caught. So it is a request for assistance from
- 12 the other firefighters on the scene.
- 13 Q. Okay.
- 14 | A. Also around this time there was in this -- this information
- 15 | that we have here comes from the radio log and this information
- 16 was also verified in interviews from other witnesses who heard
- 17 | these transmissions take place on the fire ground. Also at this
- 18 time, Captain Robeto, who was the captain on Engine 16, who was
- 19 | with Firefighter Acabou had also attempted to call a mayday.
- 20 | There were witnesses who stated that they heard that Mayday on the
- 21 | ship but that was not captured in the radio traffic.
- 22 | O. And --
- A. Would you like me to elaborate on the different types of
- 24 | radio transmissions?
- 25 Q. Yes, please.

A. So there are two different types of radio transmissions that were made throughout this incident. There is what is called a repeated radio channel. A repeated radio channel will go from the transmitter to a repeater tower or station and then that will be rebroadcast. In this case, that example would be Newark Fire Channel 2. Those transmissions are what are captured or recorded at the 911 Communications Center. So communications on repeated channels in this case were recorded.

Okay. There could have also been what's called or referenced as a direct transmission. A direct transmission is made on a different channel and that transmission is intended to go directly from one radio to another radio without going through a repeater.

If there was a direct transmission made, it was not captured and was not recorded. So the log that you see in front of you contains a large percentage of the radio traffic, but it does not include it all. So there could be additional radio transmissions that were made that were not captured and recorded.

We did our best to gather those transmissions by conducting interviews with individuals and asking them what additional radio transmissions did you hear that we do not have in this timeline?

We had a number of witnesses who advised that they did hear

Captain Robetto call a mayday however, it was not captured at this time.

- Q. So not being familiar with firefighter radios --
- 25 A. Yes, sir.

- 1 Q. If there is these two types of transmissions, if I have my
- 2 | radio set to direct communication and somebody in rather close
- 3 proximity to me has their radio set to do over the repeater, is he
- 4 going to hear my direct communication if I use it?
- 5 A. The question would be, are you on the same channel or
- 6 | frequency because once again, in this case, Newark Fire 2 was a
- 7 repeated. There were firefighters that also had switched to
- 8 Newark Fire 5. Newark Fire 5 is a different channel. That is a
- 9 direct channel. That is not a repeated channel. If you are on
- 10 channel 2 and I'm on channel 5, the only way you would hear that
- 11 | is if your radio is set in what's called a scan mode.
- 12 So in other words, your radio would not just be listening or
- 13 | receiving one channel but multiple channels. So for example,
- 14 someone who had a radio on scan could be picking up both channel 2
- 15 | in this case or channel 5 in this case. So that would depend.
- 16 You -- does that answer your question sufficiently?
- 17 Q. Yes.
- 18 A. Yes, okay.
- 19 | Q. So in this case, you know, you just described the difference
- 20 between those two and looking at the timeline entry for the radios
- 21 | at 10:24 or 2224, D1 replied, negative they had -- he had not
- 22 heard the transmission. What are some factors in this particular
- 23 | case, in this particular environment that would have potentially
- 24 | impacted radio communications?
- 25 A. Yes, sir. So there can be a number of things here.

Different radios have different power or capability in terms of transmitting and receiving. So for example, a portable handheld radio would have less capability to transmit and potentially less capability to receive a transmission. So once again, going back to the equipment in that case could be a factor. The radio that headquarters or that the 911 Communications Center is using has more power than a portable handheld radio would and also has a better receiving system than a portable radio would.

So equipment is at play here in terms of the types of equipment that are being utilized. Is it a portable handheld radio versus is it something like a radio also as well could be in fire apparatus, could have more power or more capability based on transmit power, based on antenna and ability to receive.

We also have the environment is in play here. The structure of the ship being steel is going to block a lot of the radio communications. So if there is steel between two radios, that steel could be blocking those communications. Whereas if two individuals were standing in line of sight or much closer to each other without that obstruction, those transmissions may make it through.

So, 1) equipment could be impacting this, 2) the environment could also as well be impacting this. The third factor would be under personnel, and it could also simply be that someone missed a radio transmission because they were -- background noise was too loud for them to hear it. It could be they were engaged in

- carrying out another activity. So, personnel could be at play, equipment could be in play, environment could be in play.
 - Q. And so when -- in reviewing these transmissions that showed up in the transmission log from the repeater --
- 5 A. Yes, sir.

- Q. -- how did you determine who those transmissions came from?

 Do radios have a identifier built into them?
 - A. Yes, sir. So radios can be programmed. So, for example, in that transmission it says Headquarters to Battalion -- or sorry Headquarters to Division 1, did you just hear Engine 16's last transmission? When someone transmits on the system they have an identifier. So, that identifier will pop up on dispatch's console showing them who that transmission is being made by. So each radio has a unique identifier and then therefore you can look at that.

The identifiers that I have on here for the most part were expressed verbally. So, that was actually someone saying this is so and so to so and so. So when you see on here an identifier that was audibly heard on the radio. In some cases, it could have been also headquarters had identified someone transmitting based on their identifier and that was stated.

- Q. Okay. And so as far as the transmissions, you know, we cannot find our way out. We are lost. And then one minute later, we are lost. You said those were from Firefighter Acabou.
- 25 A. Yes, sir. Correct.

- 1 Q. How did you determine that?
- 2 A. Because radio identified in that case, did you just hear
- 3 | Engine 16's last transmission? So the radio was able to see when
- 4 | that transmission was made that that transmission came from Engine
- 5 16. And there is a, once again, a unique identifier log which we
- 6 | had, and we could go back and see which radio was making that
- 7 | transmission as well. So, yes, sir.
- 8 Q. And so in this case where was Firefighter Acabou located just
- 9 | in general --
- 10 A. Yes, sir.
- 11 | Q. -- when he made that transmission?
- 12 | A. Yes, sir. So, at this point a -- two crews -- so, at this
- 13 point we had -- in terms of making entry at this point we had
- 14 | Ladder 4 and Engine 16. Ladder 4 and Engine 16 -- two members
- 15 | from Ladder 4 that would have been Captain Rogers and that would
- 16 have also been Firefighter Brooks. They made entry with Engine
- 17 | 16, Captain Robetto and Firefighter Acabou. So this is a total
- 18 group of four firefighters made entry onto deck 10 in order to
- 19 conduct fire suppression operations on deck 10.
- 20 | Q. So then we hear this call we're lost. When was firefighter
- 21 | Acabou found?
- 22 A. Yes, sir. So, shortly after that -- so following the call
- 23 | for the mayday, there were a number of units that responded to
- 24 | that. Initially Ladder 8 was operating on -- in the areas of deck
- 25 \parallel 10 and 11 and at that point in time, just to clarify, the

- 1 operations that were being carried out on deck 10 were being
- 2 carried out from the port ladder well. So, the -- if you will,
- 3 the rear corner of the ship there is a stairwell located. Do you
- 4 want to bring up the exhibit?
- 5 0. Sure.

8

6 A. If you could bring up Exhibit 19.

7 (Coast Guard Exhibit No. 19 marked

for identification.)

- 9 Q. And Mr. -- as it comes back on the screen.
- 10 A. Yes, sir.
- 11 | Q. Mr. Richardson, is this diagram familiar to you?
- 12 A. Yes, sir. This was a diagram that I had created as part of
- 13 | the investigation to show the conditions on deck 10 as they were
- 14 determined, and these are the conditions on deck 10 at the time of
- 15 the firefighting operations.
- 16 | Q. Okay. And we'll walk through a lot of the information that's
- 17 on this diagram.
- 18 A. Yes, sir.
- 19 | Q. But I think particular to what you were just talking about,
- 20 you were mentioning the port ladder well. You have a mouse
- 21 available to you there by the microphone.
- 22 | A. Yes, sir.
- 23 Q. If you'd like to --
- 24 A. Yes, sir.
- 25 \mathbb{Q} . -- indicate where that is.

- 1 A. So, in this particular diagram to the left of the diagram
- 2 | would be the rear of the ship, to the right of this diagram would
- 3 be the front of the ship, to the top would be what's referred to
- 4 | as the port, and at the bottom of this diagram would be what's
- 5 referred to as the starboard side of the ship. The ladder well or
- 6 | the -- the ladder well or stairs that were used by the crews to
- 7 carry out operations on deck 10 was located in this particular
- 8 corner that I'm highlighting with the mouse.
- 9 Q. Okay.
- 10 A. So that's going to be to the rear and to the port side or the
- 11 | side of the ship that was not close to the dock. That's where
- 12 crews had entered. Those four firefighters had entered that point
- 13 on deck 10. They had taken a hose line in with them for the
- 14 | purposes of this diagram that hose line is a highlighted yellow
- 15 | line that the mouse is tracing. They had advanced that hose line
- 16 | in in order to fight the fire that was located on deck 10.
- 17 $| \cdot |$ Q. And is that port ladder well the only location with which
- 18 | firefighters entered deck 10?
- 19 $\mid A$. Yes, sir. Correct. Would you like me to go through the
- 20 access on deck 10 now?
- 21 Q. We'll come to that.
- 22 | A. Yes, sir.
- 23 \parallel Q. And I'm sorry as far as -- again timeframe, when did you say
- 24 | Firefighter Acabou was found?
- 25 A. Yes, sir. So, those units had come in to carry out the

operation. Ladder 8 was located in that area in that stairwell. They initially made an attempt to locate the two firefighters right after the mayday was called. They followed the hose line in to the end of the hose line and they were not able to locate the firefighters. They could not physically find them, see them or hear them. So Ladder 8 came back out. At that point in time Ladder 5 had been designated as the rapid intervention team.

A rapid intervention team is a group of firefighters that are specifically given an assignment to stand by in the event that a firefighter gets into trouble. Their sole purpose is to respond to the mayday call. Ladder 5 was the assigned rapid intervention company. They had come on board the ship, had been up to deck 12. They had to respond down from deck 12. So they came down via the port ladder well.

They decided to send two members in initially. Those first two members went in, that's Captain Maresca and Firefighter Malhado. They entered. They followed the hose line. When they reached the end of the hose line they were not -- had not located the firefighters. They were using a thermal imaging camera. A thermal imaging camera is a device that senses infrared energy or looks at things in terms of temperature differences. They were attempting to use that. They did not -- were not able to see anything.

At that time, they hear what's referred to as a PASS device going off. A PASS device is a personal alert safety system. It

is incorporated into the self-contained breathing apparatus worn by the firefighters. So at that time they hear that device going off. That goes off when a firefighter lays motionless or stationary. That's to let someone know that that individual is in trouble or distress. They take a search rope, and they attach it to the vehicles where the fire had been.

At this point that fire has been extinguished. You can see that search rope indicated on this diagram in the color blue. It's a blue dotted line. They deployed that search rope and traveled approximately 40 feet to where they located Firefighter Acabou. He was standing more or less upright and was pinned between two vehicles.

- Q. And then if you could for those of us who aren't firefighters, could you just describe exactly what a search rope is?
- A. Yes, sir. So, a search rope is just a rope that the firefighters carry in order to use it as a point of reference. Firefighters are always trained to maintain some type of physical reference so that they can find their way out. In the case of the crew that initially entered -- the four firefighters, the hose line would have been their point of reference.

So by following the hose line, they would have a way to get back out. In this case, since they were going to search beyond the hose line they deployed a rope so that that rope could act as a physical reference so that they could find their way back out.

- Q. Okay. And to confirm I heard you correctly, that first team
 when they heard the PASS alarm, they were located -- they were at
- 3 the end of the hose line near where the vehicles were?
- 4 A. Yes, correct.
- 5 Q. The -- you have marked on your diagram --
- 6 A. Yes, sir.
- 7 Q. -- fire origin --
- 8 A. Correct, in this area right here. Yes, sir.
- 9 Q. Okay. All right.
- 10 A. And that time would have been 10:40. So at 10:40 p.m. was
- 11 when Ladder 5 made contact and located Firefighter Acabou.
- 12 Q. Okay. And then when was Firefighter Acabou actually removed
- 13 | from deck 10?
- 14 A. So Firefighter Acabou was physically trapped, pinned or
- 15 | wedged between the two vehicles. It took a substantial amount of
- 16 time and effort to be able to free him. They worked -- when they
- 17 | found him at 10:40 up until 11:59, so just prior to midnight. It
- 18 took them that long to free him from between the vehicles.
- 19 At that point he was free, and he was being brought out from
- 20 deck 10. At nine minutes after midnight or at 12:09 he had been
- 21 | brought up to deck 12. So, he had been carried and removed from
- 22 deck 10 to deck 12.
- 23 \parallel And then it was also a very significant process. When he was
- 24 | brought up, he was brought up via the port ladder well and he had
- 25 \parallel to be moved across deck 12 over to the starboard side on that --

that would be in this area here on deck 12. A decision had been made, there was a crane there that would -- could be utilized, would be the fastest way to remove him down to the dock. So he was moved across deck 12, a stokes basket or a basket that's used to transport or secure a victim was connected and he was lowered,

6 and he was on the dock at 12:45.

- Q. Okay. And so what -- you said it took from -- let me get back here -- from 10:40 to 11:59. So a little over an hour to first find and then remove Firefighter Acabou from the space.
- 10 A. Yes, sir.

- 11 Q. What factors impacted their ability to -- you said he was
 12 trapped but --
 - A. Yes, sir. Correct. So, if we go back to personnel. There were limits in the number of personnel that were available to assist with the rescue. At this point all of the personnel that are assisting with the rescue or from the Newark Fire Department. So we had previously spoken about mutual aid companies. Those companies have not arrived on the scene, so at this point it's strictly up to the Newark companies that are on the scene to attempt to locate and rescue Firefighter Acabou.

In interviewing numerous witnesses, they commented that there were times when there were personnel that were limited or not available to assist to the degree that they would like to. So they had limited capabilities with the personnel that they had. They were requesting additional equipment and resources to assist

with the rescue.

So under equipment, they ultimately required hydraulic extrication tools. So, most civilians are probably familiar, it's called the jaws of life. So these are tools that work off of battery power. They are hydraulically operated. They can produce significant forces. They had to utilize those tools in order to move the vehicles in order to be able to free Firefighter Acabou.

There was also additional equipment. All of that equipment had to be shuttled from the deck -- or sorry, from the dock up to deck 12, across deck 12 and then down the port ladder well. That took a substantial amount of both personnel and time. So we have issues with personnel being available. We have issues with getting equipment logistically, being able to get equipment to where it's needed.

Deck 10 at this time would be what we would refer to as an IDLH. That's immediately dangerous to life and health. Deck 10 at this point requires you to utilize self-contained breathing apparatus in order to operate. It's a smoke filled environment. So, the firefighters operating were limited by their air supply.

The Newark Fire Department utilizes what's referred to as a 30 minute self-contained breathing apparatus cylinder. Thirty minutes is a very relative term. In reality, a firefighter may do well to get a 15 minute air supply out of that depending on how hard they are working. So it's key to understand when you hear that it's a 30 minute self-contained breathing apparatus that's

under the best possible circumstances. When someone is working extremely hard, when the conditions are extremely demanding that time can be depleted significantly.

So at that point, Newark only has those 30 minute SCBAs available to them. Those cylinders were being depleted at a very high rate. We have numerous radio transmissions where you will hear requests for additional air. There's numerous times where it's stated we no longer have any air cylinders available. We need additional air cylinders.

So we have issues with personnel. We have issues with getting equipment there. We're having issues with air supply. You also have to understand the environment. This is a smoke filled environment. Visibility was limited to feet at best, so it's extremely challenging to get to the location to attempt to carry out whatever it is you're carrying out. Temperatures are elevated. You're in full protective equipment. You're experiencing significant heat stress. So, the -- there is only so long and so much that these firefighters can do before they are having to be rotated out.

- 20 Q. And you mentioned that you as part of your investigation, you 21 had the opportunity to examine firefighter equipment.
- 22 A. Yes, sir. Correct.

- Q. So did you have a chance to examine Firefighter Acabou's equipment?
 - A. Yes, sir. Correct.

- Q. Was there anything significant noted or what was significant about --
- A. No, sir. For the most part his personal protective equipment was unremarkable. It was noted that when he was found he had run out of air. So he had had run out of air so at more than likely right around the time the mayday was called. There were statements made by Captain Robetto who was with them at the time that they were experiencing low air. So we would anticipate if they were experiencing low air from the time the mayday was called
- probably had no more than four to five minutes of air supply left and would have run out of air.
- Q. Okay. And what equipment were you able to review from Firefighter Acabou?
- A. Yes, sir. We were able to review his full personal
 protective equipment ensemble. So, his turn out gear if you will,
 his bunker gear, the protective equipment he wears, his selfcontained breathing apparatus was also recovered as well.
- 18 0. Okav. Did he have a radio?
- 19 A. Yes, sir. Correct, he did have a radio with him. That was 20 recovered with him as well.
- 21 Q. Okay. And did he have -- do you know did he his mask and was 22 it on?
- A. Yes, sir. At the time that Firefighter Acabou was located his -- he was unconscious and unresponsive. The initial two firefighters that found him, his face piece that's connected to

his self-contained breathing apparatus was partially off of his face dislodged. So, that was recovered. Yes, sir.

- Q. Okay. And so while this hour long effort to find Firefighter Acabou was taking place and then to get him up to -- to deck 12, was there -- were there other search units operating within the space?
- A. No, sir. To the best of my ability that I've been able to determine all of the available resources were being utilized either in the direct rescue roles, so they were actively being utilized to try to remove Firefighter Acabou. There may have been some limited attempts to search in that immediate area, but there was not a dedicated crew or group that was carrying out another operation.

The available personnel were being utilized once again as part of that process. And towards the end of that process, the first mutual aid company arrived, which was Elizabeth Fire Department. Elizabeth Fire Department's Rescue Company was sent into the ship. They ultimately ended up encountering Firefighter Acabou as he was being brought to the port ladder well. So, the Elizabeth Rescue Company immediately transitioned into assisting with the Acabou rescue.

So the individuals from Elizabeth Rescue Company assisted in getting Firefighter Acabou up to deck 12 and then in the process of moving him across deck 12 and then ultimately to get him down.

Q. Okay. And you keep mentioning I think it's probably worth

exploring this. You keep mentioning the firefighters having to go up to 12, across deck 12 --

A. Yes, sir.

- Q. -- and then down to 10. Can you explain why they were having to do that process?
 - A. Yes, sir. So, if we look at the diagram, which is Exhibit 19 which is up on the screen. On the starboard side of the ship there was an additional ladder well or staircasing. That was actually the stairs or ladder well that was utilized by the firefighters as they were coming onto the ship. So the ship's crew was directing the fire companies over to the starboard ladder well.

When you came up the starboard ladder well, that ladder well did not have any access to deck 10. So the stairs in effect the term that's used are they are blind. So, those stairs do not have any type of door or opening that opens up onto deck 10. As such, the firefighters were having to go up to deck 12, move from the starboard side across deck 12 over to that port ladder well to go down to there because that was the ladder well that had access to deck 10.

Also on deck 10 you had the vehicle ramps that have been discussed in previous testimony. There was a ramp located here. This is towards the top of the diagram where the two arrows were at. So you had a ramp directly below this that would have come up from deck 9 to deck 10. And then you would have had a ramp here

that went from deck 10 up to deck 11.

So the vehicle ramps were here. You could have gone up or down the ramp from 10 to 11 -- or I'm sorry from 9 and 10. So, you could have come up from 9 to 10 or gone down from 10 to 9. However, firefighters were not utilizing that because that area was exposed to the environment. So there was smoke and there was heat. So they had some protection from that in the ladder well.

If you attempted to go up or come from the top down using the ramps as once again was discussed in previous testimony since the watertight door on deck 12 had not been closed the ramps were more or less acting as a chimney funneling heat and smoke up from the decks below. As such, firefighters would not have been able to use that unless they were utilizing full PPE and self-contained breathing apparatus. Those ramps were not habitable without full protective equipment, therefore they were not utilized.

There was also a locked gate blocking those ramps as well as was previously discussed in testimony. So the deck -- the ramps were not utilized by fire personnel as a primary means to get on and off of the deck. There is a door towards the rear here. That door goes out onto a balcony and that has been shown in previous exhibits. That balcony is there for the equipment to be checked or serviced that is used to raise and lower the ramp. So this door or this balcony has no additional up or down access. So it's strictly a dead end ability to come in and out.

There was another set of stairs inside the engine casing

1 | housing here that's located here. That set of stairs went down to

- 2 deck 9. I don't believe due to familiarity, any of the fire
- 3 personnel were familiar that it was there. It was not utilized.
- 4 | In this corner which would be towards the front and starboard side
- 5 of the ship, the ship closest to the dockside there is what's
- 6 referred to as an escape trunk. This is basically an opening in
- 7 the floor that's covered with a grate. You would have to lift or
- 8 remove that grated covering and then there was a vertical ladder
- 9 that would descend down to deck 9, that was also not utilized.
- 10 | Q. At the time that Newark Fire Department was searching and
- 11 | recovering Firefighter Acabou, were they aware that they had a
- 12 second firefighter that was also down?
- 13 | A. If -- based on listening to radio traffic, based on witness
- 14 statements, there was significant confusion throughout that period
- 15 of time if the second firefighter had been located and/or rescued.
- 16 Okay. Would you like me to elaborate on that confusion?
- 17 | Q. If you would like.
- 18 A. Sure. So, as I had just mentioned previously, the Elizabeth
- 19 | Rescue Company had come up to assist with -- which ultimately
- 20 ended up being to assist with the removal of Firefighter Acabou.
- 21 A number of their members after that removal process were overcome
- 22 due to both heat exhaustion and due to smoke. Two of those
- 23 \parallel firefighters actually ended up calling a mayday, and that was
- 24 | called at 12:16.
- 25 So two of the Elizabeth firefighters in the port ladder well

mayday call for assistance -- that they needed assistance. So at that point in time, Jersey City had arrived, the second mutual aid company and they had been given the task to stand by as the rapid intervention team.

So at that point, the Jersey City Rescue was ordered into the port ladder well to assist with the location and removal of the Elizabeth firefighters that were experiencing a mayday. They located those firefighters and when they did there was radio traffic that stated we have located the firefighter or firefighters. That was apparently confused for having located Firefighter Brooks.

So there is radio transmissions that are going on that we've located a firefighter, that was then apparently confused for, okay, they have located the Newark firefighter which was not the case. Then there's radio transmissions that are made that were bringing out the firefighter or firefighters. That radio transmission once again led to confusion in which firefighters were being brought out.

- Q. And I think much of what you are describing -- it's my understanding it's based on radio traffic.
- 21 A. Yes, sir. Correct. If you --
- 22 CDR BARGER: Can you bring up Exhibit 17?
- 23 THE WITNESS: Yes, sir.
- 24 BY CDR BARGER:

Q. Just as a visual aid while you are describing this. And what

time frame are we at, again? Get to the right page.

- 2 A. Yes, sir. So, probably if you want to start at around
- 3 | midnight. So -- okay. So, if you will note right here at 2359
- 4 Battalion 1 to Deputy 1, we have a firefighter. We are taking him
- 5 to the 12th floor. That would be radio traffic related to
- 6 | Firefighter Acabou. So, that's radio traffic related to the final
- 7 stages of Firefighter Acabou being removed.
- 8 Q. And that's towards the bottom of page 6 for reference on the
- 9 record.

- 10 A. Yes, on the bottom of page 6. And then if you want to go to
- 11 | the next page. You'll see additional radio traffic here. So, for
- 12 example, at 005 you have he's coming up. He's almost to the top.
- 13 Once again, this is radio traffic that's related to the removal of
- 14 | Firefighter Acabou.
- 15 \parallel And then if you will know at 0016 or at 12:16, the mayday is
- 16 | called by Engine 10, that's Newark Engine 10 for downed Elizabeth
- 17 | firefighter on deck 9, request for writ. So, this is the mayday
- 18 with the Elizabeth Rescue Company. The next transmission, 0017,
- 19 | starts off with some inaudible Engine 10 is with a down Elizabeth
- 20 | firefighter, deck 9 stairwell, Deputy 1 copies are on their way
- 21 up. They're going to need a stokes to get him. So, this is
- 22 | Jersey City Rescue 1 being deployed for the Elizabeth firefighter
- 23 mayday.
- 24 If you scroll down a little bit to 0020 you will see here
- 25 whereas I have mentioned previously there is a comment that's

being made and it states, Chief, we have no more air tanks up here. Reference once again to the lack of air supplies being available for personnel.

If you scroll down, you'll see a bunch of radio transmission that's related to Firefighter Acabou being removed via the crane.

So that's there if you continue scrolling. Okay. Scroll down a little bit more if you can please. Okay. So, at 0046 or at 12:46 we have a transmission from Deputy 1 to Battalion 4. That is from Deputy 1 as the incident commander to Battalion 4 who is the chief that's running operations on deck 10. Which access point did the second firefighter come down from the ship. Battalion 4, repeat that. Deputy 1, what access point did the second firefighter come down from the ship? Battalion 4, I'm not sure I was with the firefighter with the crane.

At this point Battalion 4 had moved up to deck 12 and once again this is where they had just utilized the crane to lower Firefighter Acabou to the deck. That's followed by Deputy 1 to Battalion or Deputy 1 to Battalion 5, yes, Deputy 1, the other firefighter is still accounted for. We have not located him. Deputy 1, I was told that you found both firefighters. That's followed by Battalion 1, which is a Battalion Chief -- Newark Battalion Chief that is operating at this point up on the top decks. Battalion 1 to Battalion 5, did you find the second firefighter? Battalion 5 responds negative. That's followed by at 0047, Battalion 1 to Deputy 1 -- so that is Battalion Chief 1

to Deputy Chief 1, I believe the second firefighter they are talking about was the Elizabeth firefighter that was down. Deputy 1 responds with received -- let's continue to do a primary secondary search.

That is then followed by Battalion 1 to Deputy 1, I'm going to need a full complement of members up here to continue the search. And then Deputy 1 responds with received.

So based on that radio traffic, it indicates that at that point it was not exactly clear that the second Newark firefighter, that being Firefighter Brooks was accounted for.

CDR BARGER: All right. And if we can bring back up Coast Guard Exhibit 19.

BY CDR BARGER:

- Q. So, Mr. Richardson, using this diagram if you could walk us through then the subsequent phases of search efforts that took place on deck 10.
- A. Yes, sir. So, after the removal of Firefighter Acabou and after the removal of the Elizabeth firefighters that had called the mayday, at that point, all of the Newark personnel basically have been moved or up on deck 12. At that point, the Jersey and Elizabeth personnel have come back down the stairwells. The Jersey City Rescue Company had brought the Elizabeth members back down.

So at this point there's a pause and basically -- so once again, we're talking about 1:00 in the morning approximately --

0100 hours was when this was going on. At this point, the additional UIC resources are arriving. So these were the additional companies that were starting to come in and start to arrive on the scene.

At this point, having realized that Firefighter Brooks had not been found or had not been located, at 1:27 Jersey City Rescue 1, so this is the same rescue company that had assisted with the Elizabeth mayday, that rescue company is sent back up to deck 10 to conduct a search for Firefighter Brooks.

And once again they enter deck 10 at 0127 and that is documented on the radio timeline. So if you go back and look at the radio timeline at 0127, you will see at that point Jersey City Battalion Chief acknowledges on the radio that his crew is entering deck 10 to search. So that's how we are able to establish clearly that benchmark or that timeline.

Jersey City sent in a crew that split into two groups. As you will see on the diagram, one of those crews came in and they immediately turned, and they started to follow the port wall moving in that direction. They continued on, moving down they came past the vehicle ramps that go up and down to the different decks. At this point there was conversations taking place as to the possibility of Firefighter Brooks having used the ramps to move to another deck.

So they wanted to make sure that that was being checked. So they actually turned and went down from deck 10 down the ramp to

deck 9. So they actually would have gone around the corner and deployed down onto deck 9. That search group actually checked deck 9 for Firefighter Brooks. Deck 9 was not loaded, so it was not full of vehicles, conditions down there were not that bad. So they were able to confirm quickly that they had no indication of a firefighter being on deck 9.

So that group came back up and came back around here. While they are doing that the other group deployed another search line and came to move in the other direction. The thought was to try to cover as much of deck 10 as possible. One group searching down the port side, one group searching down the starboard side. That group comes along, they come up through here once again. They are now moving towards the starboard side of the ship here. They continue to push forward past the location where Firefighter Acabou had been located and they end up making it approximately 200 feet.

They deployed a 200 foot search line and basically had reached the end of it. So they had gone as far as the rope would extend or would allow them to move. At this point in time, some event occurs on deck 11 above them. They described a very loud noise, some type of explosion taking place. It caused debris on the roof -- on the ceiling of deck 10 to drop down. At that point, they determined that conditions may not be safe to continue the search.

At that point, they were also starting -- they had exceeded

- 1 | 50 percent of their air usage and they decided that they needed to
- 2 | make sure they could get back out, so they turned around and
- 3 started to come back. As they are coming back the other rescue
- 4 | team is also -- search team is also coming back. So both of the
- 5 Jersev City teams are coming back to the port ladder well. They
- 6 had not located Firefighter Brooks.
- 7 \mathbb{Q} . And so what size SEBA bottles? Because you mentioned that as
- 8 | a limiting factor --
- 9 A. Yes, sir.
- 10 | Q. -- earlier with Newark. What size SEBA bottles was Jersey
- 11 | City using?
- 12 A. They were actually running one hour cylinders. So longer
- 13 duration cylinders which gave them the ability to search beyond or
- 14 | farther than the others had.
- 15 | Q. Okay.
- 16 A. Do you want me to pick up the next --
- 17 Q. You can go on.
- 18 A. Yes. So at that point the UIC crews -- the different
- 19 companies had arrived on scene. And initially you additionally
- 20 | had Hoboken and North Hudson had arrived on the scene. So their
- 21 rescue companies had arrived as part of UIC mutual aid. They
- 22 arrived at around 1:14 in the morning. Those companies were then
- 23 sent on the ship.
- 24 \parallel Also arriving at this time were units from the Fire
- 25 Department, City of New York, so FDNY. So a request had been made

from the UIC resources for assistance from FDNY. So, at this point FDNY had responded, their units were also arriving on scene. That includes Rescue 5 and Squad 8. Those units responded from Staten Island. So those units have also arrived on scene.

At this point those units are sent onboard the ship to carry out the next round of searches for Firefighter Brooks. The decision was made based on experience, equipment, and training to send the FDNY units in first. So, at that point Squad 8 had come up the stairwell and they were told to check deck 9 once again just to make sure that he was not there. They were also sent in on deck 9 to relay the layout to Rescue 5. That way they would have a better idea of potentially of what they were going to be encountering.

Squad 8 very quickly cleared deck 9. No indications of a missing firefighter. At that point Rescue 5 enters with six personnel -- FDNY Rescue 5, and they spread out across deck 10 and begin a search. They are utilizing initially the ropes that Jersey City had left in place. So half of the rescue firefighters from rescue five are searching once again down the port side, half are coming also down the starboard side. When the crew on the starboard side got close around the end of where the Jersey City rope had ended they were able to hear once again a PASS device -- a personal alert safety device going off. So, they advised we have a PASS. He's directly basically in front of us. So on the starboard side.

Also at this time one of the firefighters from Rescue 5 locates Firefighter Brooks's flashlight discarded on the deck. So they are like we have a physical indication he is here. We can hear a PASS device. All personnel move towards the starboard side of the ship he has to be in this area. So they deploy -- sorry, their own search rope and they start moving forward. They come up and they zero in basically on where he's located utilizing his PASS device. So, they are using the audible alarm to locate where he is located.

He was located around frame 80 as a point of reference. So looking at the diagram, if you can locate frame 80 on -- around frame 80 there is a column that's located closer to the starboard side. He was found next to that column. So he was also found unconscious, unresponsive. He had his self-contained breathing apparatus and his face piece with him. His face piece was not on. He did not have his helmet on at that time. It was later discovered -- this is after -- days after the incident his missing fire helmet was located just short of frame 90 but closer to the starboard side.

- Q. You mentioned that one of the firefighters found the flashlight.
- 22 A. Yes, sir.

- Q. How -- do you know how they were able to attribute that flashlight to being Firefighter Brooks'?
 - A. It was an assumption at that point. So, they were just going

off an assumption that based on the search rope stopping where it had stopped, chances were no additional firefighters had made it past that point. So finding a piece of discarded equipment the assumption was it's more than likely his because there's no indication that anyone else had made it past that point in terms of searching.

- Q. Okay. And we heard in some previous testimony that the ship's crew was requested to, and they did turn on the ventilation system for deck 10. Within the -- if you are aware of that having taken place, within the scope of these search efforts, when was that ventilation system run?
- A. So according to the information that I have which was taken from the VDR data, that's the ship's voice data or the data logging data and I believe that was admitted previously. We had the ventilation starting at 11:45 and then we had it stopping at 12:19 so 19 minutes after midnight. So these searches were being conducted without the ventilation on.

And the conditions at this point had deteriorated significantly. Reports from the companies that were looking -- stated visibility at best was maybe two to three feet, but there was smoke starting to filter significantly into deck 10. At this point and we have reports as early as 10:13 that there is a significant fire on deck 11. So since 10:13 up to this point fire has been burning and developing on deck 11. So at this point, there is a -- evidence and indication that there's a significant

fire burning on deck 11. Both that heat and products of combustion are filtering down or radiating down on to deck 10.

- Q. And then does -- what is the significance of locations, if that was Firefighter Brooks' flashlight and then it sounds like his helmet was attributable to him?
- A. Yes, sir. Correct.

- Q. Then that they were along the starboard bulkhead.
- A. Basic firefighting as I had expressed previously dictates that you maintain and utilize physical reference points when trying to find your way in or out of a location. As a firefighter you are trained if you become lost or disoriented find a wall because in most normal circumstances, if you can find a wall, you can find egress -- a way out. That's going to be a window or a door.

Unfortunately, in a ship environment such as this, that's not the case. It would have been very logical that once Firefighter Brooks located a wall he would have followed that wall with an understanding that that would ultimately lead him to a way off of the deck. So he would find in this case an opening -- a door. Unfortunately, with the way this ship is designed, the egress on the starboard side would have been in the engine casing or engine housing area which not being familiar with the ship, he may not have recognized or realized, and he did not, apparently, make it far enough forward to find the escape trunk.

So at some point, for some reason, it would appear he

- deviated off the wall and was found where the location he was
 found. So it would be very typical for a firefighter to follow a
- 3 wall when they are lost or disoriented.
- 5 A. Yes, sir. So, Firefighter Brooks was located by Rescue 5 at
- 6 | 2:09, so 2:09 a.m. -- two in the morning.
 - Q. Okay. And by what -- by which department again?
- 8 A. He was located by FDNY Fire Department, City of New York
- 9 Rescue Company 5.

- 10 Q. And I -- and again I know air packs was -- or SCBAs was
- 11 described as a limiting factor in some cases. What type of air
- 12 packs was the FDNY using?
- 13 A. The FDNY companies were also utilizing one hour cylinders.
- 14 | So they were utilizing an extended air supply. FDNY had also
- 15 | brought with them what's called their rebreather unit. That's a
- 16 unit that carries a type of breathing apparatus that recycles or
- 17 | reutilizes air. It's called a rebreather. That could have
- 18 supplied up to four hours. So, their initial thought was to
- 19 utilize their one hour cylinders. If that failed, then they could
- 20 go to those four hour rebreathers if it was going to be an
- 21 extended operation.
- 22 Q. Okay. And then when Firefighter Brooks was found, was he
- 23 | trapped between cars like Firefighter Acabou was?
- 24 \mid A. No, sir. He was just lying on the deck. There was kind of
- 25 | an opening there more than likely due to that column being there

- 1 so the cars were not as close together. So there was an actual
- opening there, if you will, and he was found lying down on the
- 3 deck next to the column there.
- Q. And then from the time that Firefighter Brooks was located until he was removed from the space, how long was that?
- 6 A Yes, sir. He was located at -- once again at 2:09, so 2:09
- 7 a.m. He was on the dock at 3:06, so 3:06 in the morning. So,
- 8 approximately an hour it took them from the time they located him
- 9 to move him across deck 10 to bring him up the ladder well to move
- 10 him across deck 12 and he was lowered down using the crane -- the
- 11 same procedures that was utilized for Firefighter Acabou. And we
- 12 have him on the dock once again at 3:06.
- 13 | Q. And then you've -- we've talked about the maydays or the
- 14 | calls that they were lost --
- 15 A. Yes, sir.
- 16 Q. -- by Firefighter Acabou which also included Firefighter
- 17 | Brooks. A mayday for two firefighters with Elizabeth Fire
- 18 | Department.
- 19 A. Yes, sir. Correct.
- 20 Q. Were there any other maydays or injuries experienced by
- 21 | firefighters?
- 22 | A. Yes, sir. Following the rescue of Firefighter Acabou, there
- 23 | were a number of Newark firefighters, specifically three that
- 24 | needed medical assistance. This is due to heat exhaustion, heat
- 25 stress due to smoke exposure. Those firefighters were on deck 12.

If you review the radio traffic you will see where there's repeated calls to have oxygen brought to deck 12 for those firefighters.

Ultimately, they called a mayday to try to get across the point that they needed assistance. So that was really not a mayday in that the firefighters were lost or trapped but it was in a mayday that they needed medical assistance immediately. It was urgent and that was to try to get oxygen brought to deck 12 for those firefighters.

There were a number of EMS personnel that were sent up on deck 12 to stand by to provide treatment. Some of those individuals were also exposed to smoke. They also needed assistance. They were basically walked down off the ship. At one — at the time that Firefighter Brooks is being rescued, so this is after he's been located and in the process of removing, there was a personal accountability report, or a PAR called by the UIC group. One of the departments that was operating — that's Milbourn, they did not respond on the radio. So a mayday was called with the assumption of them being lost and disoriented. It turns out there was not a true mayday, they were located, and it was cleared.

- Q. Okay. So, and then going to that you did a review on equipment that was found --
- 24 A. Yes, sir.

Q. -- for Firefighter Brooks, did you have a chance to review

his gear?

A. Yes, sir. So, we had his personal protective equipment. We reviewed that. We were initially provided with the self-contained breathing apparatus and told that that was his. We have discovered information to the contrary of that. We believe at this time his SCBA was actually left on the ship and not recovered.

That's an ongoing issue that's still being actively investigated because the SCBA that was left -- potentially left on the ship was significantly damaged by the burning fire for the next couple of days. So that SCBA is not in a condition that allows us to identify or attribute it to anyone. So that's still an ongoing item that we are trying to further determine if that was the case.

- Q. And was there anything significant about the rest of his gear?
- A. So, once again, gear being recovered, his flashlight was recovered later on the ship. His helmet was recovered later on the ship. We believe his self-contained breathing apparatus was recovered on the ship. No radio was recovered. Also of significance of note at the time that the maydays were called the maydays were called only by Firefighter Acabou. We have no -- no one -- either there was no call captured in the recorded transmissions. We have no one that we've interviewed that heard Firefighter Brooks calling a mayday.

Therefore, during our investigation we attempted to determine what the potential situation was. We went through and once again when these radios are turned on and when they connect with the system that's captured by dispatch. That morning when they came in and started their shift, the radio assigned to Firefighter Brooks was turned on, it was captured by the system. Then later on that afternoon around approximately 7:00 p.m. that radio registered on the system once again.

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At the time of the incident his radio never registered on the system. So we have no indication that his radio was turned on at the time of the incident. Once again, when he was recovered, his radio was not with him. A extensive search was conducted on deck 10. A radio was not found -- no indications or remnants of a radio.

We advised Newark that his radio could not be located. They -- that's the Newark Fire Department. They conducted an extensive search. They could not locate his radio on the apparatus, at the firehouse, or any other location. So at this point in time, Firefighter Brooks, the radio that was assigned to him is missing and it has not been located. And since this time that radio was never registered back on the system. So at this point in time his radio is unaccounted for. And at this point in time we cannot make a determination as to what was -- what took place with his radio at the time of the incident.

CDR BARGER: Okay. Yeah, we have been going for an hour and

a half. We will take a five minute recess and reconvene. It is now 2:37 p.m. We will reconvene at 2:45 p.m.

(Off the record at 2:37 p.m.)

(On the record at 2:48 p.m.)

CDR BARGER: The time is now 2:48 p.m. and the hearing is now reconvened and back on the record regarding the fire on board the Grande Costa D'Avorio. Our current witness with ongoing testimony is Mr. Michael Richardson. This is a continuation of his testimony.

Mr. Richardson, as a reminder, you are still under oath.

THE WITNESS: Yes, sir.

BY CDR BARGER:

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orientation.

- Q. So, Mr. Richardson you mentioned that you have investigated I believe it was at least ten firefighter line of duty deaths --
- 15 A. Yes, sir, correct. Yes, sir.
- Q. Yourself -- you've been a part of them. You've been around the fire department. So in your experience, what are some of the typical causes of how firefighters become disoriented in a space?
 - A. Yes, sir. Some of the more common ones typically would be firefighters are operating in a condition where they have visibility. Therefore, they are not as focused on staying oriented. All of a sudden conditions change, and they lose visibility. So that could result in them not having a point of
 - Typically, if you walk into an area and can see you are not

too worried about getting back out now. Now you can't see so once again, the environment or the conditions changing could be.

Another one typically would be with personnel would just simply be a lack of significant training and experience. So you may be operating in residential structure fires where you are used to very small rooms, very typical layout, then you go to something such as this. This deck is over 30,000 square feet, it's foreign.

The majority of the firefighters that we interviewed did not have previous knowledge or experience of this type of ship or layout. So, not having the training and/or the experience or the familiarity with something like this. Because once again, as a firefighter, if I can get to a wall typically I could find a door or window. That's not going to necessarily be the case on a ship here. Something could happen with your point of reference.

So for example, if you are utilizing a hose line and you're not in physical contact and it somehow gets kicked or hit or bumped that could move it. So therefore when you go back to locate it, it's no longer there. So those are some typical examples of how a firefighter could have lost or could lose orientation. And I believe all three of those could be factors at this incident.

- Q. And when a firefighter does become disoriented or lost in a space what equipment or resources do they have available to them on their person that would help searchers be able to find them?
- A. Yes, sir. Standard procedures for a firefighter being lost

or disoriented would be to immediately call the mayday. You do not want to delay or waste any time. So the appropriate response is to utilize your radio and to request assistance or to call a mayday. Once you've done that, you would activate your personal alert safety -- so your PASS device. So, you would activate that in the hopes that some other firefighters would hear that device, would be able to respond and would be able to assist or would be able to help you.

You have to basically at that point try to make a decision as to whether you are better to stay where you're at if you know that resources are coming to you. Because in theory if you start moving you could be moving away from your actual exit or from the resources that are coming.

If, for example, you don't have a choice, it's no longer tenable, the fire is now in the immediate area. You don't have air to stand by and wait. Then you're going to try to move in a straight direction as best as you can in the hopes that you would make contact with something that you can recognize as a reference point.

So that would be -- you would find a hose line, find a rope, find an exterior wall, some way and then work along there. So that's typically how a firefighter is going to respond to that.

CDR BARGER: Thank you. That's all I have -- all of the questions I have for you right now. I'll turn it over to members of the investigative team for any follow up questions. Lieutenant

Commander Moore.

LCDR MOORE: Thank you, Commander.

BY LCDR MOORE:

- Q. Mr. Richardson, we have discussed the term mutual aid throughout the testimony. Is there a standard definition for mutual aid?
- A. Mutual aid can vary. Mutual aid would typically be placed into two categories. The first category would be automatic mutual aid. That is, there's an agreement that's in place that at the time a call or an alarm is dispatched that certain neighboring departments or agencies would automatically respond on that to provide assistance. So you can have automatic mutual aid agreements in place.

The other would be where you would have to formally request or reach out to ask another agency to respond. In this particular incident we saw both types. So we had automatic mutual aid with the New Jersey Departments in different forms. And then we had a -- out -- an official request had to be made to FDNY to have them to respond to the incident. So we saw both types of mutual aid response in this incident.

- Q. When those requests or those automatic mutual aids occur, what kind of resources can a fire department expect to receive once that request is made?
- A. It's totally dependent on the agreement that's in place. So, it could be anything from a single company staffing with four

firefighters to multiple companies. It could be specialized equipment and resources.

In the case of the UIC resources here once again that's a group that is trained and equipped to handle specialized rescue. So, they are going to respond with a heavy rescue piece of apparatus which carries specialized equipment. They are going to respond with personnel that have additional levels of training that can carry out additional specialized tasks or responses.

So the type of mutual aid you get is totally dependent on how you set it up.

- Q. Understood. Thank you for clarifying on the UIC. The next thing I wanted to ask about was the SCBAs. You noted them as a limiting factor. Were SCBAs able to be refilled on scene?
- A. So, what typically would happen in a fire scenario is most fire apparatus are equipped to carry a spare cylinder. And so in this case, where firefighters know that they're probably going to be running out of air they will take that spare cylinder with them.

So in this case, when we interviewed firefighters, they indicated in most cases when they left their apparatus they took their spare air cylinder with them. So that provided some initially -- some additional air supplies. Then at that point if that air is depleted you would utilize what is called a -- typically referred to as a cascade or an air unit. So this is an apparatus that's equipped and set up to refill air cylinders. So

in this case the cascade or the air unit for Newark was out of service. So their ability to fill cylinders on scene or on site was -- they did not have that capability.

When the mutual aid companies responded they also responded with the unit, that unit was out of service as far as filling cylinders as well. However, those units carried spare air cylinders. So basically, the way that air was supplied or utilized here was through the use of spare air cylinders. So they were not actively filling air cylinders on the scene.

Q. And then just one last question I had was you stated that the FDNY was selected to continue the search for Firefighter Brooks based on their training and experience. Were you able to clarify what that training and experience was during your investigation?

A. Yes. If you look in a typical and this is typical with most fire services or most fire departments, the rescue companies are specialized units. So, those are individuals that usually are selected through a very rigorous process. They have extensive amounts of additional training. They are typically the most experienced firefighters on the department.

In this particular case FDNY -- those firefighters had marine or ship-based firefighting training. Some of those firefighters had responded to marine or shipboard incidents. They had the one hour SCBA cylinders already with them and in place and were ready to go. So those were some of the factors that factored into the decision to use them to carry out that immediate search.

1 LCDR MOORE: Thank you, Mr. Richardson. That's all I have, 2 Commander.

CDR BARGER: Lieutenant Commander Ward?

LCDR WARD: I just had one thing to clarify. Could you bring up the exhibit with the radio communication, please on the page that includes the mayday.

THE WITNESS: Yes, the mayday time was 2223 or 10:23. Those black highlighted areas right there. Yes.

BY LCDR WARD:

- Q. Okay. So, on the exhibit it's not attributable but you did mention in the testimony that it was Firefighter Acabou?
- 12 A. Yes, correct.

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- 13 | O. From the radio?
- 14 A. Yes, correct.
- 15 | Q. And how do you interpret the fact that it says we?
- 16 A. The fact that it says we, once again what had happened is the
- 17 crew of four had entered. So, once again, we have two
- 18 | firefighters or a captain and a firefighter from Ladder 4. A
- 19 | captain and a firefighter from Engine 16. They entered. The
- 20 | Ladder Captain had experienced an issue with his boots. His boots
- 21 | actually had sustained enough heat that the soles were separating.
- 22 | So, he had to actually leave deck 10.
- So, he left deck 10, that left three personnel behind out of the four. So that was the Captain, and then Firefighter Acabou,

 Firefighter Brooks. They had started to experience low air

alarms. So the Captain said, "We need to go ahead and leave. So they proceed to follow the hose line out. As they're following the hose line out the Captain testified that he lost track of the two firefighters.

He said originally they were in front of them. He could -when you're operating in zero visibility the way you kind of tell
someone is there is really a sound. You listen, you can hear them
shuffle, hear them move. So you kind of know they're in the area.
He realized he was not hearing that, and at that point realized
they had gotten off of the hose line and gotten separated.

So at that point, the assumption would be that Firefighter
Acabou and Brooks were together and got separated off the hose
line and that would account for why when Firefighter Acabou made
the transmission and said we, he would have been with Firefighter
Brooks at that time.

- Q. Okay. And then to verify there's no independent mayday that you have attributed to Firefighter Brookes' radio?
- A. Correct, yes.

- LCDR WARD: That's it. Thank you.
- 20 THE WITNESS: Thank you.
- 21 CDR BARGER: Okay. Thank you. Lieutenant Reed, any follow 22 up questions?
- 23 LT REED: Yes, thank you.
- 24 BY LT REED:
 - Q. Mr. Richardson talking about radio communication, are

multiple people able to transmit simultaneously?

No, sir. So the radio system, what's going to happen, and you'll hear the terminology in the fire service. Typically you're going to get bonked. So, what's going to happen is when you key up your radio you are going to hear a tone, and that tone tells you that it's not able to access the radio channel. So that's telling you that that radio channel is being utilized by someone else. So you would have to wait until that's clear and try again.

LT REED: Okay. Thank you. That's all I had.

CDR BARGER: Mr. Pittman, do you have any follow up questions?

MR. PITTMAN: No questions.

CDR BARGER: From the NTSB, Ms. McAtee, any follow up questions?

MS. MCATEE: Just a couple of follow-ups and some educational points.

Yes, ma'am. What that means is the dispatch center has the

BY MS. MCATEE:

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- Since we have this exhibit up, I just have one question.
- Underneath the last mayday that's marked on this page there is a
- 20 term that says, tones sound. What does that specifically mean?
- 22 ability to activate a button which creates a tone on the radio
- 23 that's a high low type of sound. And that's to get everyone's
- 24 attention that there's an important transmission coming.
- 25 that's to alert firefighters that if you hear that tone typically

1 | that's an urgent emergency transmission that will follow. In this

- 2 case that was done because they recognized that the mayday had
- 3 been called and they wanted everyone to stop talking. That it was
- 4 | an absolutely necessary, and to listen. So that's typically why
- 5 | that's done and how that's done and what that is.
- 6 | Q. So, I apologize I'm going to jump around just a little.
- 7 | A. Sure.
- 8 Q. Just for educational purposes, the average person may not
- 9 know what the typical complement a firefighter PPE is. If you
- 10 hear a firefighter say his bunker gear or turn out gear, what
- 11 | exactly does that outfit consist of?
- 12 A. Yes, so a typical firefighter ensemble, personal protective
- 13 equipment, bunker gear starting at the top it's going to consist
- 14 of a helmet, underneath that a hood -- fire resistant hood is
- 15 | going to be worn. You will have a bunker coat or bunker gear --
- 16 your coat. You will also have pants. Once again, that's made-up
- 17 of three layers. You have an outer layer that is typically
- 18 resistant to burning, to abrasion, etc. You'll have a middle
- 19 | layer that's a water barrier or a vapor barrier. That's to stop
- 20 water from getting into the gear.
- 21 And then you'll have an inner liner that's a thermal liner to
- 22 stop heat transmission. So that's the coat and the pants. And
- 23 then you're going to have boots and gloves. That's the basic
- 24 | firefighter ensemble. And then typically that's going to be
- 25 utilized with a self-contained breathing apparatus that would be

the pack or the harness that holds the cylinder that has a regulator which manages airflow and then you will wear a face

3 piece which is what the regulator is connected to allow you to

4 breathe the air.

operations?

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Q. Thank you. My next question is about the rapid intervention teams. Do the RIT team members, are they required to have special rescue training or does standard firefighter training cover those

9 A. That would really honestly get into the local authority

10 having jurisdiction. So that would be whatever the department

11 determines. So if you look at the NFPA, NFPA stands for National

12 | Fire Protection Association, they would recommend that those

13 | firefighters have additional training, however that's a standard.

It's not a rule. It's not a regulation. The one thing that would

apply here would be the OSHA regulation that would potentially be

16 | an applicable regulation or law and that does not necessarily

17 | specify that they have to have any specific additional training.

18 $\mid Q$. Okay. My last question. There seemed to be a lot of

19 \mid confusion as to who was on the ship, where they were as well as a

20 | lot of additional resources showing up at various times. Is there

a method used to manage such complex scenes?

22 $\mid A$. Yes, so typically you are going to hear what's called IC,

23 | Incident Command, or IMS, Incident Management -- Incident

24 | Management Systems Incident Command. So, this if you will is kind

25 of a formal structured setup where you will have one individual

that is in charge of the scene. It's important that there is a single individual. You do not want to have multiple individuals coming up with different plans and taking uncoordinated actions. So, that individual will be the incident commander.

In this case, the incident commander was Deputy 1 Carlucci. So that was Deputy Chief 1 Carlucci. Underneath the incident commander, you can have groups, divisions, operations. So these are, if you will, subcommanders or other individuals that are in charge of a certain function or a certain area.

In this particular case there were two Newark Battalion
Chiefs that were forward deployed to handle the operations on deck
10 and deck 12. And that was Battalion 4 and Battalion 5 -that's Maresca and Capco (ph.). Those Battalion Chiefs, if you
will, were running the forward operations reporting to the
Incident Commander. And then underneath those individuals you
would have the companies reporting to them. So, for example, if I
was in charge of deck 10, any companies that were coming in
operating on deck 10 would report to me.

When you start bringing in outside agencies you would typically establish what's called the Unified Incident Command. You will still have a single Incident Commander however, the other personnel will report to the command post and work with that individual. So you still have one person that's ultimately in charge but there are other individuals that will come in to coordinate or to assist. When the UIC group showed up they

established their own command post. That command post would coordinate their activities with the Newark command post. So there are separate command posts that were established.

The Newark Command post was on the rear of the ship. There is a ramp that came up, they were established there. The UIC command post was established on the dock. Those two groups were trying to communicate and coordinate their efforts.

MS. MCATEE: That's all of the questions I have.

CDR BARGER: Mr. Barnum, any follow up questions?

MR. BARNUM: Thank you.

BY MR. BARNUM:

- Q. Thank you, Mr. Richardson. Just a -- yeah about five clarification points. You were talking about incident command. Is there -- who is -- is there an automatic incident commander, in other words is the most senior firefighter on scene t Incident Commander?
- A. Once again, sir, that would come down to local authority having jurisdiction. So that varies from agency to agency, from department to department. Some departments have a policy that states the higher ranking an official receives they will assume command so command will be transferred. Some agencies once command is established typically it would not be transferred unless something prompted that.

Now in some cases, if there is a significant event, then another Incident Commander may be inserted, and they may assume

- command to relieve that individual if for some reason they feel
 it's not appropriate or correct. But that, once again, ultimately
 comes down to local authority having jurisdiction.
 - Q. Do you know what Newark's policy was on that?
- Newark did not have a set policy that said that a higher 5 6 ranking individual had to assume command. So, it was up to if the 7 command was established, it was up to that individual. Now the fire service is a paramilitary organization. Obviously, the 8 9 higher rank you are, the more ability or authority you have to 10 make a decision. So ultimately, in any organization, the ultimate 11 authority is the Fire Chief and the Fire Chief has the authority 12 to take any actions they deem appropriate.
 - MR. BARNUM: Thank you. Lieutenant Reed, could you please bring up Exhibit 19?

BY MR. BARNUM:

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- Q. Mr. Richardson, you were speaking earlier about how the initial Newark Fire Department when they showed up they were taking the starboard ladder well. And you were telling -- saying that it was, you know, the long way around. Do you know why they were taking that starboard ladder well instead of the port ladder well?
- A. Initially that was being done because that's where the crew members directed them. I understand they did not know the layout of this ship. They had no previous experience with it. So they were following the direction of the crew. So the crew was taking

them up those stairs. My understanding is that that stair is considered to be, if you will, an emergency egress stair. Because that stair is blind to certain decks which would protect it if you will.

I believe initially there was some concerns with the fires on decks 10 and 11 if that compromised those doorways that could compromise that stairwell. So that may have been some of the reason why that route was initially being utilized. But ultimately, in the interview process, asking the Newark firefighters, why did you pick one over the other? They were following the crew.

Now later on in the incident there were crews that did directly utilize the port ladder well. So not all crews later on in the incident were using the starboard ladder well.

- Q. Would Elizabeth be one of those crews?
- 16 A. Yes, sir, correct. Yes.

- Q. Thank you. And then the second question on this exhibit here, there is some text about the -- on the port side, frame 65.
- 19 It says area full of additional cars. Can you just explain why 20 you put that there?
 - A. Yes, sir. So what you have as it states down here, vehicle scale and placement is an approximate representation. So this was an attempt to give everyone an idea of how packed this deck was with cars. These cars here, we know that 15 cars could be put in place from port to starboard and we know approximately up to 17

cars could be put in place. So that's why those cars were put in as a representation of that.

This group of cars here is accurate. That's based on that scene being documented and photographed. And this last group of cars here is an accurate representation once again, from documentation of the scene. I didn't want to fill in the entire diagram with cars because it would have --

Q. Understood.

- A. -- made legibility difficult. So that -- but to make it clear, these areas that I'm going over now with the cursor would have been full of cars. So the only area that was not loaded was the area that you see that's clear here in the rear. This deck was -- I would say, 90 plus percent loaded with cars.
- Q. Understood. And we heard from previous testimony of the Chief Officer that these cars are positioned with about 10 centimeters of space between each car. So, how --
- A. There's places where the cars are placed close enough together you would struggle to -- significantly struggle to walk between them. In some places, as he also mentioned in previous testimony, there were areas where there was an emergency egress, a yellow line marked, and those areas were free from cars. So there were some areas where there were pathways, but when you got into the majority of the area the cars are parked so close together it was an extreme challenge to just walk between them.
- Q. Thank you. Mr. Richardson, in your testimony you indicated

- that Firefighter Acabou was located at approximately 2240, is that accurate?
 - A. I believe so, sir. Give me one second to check my notes.
- 4 Q. Ladder 5 located Firefighter Acabou at 2240.
- A. Yes, sir, correct. At 10:40 or 2240 was when Firefighter
- 6 Acabou was initially located by Ladder 5.
- Q. In your interviewing of Ladder 5, did they indicate what the status of the fire on deck 10 was at that time?
- 9 A. At that time, there was no active fire on deck 10. The
- 10 original vehicles, as previously testified to, that being the Jeep
- 11 and the Toyota Venza, those vehicles at that time were smoldering.
- 12 | The initial crew that came in -- the Ladder 4, Engine 16, they had
- 13 extinguished the fire that was burning there. And there was no
- 14 | additional fire identified or located on deck 10.
- 15 Q. So, presumably that fire was put out before 2223 and the
- 16 | mayday call?

- 17 | A. Yes, sir. Actually, if you check the radio traffic at around
- 18 \parallel 2218 there is a call made that the fire has been knocked down.
- 19 Q. Okay. Thank you.
- 20 \mid A. So, approximately five minutes prior to the mayday being
- 21 called there is radio traffic that confirms that the fire on deck
- 22 | 10 has "been knocked down". That's fire term for the fire has
- 23 been basically extinguished.
- 24 Q. Thank you. And in your investigation did you discover -- was
- 25 there any -- by the Shoreside fire response, was there any active

1 | firefighting going on after that initial -- after the 2223 mayday?

A. By a Shoreside Firefighters? No, sir. All efforts after

3 | that were strictly focused on search and rescue. Ship's personnel

4 | were operating hose lines on deck 12 on the top deck but there

were no hose lines being operated on deck 10 or deck 11 by anyone

6 | from that point on.

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MR. BARNUM: Thank you. No further questions.

CDR BARGER: Any other follow up questions from the

9 | investigation team? Okay.

10 All right. In order to ensure equitable time and opportunity

11 | for each party to -- party in interest to ask questions, each

12 party in interest will have approximately eight for cross-

13 examination within the scope of the direct examination questions.

14 \mid As a reminder for counsel, in light of some of the previous -- as

15 | a reminder for counsel, please ensure that your questions are

16 eliciting relevant information that meets the purpose of this

17 | investigation.

18 Grimaldi Deep Sea.

CROSS-EXAMINATION

20 BY MR. LEVY:

Q. Good afternoon, Mr. Richardson and thank you for your

22 testimony.

A. Thank you, sir.

24 | Q. I'm very impressed of putting that timeline together.

25 A. Thank you, sir.

- Q. You mentioned in one of your earlier remarks that you were getting assistance from Bill Burket.
- 3 A. Yes, sir, correct.
- Q. And you also had a panel of marine firefighter experts who you consulted with.
- 6 A. Yes, sir, correct.
- 7 Q. Can you tell me the names of the marine firefighter expert 8 you have consulted with?
- A. Yes, sir. So one would be Bill Burket, as previously
 mentioned. Another would be Trace Barrow, B-a-r-r-o-w. Trace
 Barrow is a Jacksonville Fire Chief. He was involved with the
 shipboard fire that Jacksonville had approximately three years
 ago. Another individual would be Chauncey Naylor. And Chauncey
 Naylor is involved with a number of different agencies that
- provide shipboard response training in a marine environment. So he -- a number of agencies. Another one would be Benjamin

 Schlitzer (ph.) and I'm sorry on spelling the last name. I can
- 19 Q. Tell me where he's from.

get it if need be.

- A. He works for Mytags (ph.), which is a term -- once again an agency that provides training and response on maritime and shipboard fires. So, those are the primary individuals that I have been speaking with.
- 24 Q. Any others?
- 25 A. No, sir.

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- 1 Q. Okay. I want to ask you about your timeline. Because I
- 2 understand your timeline that we have. It's made into Exhibit 17.
- $3 \mid A.$ Yes, sir.
- 4 Q. It's not everything that you have. You have gotten more
- 5 | notes on times. Is that correct?
- 6 A. I could have more notes on time. That timeline is really
- 7 | based on radio transmissions and radio traffic. So that's not an
- 8 | all-encompassing timeline. That's a timeline that was made to
- 9 represent radio traffic.
- 10 Q. Okay. Did you --
- 11 | A. So that --
- 12 | Q. Did you create a timeline from the voice data recorder?
- 13 A. I did not. I utilized the one that was created by the Coast
- 14 Guard.
- 15 | Q. Okay. Based on your timeline can you tell me who was the
- 16 | first -- well, what group was the first firefighters on board and
- 17 | what time did they come onboard?
- 18 A. Yes, sir. So your Newark Fire Department is going to arrive
- 19 | at 2133. And then within approximately four to five minutes of
- 20 | that they are going to be operating on the ship. The first crew
- 21 | that led in would have been Engine 27 and they would have come in
- 22 | within, like I said, it's approximately give or take five minutes.
- 23 And then at 2141 the Deputy Chief assumed command.
- 24 | Q. And that's Mr. Carlucci?
- 25 A. Yes, sir. Correct.

- 1 Q. When Engine 27 came in do we know who was in that group?
- 2 A. Yes, sir. So, Engine 27 was led by Captain Manning and also
- 3 he had Firefighter Johnson with him. So they were the ones that
- 4 provided the original reports up on, if you will deck 12. When
- 5 Newark arrived they originally found a fire on deck 12. So when
- 6 Newark arrived on scene their initial size up -- they see smoke
- 7 and fire on the top deck of the ship and that's where they
- 8 | initially are -- and that's what they initially deal with.
- 9 Q. At 2135 you have E4 and B4 on the scene. Now that's Engine 4
- 10 and Battalion 4?
- 11 A. Yes, sir, correct. Yes.
- 12 Q. Can you tell me based on your notes, if you know, who was the
- 13 | first firefighters to reach deck 12?
- 14 \mid A. Yes, sir, that would have been the crew off of Engine 27.
- Q. And can you tell from your log or your notes when they
- 16 arrived up on deck 12?
- 17 | A. The -- probably if we want to go back to try to help explain
- 18 | this we would be looking at the radio transmission exhibit, which
- 19 | is the one that's up on the screen. And if you start taking a
- 20 | look here -- we'll take a look right here. So, you'll see a
- 21 | transmission here. Battalion 5 to Division 1 or to Deputy 1,
- 22 sorry, fire is on the top deck. They have it sealed off, working.
- 23 | Battalion 5 to Engine 27, let me know what's going to be the best
- 24 | access. And that's at 2136. So at that point we know that
- 25 | Battalion 5 and Engine 27 are -- have made it to the top deck.

Q. And that's around 2136?

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- 2 A. Yes, sir, correct. So that would be 9:36. Yes, sir.
 - Q. There is an entry at 2149. Can you read that and add anything to it that you can by way of explanation?
- A. Yes, sir. So we're on page 1 of the exhibit towards the
- 6 bottom. The time is 2149 or 9:49. Battalion 5 to Division 1,
- 7 | Battalion 5 once again is the forward deployed Battalion Chief
- 8 | speaking to Deputy 1, which is the incident commander. I'm with
- 9 the ship captain on deck 12. They have their own portable hand
- 10 lines in place and the fire is knocked down here.
 - So, per previous testimony the ship's crew had utilized their fire pump, fire main and their own hose lines. They had deployed them to fight the fire that was on deck 12. There was a number of cars there on fire. At this point, the crew -- the ship's crew has knocked that down. Next thing he states, the fire actually
- has knocked that down. Next thing he states, the fire actually
- 16 started on level 10, two fours below.
- 17 They were able to seal off those compartments and deploy the
- 18 | CO2. So that would refer to fire being two floors below on deck
- 19 | 10 and sealing off the compartments, as previously testified to,
- 20 | would have been the crew closing watertight doors and then they
- 21 deployed the ships internal CO2 fire suppression system. It says
- 22 we're going to send Engine 27 down to check out those two levels.
- 23 The reference here to the two levels would be deck 10 and
- 24 deck 11. Fire on 12 being deck 12 is knocked down -- 11 and 10
- 25 investigating now. Deputy 1 responds received. I have Ladder 4

- 1 on the way to check deck 10.
- Q. Is that entry the first entry where B5 -- Battalion 5 and remind me of who that is.
 - A. Yes, sir. Battalion 5 would be Chief Maresca.
- Q. So is that the first instance that you see in your timeline of someone deciding that firefighters should go down to decks 10
- 8 A. Yes, sir, that's the first reference that we have to that, 9 correct.
- 10 CDR BARGER: And Mr. Levy, one minute warning.
- 11 | MR. LEVY: Okay. Thank you.
- 12 BY MR. LEVY:

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and 9?

- 13 Q. And that's a communication directly to D1, the chief?
- A. Yes, sir, to Deputy 1 from Battalion 5 who is operating at this point on the top decks down to the incident commander who is
- 16 set up at the rear of the ship.
- 17 Q. Okay. Just a couple questions. Exhaust fans or the exhaust
- 18 extractors, the vessel -- the data recorder shows that they are
- 19 | turned on, then turned off then turned on again. I think your
- 20 period is accurate, do you have any knowledge of that, that they
- 21 were turned off and then turned back on again and why that was
- 22 done?
- 23 A. We had reports that the -- when the ventilation fans were
- 24 | turned back on at 2345 that is post mayday, the decision was made
- 25 | that they needed to try to remove the smoke, a) to help with the

- searches, but also with the firefighters who have run out of air to try to increase their odds of survival. So --
- 3 Q. I just have one last question for you. Thank you.
 - A. Yes, sir.

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- Q. Just one last question. Was there any discussion among the firefighters -- I don't see it in your log here whether they knew that the crew and the stevedores were all out of that space -- there was no one in the space?
 - A. That was not captured on radio traffic, but in conducting interviews there were at least two individuals who had spoken with crew members and had verified that the ship's crew was accounted for. When they had first arrived up on deck 12 the crew was basically for the most part, mustard there as was previously testified to. So that conversation for sure had taken place there.
 - MR. LEVY: Okay. Thank you.
- 17 THE WITNESS: Yes, sir.
- 18 CDR BARGER: Ports America.
- 19 MR. ZONGHETTI: Okay. Thank you, sir.
- 20 BY MR. ZONGHETTI:
- Q. Again, Gino Zonghetti on behalf of Ports America. I just
 have a few questions. The entry we were just looking at from 2149
 on the transmission sheet. There is a transmission that you just
 read from I believe it was Chief Maresca to Division 1 which is -is it Inspector Carlucci?

- 1 A. Just to clarify, because -- I'm -- let me clarify this in
- 2 case I misspoke because I may have here. So Battalion 5 is Chief
- 3 | Capco. So, just to clarify Battalion 5 is Chief Capco. Battalion
- 4 | 4 is Chief Maresca. So, just to clarify that because I believe I
- 5 may have misspoken previously.
- 6 Q. Thank you.
- 7 A. Sorry, there is a lot to keep track of.
- 8 Q. Sure. No, you do an amazing job. Okay. So that
- 9 communication from Chief Capco to Division 1, that's -- is it
- 10 | Inspector Carlucci, I'm sorry. Carlucci is an inspector.
- 11 A. Carlucci is a Deputy Chief.
- 12 Q. Deputy Chief.
- 13 | A. Yes, sir.
- 14 $\mid Q$. Okay. And Division 1 is in charge of this charge of this
- 15 operation at this point in time?
- 16 A. Yes, sir. He established himself as the incident commander
- 17 at 2149.
- 18 | Q. So, Chief Capco had apparently been updated by this
- 19 | communication on deck 12 with the ship's captain and is it my
- 20 understanding that he was communicating that the ship -- the
- 21 | captain had informed him that they were able to seal off all
- 22 | compartments?
- 23 A. I can't speak for what he was saying or thinking, but I can
- 24 | tell you here that he was communicating that having spoken to the
- 25 | ship's captain there was an understanding that they had done their

- 1 best to seal the compartment and had deployed the CO2 system. It
- 2 was obvious and apparent at that time once again per previous
- 3 | testimony that the watertight door on deck 12 was not closed and
- 4 sealed.
- 5 Q. Okay. And I believe you testified and maybe you can explain
- 6 this a little, the ramps were not able to be used for transit or
- 7 | egress by the firefighters because there was a gate that was
- 8 | across one of the ramps.
- 9 A. Yes, sir. Correct. It's basically -- and when I say a gate
- 10 | it would be the to the best I can describe would be like a chain
- 11 | link fence. That was previously testified to as well by one of
- 12 the crew members. That had been closed as a security feature to
- 13 try to stop potential people from moving from deck to deck. And
- 14 | so that would have been at the ramps coming, if you will, from
- 15 deck 10 going up. So --
- 16 | Q. And I believe you also said that because the watertight door
- 17 was open that area was acting like a chimney.
- 18 \mid A. Yes, sir. Correct. So, all of the heat and products of
- 19 | combustion -- that was basically the primary path that was
- 20 | available. So fire behavior 101 -- heat and smoke rises so that
- 21 | is the open path that's available and that creates pressure --
- 22 | fire creates pressure, so that was venting out and coming up the
- 23 door. Yes, sir.
- 24 | Q. Now, the Deputy Chief Carlucci instructed the North Hudson or
- 25 \parallel instructed the headquarters to tell North Hudson not to respond.

- 1 Am I reading the entry at 2147 correctly?
- 2 A. Yes, sir. Correct, you are, yes.
- Q. And was North Hudson also the dispatch for the fireboat task force?
- A. That was part of it. Yes, sir. So what happens is you get

 North Hudson Regional, the department and the New Jersey Fireboat
- 7 Task force. So there were actually boats that were responding --
- 8 fire boats as well as North Hudson Fire Department.
- 9 Q. In your interviews was -- were you able to determine why that
- 10 decision was made not to allow this additional personnel and
- 11 assistance that had been dispatched to come to the scene of the
- 12 | fire?
- 13 A. My understanding was at that point it was basically believed
- 14 that they had the car fire on deck 12 which had been extinguished,
- 15 | so the only -- speaking in the interview process was the fire on
- 16 deck 12 has been knocked down, that's okay. So we don't need the
- 17 | -- and we're not going to use a fire boat in this scenario, so we
- 18 | don't need those resources.
- 19 Q. But the fire -- was there an actual fire to a vehicle on deck
- 20 | 12 by this point in time? Because deck 12 was above the areas
- 21 | that had -- it started on 10.
- 22 | A. Yes, sir. But when they -- when Newark arrived they -- there
- 23 was an -- there were multiple active car fires on deck 12 that was
- 24 being extinguished by the ship's crew.
- 25 $\mid Q$. Was the belief by the Newark Department at that point in time

- 1 | that that was the extent of the fire?
- 2 A. Yes, sir. Correct. Until at this point, which would have
- 3 been 2149, when they were informed that the fire had actually
- 4 started two decks below.
- 5 Q. Okay. So, they had called off the assistance before
- 6 | realizing that there was --
- 7 A. Yes, sir. Correct.
- 8 Q. Did they -- thereafter, shortly thereafter, did they reenact
- 9 the assistance or that came much later on?
- 10 A. No, sir, the next -- when mutual aid was requested that would
- 11 have been 2335. So that was the first time that any call was made
- 12 | for assistance.
- 13 | Q. Now, if I'm understanding the timeline correctly, when this
- 14 | very unfortunate situation happened where the firefighter or a
- 15 | mayday was called for --
- 16 A. Yes, sir.
- 17 | Q. -- the fire was -- to use you folks' terminology -- knocked
- 18 down on deck 10?
- 19 A. Yes, sir. Correct.
- 20 Q. And at that point in time, do we know what they were doing in
- 21 | that space or why they had entered? Was it strictly for
- 22 | inspection purposes?
- 23 | | A. No, sir. That crew was actually the crew that knocked the
- 24 | fire down. So the crew of four that originally had entered, they
- 25 | had entered with the hose line for the purpose of extinguishing

- 1 those burning cars which they had done.
- 2 0. So there was still fire active on that floor?
- 3 A. When they entered. They enter, they knocked the fire down.
- 4 Once they have knocked the fire down, they decide we need to
- 5 leave. In the process of trying to leave deck 10 was when the two
- 6 | firefighters got lost and disoriented.
- 7 Q. So, the CO2 had not done its job on that floor by that point
- 8 | in time.
- 9 A. Well, actually if you go back and look at around 2154, the
- 10 | initial reports -- okay, so if you look right here, you will see
- 11 | at 2150 there is communications about that they have five lines
- 12 working on deck 12, no fire visible. Then there's communications
- 13 | about going down to 10 and 11. It says Engine 27, we are there,
- 14 check conditions on the floors. Okay, then if you go down below
- 15 | that, you'll see some additional transmissions. You'll see that
- 16 | Engine 27 at 2154 responds back and says I went to the 10th floor
- 17 | and there's heavy smoke. At that point, there is no report of
- 18 | fire on the 10th floor.
- 19 Q. All right. But if we look at 21 --
- 20 CDR BARGER: Mr. Zonghetti, one minute warning.
- 21 BY MR. ZONGHETTI:
- 22 | 0. -- 2152 which is two minutes earlier --
- 23 | A. Yes.
- 24 | Q. -- it says I have two confirmed fires. The one on level 10
- 25 | is unofficial.

- 1 A. Correct, yes. So, at that point they did not because then if
- 2 you scroll down at 2204, you will see we've got a line on the 10th
- 3 | floor. Now they state we have visible flames. So you have an
- 4 | initial report that they only have smoke and then later you have a
- 5 \parallel report that they have visible flames.
- 6 Q. So there was still fire active -- there was still fire active
- 7 when they went down there, and the CO2 hadn't knocked out all of
- 8 the fire.
- 9 A. I can tell you based on what the initial reports from deck 10
- 10 did not report a fire.
- 11 | Q. Okay. But --
- 12 A. It wasn't until later that the fire was reported, and when we
- 13 | interviewed the firefighters when deck 10 was initially opened
- 14 | there was no obvious indicators, there was no fire visible. So
- 15 | there was a window where there was no fire on deck 10 and then
- 16 there is fire on deck 10.
- 17 | Q. So, when they went in with no fire on deck 10, if I'm
- 18 understanding correctly, what was the purpose to investigate the
- 19 | scene?
- 20 A. They -- that's when they initially opened the door when they
- 21 | arrived at deck 10 to determine what was going on.
- 22 Q. Okay.
- 23 A. Yes, sir.
- 24 Q. Thank you.
- 25 A. Yes, sir.

CDR BARGER: And just as a reminder, we will have the opportunity to receive testimony from several Newark Fire Department members of leadership next week as well.

American Maritime Services of New York.

BY MR. PALLAY:

- Q. Good afternoon, Mr. Richardson. Thank you for your providing testimony today.
 - A. Thank you, sir.

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- 9 Q. All right. I apologize. I'm going to jump around a bit.
- 10 You mentioned the Jacksonville fire that Trace Barrow was involved
- 11 | with. That -- did that fire also involve Grimaldi?
- 12 A I believe so. Yes, sir.
- 13 Q. Okay. Before I believe it's Battalion 4 went down to deck 10
- 14 was there any report or check on the condition of deck 11?
- 15 | A. Yes, sir. So, in the interview process, as they proceeded
- 16 down, they stopped at deck 11 first, opened that door. When they
- 17 pened deck 11 once again just reports of smoke, no fire. They
- 18 then proceeded down to deck 10, open deck 10 initially had no fire
- 19 on deck 10. So the initial reports from both deck 11 and 10 were
- 20 | no fire at that point. And then as we just saw in the exhibit,
- 21 that first call came in with the fire on deck 10.
- 22 | Q. After there were reports of smoke on decks 11 and 10 was
- 23 | there another opportunity for North Hudson -- or another request
- 24 for North Hudson and the fireboat task force?
- 25 $\mid A$. Mutual aid can be called at any point throughout the

- incident. So at any point in time any additional resources could be called for.
- Q. Well once -- I guess during your review, was there any -once the smoke was detected, was there any calls then for the
 mutual aid?
- A. There was not, no. So there -- at that point there were no additional calls for mutual aid.
- Q. And the next time that mutual aid was called was 2335 and that was the Elizabeth Department, correct?
- A. Yes, sir. Correct. At that point in time the mutual aid was

 Elizabeth and Jersey City, and the comment was made that was

 called to respond to the firefighter mayday.
- Q. Okay. All right. Jumping around. Do you know when the port side stairwell started being used?
- 15 A. The port ladder well, when you say used, can you give me a letter -- because it was used throughout the incident.
- Q. So, you testified earlier that the starboard ladder well was being used to go up from the main deck up to 12 and then over.
- At what point was the portside stairwell or ladder well being used to go from the main deck up?

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A. I would have probably been within about 30 to 40 minutes of them arriving on scene. It's hard to say for sure because there were some firefighters that had gone down that came back up. So it was being used sporadically. The primary companies that started using it as a way to go up would have been when the Jersey

1 -- when the Elizabeth companies arrived. So and that would have

- 2 been around approximately 2345.
- 3 Q. Okay. In your review of the transmissions, were maritime or
- 4 | nautical terms being used to describe locations on the vessel?
- 5 A. Sporadically, sometimes they were used, yes. There were some
- 6 | individuals that had a pretty good understanding of nautical terms
- 7 | and were using them and then there were other people that were
- 8 just using front, back, rear, side those types of terms so.
- 9 Q. Did you, in your review of the transcripts, did the lack of
- 10 using nautical terms or maritime terms did that add to any
- 11 | confusion?
- 12 A. Not -- I don't believe among the fire department members. It
- 13 may have caused some issues in communicating with the ship's crew.
- 14 | Q. Okay. And then I was going to say, my next question is, what
- 15 | if any issues regarding communications with the crew were you made
- 16 aware of during your review of the evidence?
- 17 | A. We -- during the interview process we had multiple
- 18 | individuals that indicated that there was a language barrier, and
- 19 | they were having trouble communicating with the ship's crew
- 20 members.
- 21 Q. Yeah, any specific examples?
- 22 A. There's many. I mean so.
- 23 | Q. And I note -- earlier you noted you know several different
- 24 | factors environmental, personnel --
- 25 A. Yes, sir.

Q. -- equipment, would that language barrier have been one of those factors?

MR. ZONGHETTI: Objection, beyond the scope.

CDR BARGER: Sustained. That I would imagine beyond the scope of what Mr. Richardson can specifically speak to.

THE WITNESS: Those individuals are testifying. So you could ask them.

BY MR. PALLAY:

- Q. Okay. All right. During your review of the records, I mean, the communications, did you ever review or see any reports of whether the ships hose lines were still active and operating when parties fire teams entered into deck 10?
- A. So the -- there were two hose lines taken from deck 12 down through the port ladder well by Newark. So two of the lines that were originally on deck 12, those are ships hose lines where you pulled down. One of those hose lines was advanced into deck 10, one was left in the stairwell there. After the initial fire attack, those hoses were no longer being utilized. Throughout the whole incident, hose lines were being used on deck 12 primarily by the ship's crew to try to either cool the deck or combat the car fire.

MR. PALLAY: Okay.

CDR BARGER: And Mr. Richardson, how do you know that? How do you know? What evidence did you review that gave you knowledge of that?

THE WITNESS: Basically, it was interviews with the individuals. So that was interviews with either fire department members or the interviews that we participated in with the ship's crew members.

BY MR. PALLAY:

- Q. But prior to them, without them, I mean fireteams bringing hoses down from deck 12, were there any reports of hoses already on deck 10 and operating without crew members?
- A. No

- Q. Rescue 5 and Squad 8, they were part of the North Hudson Taskforce?
 - A. No, sir. They were specifically called. So they were called by the UIC resources. So the incident command team for UIC had been communicating with FDNY. FDNY advised them they were available and were willing to respond but a formal request would have to be made. That request was made and at that point they responded.
 - Q. I mean, you know, who was that that made that request?
 - A. That would have been Chief Seeberger (ph.) with part of the UIC command post -- command team. And I believe there were multiple communications going on simultaneously, but that was one for sure that was documented.
 - Q. Based on your review of the records and the communications, were there any concerns or discussions about the watertight door being open?

1 A. Yes, sir. But it was much later in the incident. Much later

2 | in the incident, around 4:00 to 5:00 in the morning there were

3 | actually several attempts made to close that door by mechanical

means. So they were considering removing pins that was holding

5 the lifting shafts in place. There was also an attempt made to

cover that opening with tarps or fireproof tarps. All of those

efforts failed, so they were not able to close it.

CDR BARGER: One minute warning.

9 MR. PALLAY: Okay.

10 BY MR. PALLAY:

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- 11 \mathbb{Q} . And based on the communications 4:00, 5:00 in the morning on
- 12 July 6th that was the first time?
- 13 A. Yes, that we have documented. Yes, sir. Correct.
- 14 | Q. All right. Based on your review of the records, you have no
- 15 \parallel factual determination as to whether the fire on deck 10 had spread
- 16 to deck 11 as of 9:15, correct?
- 17 | A. I can't attest to the fire behavior because that would have
- 18 gone on prior to fire department arrival so.
 - CDR BARGER: Do you have one last question?
- 20 MR. PALLAY: Nothing further. Okay one last question.
- 21 BY MR. PALLAY:
- 22 | Q. At 2205, Battalion 4 noted to Deputy 1 that there was a fire
- 23 on deck 10, correct?
- 24 $\mid A$. I'll check the timeline here if you've got that. The time
- 25 | again, sir?

- 1 0. 2205.
- 2 A. Yes, sir. Correct, Battalion 4 which was up on the top decks
- 3 or reached out to Deputy 1, we have fire on the 10th floor.
- 4 Deputy 1 received.
- 5 MR. PALLAY: Okay. Thank you.
- 6 CDR BARGER: Port Authority?
- 7 MR. REILLY: We have no questions at this time.
- 8 CDR BARGER: And if you could say it into the microphone,
- 9 Mr. Reilly.
- 10 MR. REILLY: We have no questions.
- 11 CDR BARGER: Thank you. City of Newark?
- 12 MR. LIPSCHUTZ: Thank you.
- 13 BY MR. LIPSCHUTZ:
- 14 | Q. Thank you, Mr. Richardson. My name is Gary Lipschutz, L-i-p-
- 15 | s-h-u-t-z | I'm First Assistant Corp Counsel for the city of
- 16 Newark. I just have a few areas where I request some
- 17 | clarification.
- 18 A. Yes, sir.
- 19 $\mid Q$. Okay? First of all, how many companies were dispatched to
- 20 | this fire?
- 21 A. A very, very large number in terms of Newark, you are talking
- 22 about on the initial response there would have been 11 units and
- 23 that was a dispatch of 2124.
- 24 Q. The initial dispatch.
- 25 A. Yes, sir. Correct.

- 1 Q. Four engine companies?
- 2 A. At that point you had one, two, three, four engine companies,
- 3 | three ladder companies, a rescue and three chief officers. That
- 4 was the initial alarm response.
- Q. And when I say engine company for the public, what does that
- 6 mean?
- 7 A. An engine company is an apparatus that carries a pump, hose
- 8 and water. So their --
- 9 Q. And that's your typical --
- 10 A. -- job is to deliver water on the fire.
- 11 | Q. That's your typical fire truck, so to speak.
- 12 A. Engine. Yes, sir. Engine -- pumper, yes, sir.
- 13 Q. Okay. And then a ladder company is a ladder truck.
- 14 | A. Yes, sir. A ladder truck would be one that has some type of
- 15 | aerial device. So something that can be raised to utilize to
- 16 spray water, rescue people would carry out ladders etc. Yes, sir.
- 17 MR. LIPSCHUTZ: Continuing with the timeline, which is
- 18 exhibit 17, Lieutenant, please.
- 19 BY MR. LIPSCHUTZ:
- 20 Q. Just some clarification, sir. I'm looking at page 2 right in
- 21 the middle -- 2204. You got that?
- 22 A. Yes, sir, I do. Sorry. Yes, sir.
- 23 | |Q. That's a report from Engine 27 indicating that they have a
- 24 line on deck 10.
- 25 A. Yes, sir.

- 1 Q. A hose line.
- 2 A. Yes, sir. Correct.
- 3 Q. And that they have visible flames.
- 4 A. Yes, sir. Correct.
- 5 Q. Okay. So, the hose line they're referring to is that a
- 6 Newark line -- a Newark Fire Department line or a ship line?
- 7 A. That's a ship line. The Newark Fire Department never
- 8 deployed any of their hose lines throughout the operation. They
- 9 were all shipboard lines.
- 10 Q. Okay. And then within 15 minutes, 2219, it appears that the
- 11 | firefighters that had entered deck 10 had put out the fire on deck
- 12 | 10.
- 13 A. Yes, sir. Correct.
- 14 | Q. And then the next several entries are Battalion Chief 4
- 15 Maresca.
- 16 A. Yes, sir.
- 17 | Q. And he is at that point telling them to come out.
- 18 A. Yes, sir. Correct.
- 19 | Q. And that's two minutes, three minutes before the mayday.
- 20 A. Yes, sir. Correct.
- 21 Q. And is it your understanding that the firefighters from
- 22 | Ladder 4 and Engine 16 were working their way out?
- 23 | A. Yes, sir. Correct. In interviewing the Battalion Chief, he
- 24 | said he was concerned at that point on their air supply, so he
- 25 wanted them to come back out.

- 1 | Q. And we're going to hear from Robetto --
- 2 A. Yes.
- $3 \mid Q$. -- who will talk about the alarms on his air supply.
- 4 A. Yes, sir. Correct.
- 5 || Q. But they were coming out. They were to follow the hose line.
- 6 A. Follow the hose line or -- he is asking them to bring the
- 7 | line they -- Captain Robetto stated their plan was to follow the
- 8 | line back out because in talking to Captain Robetto he stated he
- 9 did not hear that transmission.
- 10 | Q. From Maresca?
- 11 A. Correct. Yes, sir.
- 12 | Q. And for reasons that we may never know they got separated
- 13 from the hose line.
- 14 A. Yes, sir. Correct.
- 15 Q. And in fact, Robetto as well got separated.
- 16 A. Yes, sir. For a moment, yes, sir, he did get separated as
- 17 | well, correct.
- 18 | Q. And it's your understanding he also attempted to call mayday.
- 19 | A. Yes, sir, that was confirmed by witnesses who said they did
- 20 hear it on the ship, but it was not recorded by the repeater
- 21 system.
- 22 | Q. And he actually found him -- his way out on his own.
- 23 A. Yes, sir. Correct.
- 24 | Q. Okay. Again, just some clarification when Acabou was
- 25 | found --

- 1 A. Yes, sir.
- 2 Q. -- you indicated that he had run out of air --
- 3 A. Yes, sir. Correct.
 - O. -- from his SCBA.
- 5 A. Yes.
- 6 Q. Can you please explain what the rescue teams did to provide air to Acabou?
- 8 A. Yes, sir. So when the Ladder 4 crew responded as part of the
- 9 | rapid intervention team they carry what's typically called a RIT
- 10 | kit or a rapid intervention kit. It's a spare air supply so that
- 11 | if they locate a firefighter that's running out of air they can
- 12 supply air to that person. So they had that kit with them. As
- 13 \parallel soon as they located him they took the facepiece from that kit and
- 14 placed it on him so that he had an air supply.
- 15 | Q. Okay. So, they didn't just leave him there breathing?
- 16 A. No, sir. Correct, he was placed on air, correct.
- 17 | Q. And are you aware if they did more than one RIT kit?
- 18 $\mid A$. They had to swap out multiple times to try to keep him on
- 19 | air. Yes, sir. Because it -- that process taking an hour would
- 20 have required multiple air supplies.
- 21 | Q. You've already testified, so I'm not going to belabor it but
- 22 plainly there was significant confusion over the location of
- 23 | Firefighter Brooks.
- 24 A. Yes, sir. Correct.
- 25 | Q. Even though you would agree Newark Fire Command was aware

- 1 | that Brooks was missing initially. Fair to say?
- 2 A. Yes, sir. If you check the radio transmissions you will see
- 3 | where once again, what's called a PAR, or a Personal
- 4 | Accountability Report was conducted shortly after the mayday and
- 5 then in that point they ultimately identified that Firefighter
- 6 Acabou and Firefighter Brooks were not accounted for.
- 7 \mathbb{Q} . So it was known that Brooks was not accounted for --
- 8 A. Yes, sir, initially. Correct. Yes, sir.
- 9 Q. And but there was significant confusion due to other maydays
- 11 | had actually got out on his own or had been located by someone
- 12 else.
- 13 A. Yes, sir. Correct.
- 14 | Q. Okay. Mr. Richardson, I want to thank you for obviously
- 15 | going to great lengths to put together an entire picture here of
- 16 what happened. I appreciate it. You put a lot of effort in. On
- 17 | behalf of the City of Newark we look forward to the NIOSH report
- 18 | and hopefully are able to implement some of the suggestions or all
- 19 of the suggestions to avoid this in the future. Okay. So, thank
- 20 you very much.
- 21 A. Yes, sir. Thank you. Appreciate it.
- 22 CDR BARGER: Thank you. Any follow up questions from the
- 23 | investigative team?
- 24 | LT REED: I have one Commander.
- 25 REDIRECT EXAMINATION

BY LT REED:

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- Q. Mr. Richardson, will you clarify how a mayday is called? Is it a verbal, is there a button?
- Yes, sir. So, to clarify, typically when a mayday is called, 4 5 it's verbal. So they are going to activate the radio and there is 6 different trainings and different methodologies but basically you 7 are going to identify who you are, what your problem is, and what 8 So that's typically how that would be done. Some radios are equipped with what's called an EAB. It's an emergency 9 10 activation button. By pushing that button it will send out a 11 message to dispatch -- to the radio system that you are in need of 12 assistance. That was not done in this case. So in this case the
 - Q. And do you know if those radios are capable of --

mayday was strictly done verbally over the radio.

- A. Yes, they are.
 - LT REED: Okay. All right. Thank you. That's all of the follow up questions I had.
- CDR BARGER: All right. Thank you, Mr. Richardson, for your time and your testimony today. You are subject to recall until you're released by me. You will be notified by our recorder, Lieutenant Reed, when that order is given. The hearing will now take a 10 minute recess before I deliver my closing remarks for the day. The time is now 3:53 p.m. We will reconvene at 4:05 p.m.

(Off the record at 3:53 p.m.)

(On the record at 4:05 p.m.)

CDR BARGER: The time is now 4:05 p.m. local time in Union,

New Jersey. There are no more witnesses or exhibits to present on
today's schedule.

Today we heard testimony from Special Agent Matthew Hartnett from the Bureau of Alcohol, Tobacco, Firearms and Explosives and Investigator Michael Richardson from the National Institute for Occupational Safety and Health. We introduced Coast Guard Exhibits 5 and 6, 17, and 19. They are publicly available through the investigation's news room.

During our next session, we will hear from the following Newark Fire Department members, Battalion Chief Alfonso Marasco, Captain Oswald Roberto, and Battalion Chief Stephen. We will reconvene on Tuesday, January 16th, 2024. On this date we plan to introduce proposed Coast Guard Exhibit 13. They will be -- it will be publicly available on the investigation's newsroom at the resumption of the hearing Tuesday morning.

I request that all parties in interest's counsel stay behind for a follow on discussion. Thank you again for attending today.

It is now 4:06 p.m. Hearing session day 3 is now adjourned. We will reconvene on Tuesday, January 16th, 2024, at 8:30 a.m. Thank you.

(Whereupon, the proceedings in this matter were recessed, to be continued, on Tuesday, January 16, 2024 at 8:30 a.m.)

CERTIFICATE

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

IN THE MATTER OF: FIRE ABOARD GRANDE COSTA D'AVORIO

AT BERTH 16 IN THE PORT OF NEWARK IN NEWARK, NEW JERSEY ON JULY 5, 2023

US Coast Guard District 1 Formal

Investigation

Public Hearing Day 3 of 6

ACCIDENT NO.: DCA23FM039

PLACE: Union, New Jersey

DATE: January 12, 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.

Julie Brumbarger

Transcriber