

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *

Investigation of:

*
*
*
*
*
*
*

ENGINE ROOM FIRE ABOARD THE
STATEN ISLAND FERRY *SANDY GROUND*
NEAR STATEN ISLAND, NEW YORK
ON DECEMBER 22, 2022

Accident No.: DCA23FM010

* * * * *

Interview of: KARIM EL GALLAD, Chief Engineer
Staten Island Ferry *Sandy Ground*

Staten Island, NY

Thursday,
February 9, 2023

APPEARANCES:

BRIAN YOUNG, Marine Accident Investigator
National Transportation Safety Board

██████████ ██████████ Chief Warrant Officer
U.S. Coast Guard

DANIEL FITZGERALD, Esq.
Freehill, Hogan & Mahar, LLP
On behalf of New York City DOT/Staten Island Ferry

I N D E X

<u>ITEM</u>	<u>PAGE</u>
Interview of Karim El Gallad:	
By CWO [REDACTED]	4
By Mr. Young	13

I N T E R V I E W

(12:35 p.m.)

1
2
3 CWO [REDACTED] Good afternoon, this is Chief Warrant Officer
4 [REDACTED] [REDACTED] that's [REDACTED] Today is
5 February 9th, 2023, the time on deck is 12:35, and we are here at
6 the Staten Island Ferry St. George Terminal located on Staten
7 Island, New York, and we will begin with introductions.

8 MR. FITZGERALD: Daniel Fitzgerald here with the law firm of
9 Freehill, Hogan & Mahar, here on behalf of New York City
10 DOT/Staten Island Ferry, party in interest. The spelling of my
11 last name is F-i-t-z-g-e-r-a-l-d.

12 MR. EL GALLAD: Good morning, my name is Karim El Gallad,
13 that's K-a-r-i-m, last name E-l G-a-l-l-a-d. I am a chief
14 engineer and port engineer, Staten Island Ferry.

15 MR. YOUNG: And this is Brian Young with the National
16 Transportation Safety Board. Y-o-u-n-g.

17 CWO [REDACTED] All right, thank you, everyone. So now we
18 would like to proceed with the interview, but for the record you
19 do agree for us to record this interview?

20 MR. EL GALLAD: Sure.

INTERVIEW OF KARIM EL GALLAD

21
22 BY CWO [REDACTED]

23 Q. And could you begin with describing your personal maritime
24 experience?

25 A. I started in the industry as a house piper, I graduated from

1 Piney Point SIU, Seafarers, Harry Lundeberg School of Seamanship
2 in 2003. I've been shipping deep sea since then. I got my
3 license as third engineer in 2008 and continued shipping with
4 MEBA. I came to the ferry with a second or first license,
5 unlimited horsepower motors, around 2013, September, and shortly
6 after converted over to my chief engineer limited license. I
7 worked here about a year as an oiler, a year. About 2014 moved up
8 to marine engineer. The following year I started working as chief
9 engineer and about a year later was port engineer here at the
10 ferry.

11 Q. Okay. And then just to verify, when you first were hired
12 onboard here with the Staten Island Ferry in 2013, you were hired
13 as an oiler?

14 A. Yes.

15 Q. For one year and then moved on to a chief engineer?

16 A. Marine engineer for a year.

17 Q. A marine engineer for a year.

18 A. Yeah. And then right around early 2016 I moved up to chief
19 engineer.

20 Q. Around 2016?

21 A. Yeah, sometime there in 2016.

22 Q. Okay. And you've also had a position as a port engineer?

23 A. Yeah, port engineer and fuel storage supervisor.

24 Q. In regards to your time and experience onboard the *Ollis-*
25 class ferries, which ferry would you say you have more experience

1 on, the *Sandy Ground* or the *Michael Ollis*?

2 A. I would say in general, I think we all -- the majority of
3 officers here have more experience with the *Ollis* class being that
4 the *Ollis* ferry, being that it's been serviced the longest, the
5 *Sandy Ground* is the newest arriving.

6 Q. Okay. Could you describe the training that you received in
7 order to prepare you to take your position onboard the *Ollis*-class
8 vessels, the *Sandy Ground* and the *Michael Ollis*?

9 A. The training, I think my training was kind of broken up in
10 and out. For the most part we were covering, providing coverage
11 for other crew members to get their training and -- but I tried to
12 maximize my training there with Richie Rizzo and Michelle Mergollo
13 (ph.) along with others who have been trained and, you know, doing
14 my own tracing and reading and whatnot.

15 Q. What was the time frame, would you say, that was the total
16 amount when you were in that training phase?

17 A. I want to say somewhere between 3 and 4 days.

18 Q. Did that training include an evaluation in the end, prior to
19 assuming your role as a chief engineer onboard?

20 A. I don't recall, no.

21 Q. And do you recall if that training included the fuel oil
22 transfer system and how to manage fuel levels and monitoring fuel
23 levels?

24 A. I think that was one of the first things that we discussed,
25 yes.

1 Q. Could you --

2 A. That was probably one of the more important things for me,
3 was being familiar with the fuel system.

4 Q. Okay. At the end of the training did you feel confident that
5 the training was adequate for you to assume your position onboard?

6 A. I was more comfortable every time I spent, I went on the boat
7 more and more. Yeah.

8 Q. Could you describe your responsibilities and duties as a
9 chief engineer onboard the vessel?

10 A. Yeah, just on that vessel, as with any vessel, the chief
11 engineer is overall responsible as the engineering officer for the
12 personnel onboard assigned to the boats, below-deck crew, to the
13 shipboard systems, you know, whether it's fuel or electrical or
14 propulsion or the safety of the crew members onboard, you know,
15 reporting to the captain from a general aspect.

16 Q. On the *Ollis*-class vessels, how do you manage fuel monitoring
17 and fuel leveling?

18 A. Fuel monitoring, we have a level, electronic levels on the
19 MPCMS screens, we have manual gauges outside the tanks, a magnetic
20 float with red and orange and white gauges, and we have the
21 sounding and sounding charts, manually, which are mostly used for
22 taking on -- in preparation for bunkering. Managing is, you know,
23 just keep the tanks level, keep the tanks full.

24 Q. And how is that done?

25 A. That's done through the use of a fuel purifier which takes

1 suction from the fuel oil storage tank and transfers it to the
2 fuel oil service tank, both service tanks, fore and aft or port
3 and starboard, and -- yeah, that's pretty much it. For the most
4 part, normal procedure is we use the fuel oil separator.

5 Q. So if there was a situation to have to configure your fuel
6 manifold to level off your two tanks --

7 A. Okay.

8 Q. -- what is that process?

9 A. To level off the tanks, we can -- we can use the fuel
10 purifier discharge to, you know, favor one tank or the other and
11 if that's not working, we can always use the fuel return lines
12 from the main engines and the generators and the boilers, at the
13 tanks.

14 Q. What valves at the fuel manifold tank locations, what valves
15 are operated as part of the leveling process?

16 A. What valves are operated would be the purifier fill to the
17 service tanks or the fuel oil return to the service tanks.

18 Q. And when you say fuel oil return to the service tanks, is
19 this the return lines coming from your engines --

20 A. Yes.

21 Q. -- back to the service tanks?

22 A. Yeah.

23 Q. Do you assign anyone in particular to be responsible for the
24 monitoring and the fuel operation?

25 A. Yeah, for the most part there's usually one of the oilers

1 will monitor that. We all keep an eye on the levels, obviously,
2 but yeah. Yes.

3 Q. How is it determined which oiler is assigned for that or
4 designated for that?

5 A. I don't believe there's any particular -- I don't recall any
6 particular method of assigning different people. If the guys are
7 making an adjustment, it's usually communicated. Me, personally,
8 I like -- I generally keep one screen on our fuel levels and then
9 the other one on that boat we can have a scan, so we'll have that
10 screen locked so if we get an alarm, the alarm will show up on the
11 non-fuel screen, and then we can just browse through on a regular
12 basis. I like to just communicate with the guys. If someone's
13 going to make an adjustment, it's usually communicated back, just
14 in case I'm out there and I decide I want to make an adjustment,
15 so we all know where we stand.

16 Q. Is that consistent amongst your ships that you do, even on --
17 between like the *Sandy Ground* or the *Michael Ollis*, do you run the
18 same type of a process?

19 A. I want to say yeah, I mean, it's -- I'm not assigned to that
20 boat, either one of those boats or any other boat from a day-to-
21 day basis. You know, I go on the boats as needed, you know, if
22 we're just testing a boat to bring into service or if I'm needed
23 for coverage on a boat, but I don't have, you know, a full day
24 startup, you know what I mean? So again, I'm on the dock, I'm in
25 the port office or the fuel facility and as -- so I'm not always

1 working with the same crew, I work with different crews. Like I
2 don't have my own below-deck crew.

3 Q. I see.

4 A. Yeah.

5 Q. Would you say the training that you received was the same for
6 the *Sandy Ground* as it was for the *Michael Ollis*?

7 A. I don't know if I had -- I mean, I received training for the
8 class, I don't recall being given certain training for each boat,
9 I mean, the boats are -- for the most part, the designs would be
10 identical.

11 Q. And have you observed any differences with the fuel transfer
12 systems between the two vessels?

13 A. No. No.

14 Q. You mentioned also fore and aft and port and starboard tanks.
15 From your experience, what do they normally refer to as?

16 A. The port tank or the starboard tank.

17 Q. Okay. From what you've seen, have you noticed any confusion,
18 maybe, or -- with the nomenclature and the labeling of the two
19 different sides?

20 A. You know, whenever I'm in doubt, I like to just double-check
21 myself. So if it's, you know -- so I know the general arrangement
22 of the boat, I know which side is forward and which side is aft,
23 you know, that's pretty much basic knowledge on a boat, it's like,
24 you know, one on one. The first day, the first thing you do is
25 figure out the general knowledge and the layout. So for the most

1 part if I have to double-check myself, I'll double-check myself,
2 which tank's which so I know which tank is -- the port tank is
3 further aft, the starboard tank is forward by the MSD and if
4 they're not, you know, set up a certain way on the screen or, you
5 know, like I know to double-check myself or, you know, just
6 reference, you know, my locality.

7 Q. Um-hum.

8 A. Yeah.

9 Q. Like your --

10 A. My bearings.

11 Q. Your bearings, okay.

12 A. Yeah.

13 Q. Do you use nomenclature such as the New York end or the
14 Staten Island end as part of how you, you know, describe the two
15 different sides?

16 A. In general on a vessel?

17 Q. Um-hum.

18 A. That's pretty much the standard here.

19 Q. Okay.

20 A. We don't really say forward and aft, we say New York end -- I
21 mean, the boat's a double-ended ferry, two bows, so I mean, it
22 could go either way.

23 Q. Okay.

24 A. I would use the bow and the stern in relation to like a
25 rudder, if we're trying to reference a rudder and we're under way,

1 I would say well, it's the bow rudder or the stern, you know what
2 I mean?

3 Q. I see.

4 A. Um-hum.

5 Q. So depending on the type of equipment, perhaps, or your
6 orientation with systems, you'll interchange the labeling or the
7 nomenclature?

8 A. Um-hum.

9 Q. Okay. As far as the alarms for the fuel tanks, have you
10 observed low and high level alarms activate?

11 A. Yeah, we've -- I've definitely observed low levels, maybe
12 prior to fueling the storage tanks, that's -- which is the low
13 level is already set pretty high. And again, the boat holds a
14 large capacity of fuel. So I mean, just experiencing a low level
15 isn't really as alarming as it may sound.

16 Q. Okay.

17 A. High levels, maybe a high level. I don't recall any specific
18 moment where I might've experienced a high level alarm, but it
19 wouldn't be uncommon if we were topping off or something and
20 they're set pretty close to our normal top-off rate.

21 Q. Would you say the tank level indicators are accurate in
22 regards to what they are showing?

23 A. I think they're accurate within a couple of hundred gallons,
24 maybe.

25 Q. Okay. So you haven't experienced any major issues with the

1 TLIs and any of the --

2 A. No.

3 Q. -- level indicators? Okay. And then just in your --

4 A. Again, we have the flags to kind of, you know, double-check
5 that, so you could kind of eyeball where the top of the tank is,
6 where the flag is on the tank, as compared to what you're reading
7 in a numerical value and a gauge level value on a TLI.

8 Q. Okay. And these flags are for the service tanks, the levels
9 in the service tanks?

10 A. Yeah.

11 Q. Okay. From what you know or, you know, may have heard, you
12 know, in your opinion do you know what may have caused the fire on
13 the *Sandy Ground*?

14 A. I don't know what, per se, caused the fire, but -- and I
15 think my first thought or idea that came to my head is there's a
16 possibility with the fuel return lines.

17 CWO [REDACTED] All right. So at this time I'd like to turn
18 it over to Mr. Young.

19 BY MR. YOUNG:

20 Q. Good afternoon, Chief, thank you for your time today. When
21 it comes to your position with Staten Island ferries, would you
22 say you're predominantly shoreside port engineer and occasionally
23 working on the vessels or is it somewhat split?

24 A. I'm on the vessels pretty much every day, but yeah, for the
25 most part I'm a port engineer on the dock, but my main job is to

1 liaison or work with the boats and the crews, you know, so I'm
2 familiar with the daily work orders, the scheduling, the out-of-
3 service tie-ups for repairs, scheduling the fueling, helping out
4 with Coast Guard inspections, so I'm pretty fluent with the day-
5 to-day operations. Troubleshooting, helping the guys troubleshoot
6 some stuff, yeah, that kind of thing.

7 Q. Understood. But you also have the ability to pick up some
8 ships and work as the chief engineer, as well, right?

9 A. Absolutely.

10 Q. Okay. Did you receive the same training as the full-time
11 chief engineers that crew the vessels?

12 A. As the full-time? Probably not. Probably not, yeah.

13 Q. And what was the extent of your training, was it being walked
14 through the vessel and being walked through some of the operations
15 and then being qualified?

16 A. I was -- yeah, so I did, like I said, on average, 3 to 4
17 days. I know two of them full days and then other than that, it
18 was, you know, catching startups, catching shutdowns, you know,
19 and then things in between throughout the day, popping in, seeing
20 what's going on, trying to help figure out -- you know, it's a new
21 boat. Even the guys that are training aren't a hundred -- you
22 know, they did their best to kind of get a grasp and understand
23 the systems and the design and the operation, but there's still
24 stuff that, you know, we figure out as we go along. You know, we
25 didn't design these ships, we didn't build them, so every day

1 you're on the boat, it's a brand new boat and you're learning
2 something new, you're -- you know, as long as you have your head
3 in the game, you're always learning something new.

4 Q. As these new experiences are coming through and you're
5 learning more, say, lessons learned, how are these lessons learned
6 passed on to the operating crews?

7 A. During training I think a lot of those were shared with the
8 training officers and then their notes as they became finalized, I
9 think they made some amendments to them.

10 Q. And those amendments, how were they sent out to the fleet,
11 were they e-mailed or were they handed to people?

12 A. I think as they were working through their notes and they did
13 their final, yeah, like -- yeah, they would just work them out and
14 either, I think, share it with the crew, give us hard copies or,
15 yeah, things of that nature. Yeah.

16 Q. And as a port engineer, were you involved at all at providing
17 any input for the design of this newest class of ferry?

18 A. No, no.

19 Q. When the vessels came out, we understand that the fuel return
20 system wasn't initially built with these return ball valves in the
21 system, they were added at a later date.

22 A. That's correct.

23 Q. Do you know why that was -- do you know why that was done?

24 A. I guess we needed a means to get a hold of the tank levels.

25 Q. In your previous career with either SIU or MEBA, do you

1 recall any other vessels that you worked on that controlled fuel
2 levels using return valves or is this unique to this operation?

3 A. No, we always kept our fuel oil service tanks topped and
4 filling over to the -- to the storage tanks or the -- well, not
5 the storage tanks, the day tanks, the settlers, you'd say.

6 Q. So then the purifier on these other vessels would run
7 continuously and overflow the residual fuel into like a storage
8 tank or a settler, right?

9 A. Yes, yes, so we generally have the day settler and service
10 tanks and the service would just overflow into the settler. I
11 think that's how it's done industry-wide.

12 Q. Do you know why this type of procedure isn't even operated
13 here? Is there a specific reason why you wouldn't do that here?

14 A. I don't believe there is. I think it's just been practice to
15 just kind of maintain levels, you know, accordingly, per -- you
16 know, for one thing, our operating or SMS procedure is to top off
17 at or below 90 percent, that may have something to do with it, we
18 don't fill anything past 90 percent. So if I had to just shoot
19 from the hip, I would say that's definitely got something to do
20 with it.

21 Q. Does each of the day tanks have sufficient capacity to
22 provide fuel for, say, a day if you were only using one day tank?

23 A. One day tank, probably not, but both, using both of them
24 together, you could definitely get through a day and a half,
25 maybe. I think --

1 Q. Have you ever seen it where one day tank was being operated
2 instead of both on the *Ollis*-class vessels?

3 A. I don't think we've had one day tank, no. No, we've always
4 used --

5 Q. And as -- go ahead, I'm sorry.

6 A. I think we've always used the two. Yeah.

7 Q. As we understand, the system has the ability to be running
8 two separate with the crossover valve being closed.

9 A. Yeah.

10 Q. Have you ever seen that operating?

11 A. No. Like I'm aware of the valves and their location, but no,
12 I've never -- I don't believe I've ever operated with them closed.
13 Usually day and storage tanks are open. Yeah, yeah.

14 Q. And as a port engineer, you may have looked at some other
15 fuel oil system drawings on some of the older-class vessels such
16 as the *Molinari* or the *Barberi* class.

17 A. I think on one of the -- on one occasion we had an
18 obstruction in one of the fuel oil day tanks and we weren't able
19 to get flow out of that tank. I can't remember exactly which
20 tank. It probably was the *Ollis*, but I can't confirm. That may
21 have been a situation where we -- for a brief period, probably
22 even not knowing that it was obstructed running off the one tank.
23 Yeah.

24 Q. And you were able to operate without any issues on one tank,
25 even though it was brief?

1 A. I'm just trying to remember when that was or -- I guess we
2 had no choice, I mean, the valve was -- the line was obstructed,
3 so we were definitely operating off of one line. Yeah, I think we
4 were having issues with the level at that time, maybe. I don't
5 recall a hundred percent, but I know at some point we did for a
6 very brief period until we actually found out, hey, there is a
7 problem, we were working through it and we found -- we found a rag
8 obstructing the line. Yeah.

9 Q. So during that time the vessel was able to operate on one
10 tank?

11 A. Yeah.

12 Q. Without any issues?

13 A. If I recall correctly, yes.

14 Q. Okay. You know, with everything open like you typically have
15 for the fuel supply to the engines and the generators and the
16 boilers, at some point do you think that the two tanks would
17 equalize --

18 A. You would think. Absolutely, yeah, those are pretty big
19 lines, they're about an inch and a half or 2 inch, the service
20 tanks. Two inch, probably. Yeah. And yeah, you would expect
21 them to equalize. Absolutely.

22 Q. Have you ever seen it where they actually do when the vessel
23 is maybe sitting overnight, not running?

24 A. I couldn't pinpoint to any particular instance, no.

25 Q. And maybe you've looked at some of the drawings of the older-

1 class vessels such as the *Molinari* and the *Barberi* and we had seen
2 them and it looks like, in the return line, there's a relief valve
3 built into those two systems.

4 A. That's correct.

5 Q. Do you have any reason why those two classes may have had
6 that relief valve built into their system?

7 A. I mean, they definitely put that in there as a safety measure
8 to ensure that there's constant flow back to at least one tank, so
9 we wouldn't end up with a situation where the system or the lines
10 over-pressurize. Yeah, definitely, in my opinion there's
11 definitely a valid reason why that valve is there.

12 Q. Do you know of any reason why it would not be included in a
13 newest class vessel?

14 A. No, no, I don't know why one wasn't put in.

15 Q. Have you experienced any issues with being able to crew the
16 vessels, with lack of people or lack of experienced people, have
17 you had any issues?

18 A. Yeah, yeah. Occasionally, more and more, maybe we have
19 issues covering jobs and we -- you know, we make do with either,
20 again, myself covering jobs or we -- if they can't get someone off
21 the overtime or we tie up a vessel, reduce service, things within
22 that nature.

23 Q. How many port engineers are there in your group?

24 A. Three.

25 Q. And do each of the three port engineers have the ability to

1 work as a chief engineer on a vessel?

2 A. Absolutely, we're all -- we all started here as chief
3 engineers.

4 Q. Okay.

5 A. Yeah.

6 Q. Does your team do that frequently or is it rare?

7 A. No, we do it frequently.

8 Q. And have you ever had an issue going onto one of the ferries
9 and with it being different classes and different setups or is it
10 all kind of relayed back to you pretty quickly?

11 A. No. No, in general, I don't have any issues. Again, I'm
12 always on the boat, there's never really a long period of time
13 where I'm not on a boat. We have multiple vessels of the same
14 class, so even if one was away at a shipyard or something for a
15 long time, we're still working on that class. So yeah, so --
16 yeah.

17 So yeah, I don't have any problem, especially if I'm
18 relieving a running crew, I probably take extra, extra precautions
19 if I'm bringing a vessel into service and we're starting it up, as
20 opposed to having a live person turning over with me, you know, on
21 a boat that's been running all day, then yeah, there's a
22 difference there.

23 Q. Got it. And when you say starting up in the morning before
24 the run starts, I understood you start all the engines and the
25 propulsion motors and everything, once you are across and say at

1 the first stop of the day, do you keep the engines running or do
2 you shut them down in between each stop?

3 A. It all depends on the time frame of the shutdown and whether
4 or not the equipment needs to be shut down, but there's no reason
5 to just idle the main engine for hours on end, with the boat tied
6 up on lines. If we need work done on a main engine, then that
7 engine needs to shut down. Whether we need to change, you know, a
8 filter or, you know, change a pump, you know, sometimes you just
9 have to shut down. You have guys working next to a shaft or
10 whatnot.

11 Q. Understood. But typically if you're just running back and
12 forth, do you shut the engines down at every --

13 A. No.

14 Q. -- terminal?

15 A. No, no.

16 Q. You keep --

17 A. Yeah.

18 Q. So you roll the engine for a few minutes and it would idle
19 and then you would just get --

20 A. Yeah, once we start up, we give power to the -- our startup
21 checks are complete, we give -- transfer power to the wheelhouse
22 that it's in their control if there's -- the only time I would
23 ever shut down was when the captain was finished with engines and
24 I would take the power back and shut down, unless for some
25 incidence where there was an emergency or whatnot, where we needed

1 to secure something and that would also be communicated with the
2 captain.

3 Q. Understood. Okay, good. Now, when you do take over a watch,
4 is there some sort of an SMS checklist or a watch changeover that
5 you complete?

6 A. Yeah, there is. There's startup checklists and relief
7 checklists, they're posted in every control room.

8 Q. And it's required that you complete these at each watch
9 changeover, correct?

10 A. Yeah.

11 MR. YOUNG: Thank you very much for your time today, I
12 appreciate all your help.

13 MR. EL GALLAD: Thank you.

14 CWO [REDACTED] And then I'd like to open it up to the room
15 for any other questions or remarks.

16 (No response.)

17 CWO [REDACTED] All right. Do you have anything else, Chief,
18 you would like to add or any remarks?

19 MR. EL GALLAD: No, I'm just looking forward to the
20 investigation and the report, just to have more, you know, solid
21 answers to what exactly happened and where we stand.

22 CWO [REDACTED] Okay.

23 MR. EL GALLAD: That's it.

24 CWO [REDACTED] And would you be available for us to contact
25 you at a later time if we had any further questions?

1 MR. EL GALLAD: Absolutely. I'm here generally Sunday
2 through Thursday and you guys can contact me any time.

3 CWO [REDACTED] All right. So that concludes our interview,
4 the time on deck is 13:05.

5 (Whereupon, at 1:05 p.m., the interview concluded.)
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

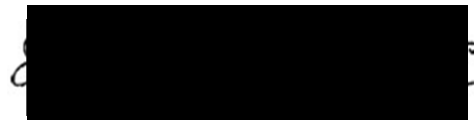
IN THE MATTER OF: ENGINE ROOM FIRE ABOARD THE
 STATEN ISLAND FERRY *SANDY GROUND* NEAR
 STATEN ISLAND, NEW YORK
 ON DECEMBER 22, 2022
 Interview of Karim El Gallad

ACCIDENT NO.: DCA23FM010

PLACE: Staten Island, NY

DATE: February 9, 2023

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.

A large black rectangular redaction box covering the signature of the transcriber.

David A. Martini
Transcriber

Interview Errata
Sandy Ground DCA23FM010
Interview of: Kasim Elgallad
Position: Chief Engineer

PAGE NUMBER	LINE NUMBER	CURRENT WORDING	CORRECTED WORDING

If, to the best of your knowledge, no corrections are needed kindly circle the statement "no corrections needed" and initial in the space provided.

NO CORRECTIONS NEED.
Initials

Kasim Elgallad
Printed Name of Person providing the above information

Signature of Person providing the above information

3/20/2023
Date