

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
OFFICE OF ADMINISTRATIVE LAW JUDGES

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Investigation of:

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COSCO BUSAN/BRIDGE ALLISION
SAN FRANCISCO, CALIFORNIA

* Docket No.: DCA 08 MM 004

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Interview of: CAPTAIN EINAR NYBORG

Pilot Commission Office
Pier 9
San Francisco, California

The above-captioned matter convened, pursuant to Notice.

BEFORE: TOM ROTH-ROFFY
National Transportation Safety Board

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I N T E R V I E W

INVESTIGATOR ROTH-ROFFY: Okay. At least the device

looks like it's recording.

INTERVIEW OF CAPTAIN EINAR NYBORG

BY INVESTIGATOR ROTH-ROFFY:

Q. Captain, for the record, would you state your name and at least a -- some contact information on yourself like a mailing address. I've got your phone numbers here.

A. Yes. My name is Einar Nyborg, San Francisco Bar Pilot. You can reach me through their address. And my -- best way to reach me by phone is my cell phone number,

Q. Okay, thank you. Captain, spell your first name for me.

A. E-i-n-a-r.

Q. E-i-n-a-r. I had that completely wrong, but good stuff.

A. Nyborg, N-y-b-o-r-g.

Q. All right, Captain, the, the NTSB, I don't know how familiar you are with our process and procedures, but briefly what we do is we take a look at the circumstances surrounding the various types of marine casualties, at least my specialty. And what we do is we take a look at the facts in these incidents. We go back, we work with all the parties involved, and we kind of come up with, you know, at least some cause or causal factors, and we try and look at what we can do to prevent a reoccurrence. And that's what this team that's going to be talking to you today is about. And, again, you know, our, our -- we want to get just an

1 idea of the actual facts and stay away from any of the, you know,
2 the speculative stuff or, you know, guesstimates and those kind of
3 things. So if you don't know the answer to any of the questions,
4 that's just I don't know. Captain, what -- can you give me a
5 little bit of your background related to maritime safety?
6 Specifically your training, where you went to school, how long
7 you've been sailing under a state license, under a federal
8 license, and, and just tell me a little bit of background there.

9 A. I went to California Maritime Academy after high school.
10 I got out of there in 1988, and I went to sea for the first year
11 or two commercial fishing in the Bering Sea. I came aboard with
12 Keystone Shipping Company on the Alaska oil tanker trade from
13 Alaska down to Panama on the West Coast. I worked at that until I
14 got my Chief Mate's License, and went to Crowley Maritime working
15 primarily in San Francisco Bay. Did mainly ship assist and tug
16 and barge -- I mean barge moves, and did some -- and I worked at
17 that job for probably three to five years, mixing it up with some
18 occasional deep sea shipping on ships. And then came into the San
19 Francisco Bar Pilots as an apprentice in 1994, and was a full
20 pilot in 1995.

21 Q. Okay. 1995, and I'm just making myself some notes here,
22 Captain. So basically summarizing your maritime experience,
23 you've been under a federal license operating in one form or the
24 other since what time?

25 A. Since 1988, graduating from California Maritime Academy.

1 Q. Okay. What license do you currently hold from the
2 federal licensing standpoint?

3 A. From the Coast Guard, I hold the Chief Mate Unlimited
4 and Unlimited Pilot, through San Francisco Bay, all the
5 tributaries, and also Unlimited Pilot Prince William Sound, also
6 1600-ton Master Freight and Towing.

7 Q. Okay.

8 A. And all the certificates that come and go with that.
9 However, there's been some FTCW limitation on the, on the, you
10 know, tonnage of that license. If I were to choose to go back to,
11 go back to sea, I'd have to renew FTCW and so forth.

12 Q. Right. Now you're, you're operating -- the regional
13 exam center you're operating out of, is it here in San Fran?

14 A. That's correct.

15 Q. Okay. As far as the state licensing program, what do
16 you hold with the State of California?

17 A. Unlimited Pilot -- San Francisco Bay.

18 Q. All right, and when was that, your first license with
19 the State issued?

20 A. It's a good question, but I started -- oh, well, with
21 the State, it would be the -- when I became a pilot in 1995.

22 Q. Okay.

23 A. With the Coast Guard licensing, I started the San
24 Francisco Bay licensing long before that, probably in 1989 or so.
25 1990, I started sitting for those exams.

1 Q. Okay. And I don't have either licensing file in front
2 of me, Captain, but am I correct in assuming both those licenses
3 are currently valid with the State and with the Coast Guard?

4 A. That's correct.

5 Q. Okay. Captain, what -- with your pilot -- as far as
6 your rotation duty on, duty off, what's your rotation you only
7 work through with the Pilots' Association here?

8 A. We usually work week on, week off, and on occasion mix
9 it up and work two, two weeks on, two weeks off to get a, you
10 know, lengthier periods of time off. So it depends on what your
11 arrangement is, but it's even time on and off, typically one week
12 on, one week off.

13 Q. Okay, now you -- and you reside in -- or in Hawaii,
14 correct?

15 A. No. I reside in Ukiah, California.

16 Q. Okay. Where is that in relation to Oakland?

17 A. Two hours north of the Bay on Highway 101.

18 Q. Okay. Now you normally commute in and out or do you
19 commute in and stay at the local area, you know, local
20 accommodations and go home when you get off ship?

21 A. I have another place when I'm working, I -- it's a, it's
22 a place where I live in Point Richmond, which is just 20 minutes
23 north of Oakland.

24 Q. Okay.

25 A. My week on, I'm living there. On my weeks off, I'm

1 typically in Ukiah.

2 Q. Okay. Captain, when did you, when did you come on your
3 most recent shift?

4 A. I worked two weeks ending on the Wednesday that the
5 incident occurred, which I believe was the seventh. I worked two
6 weeks before that. I started and worked right through that
7 Wednesday.

8 Q. So Wednesday, November the 7th was your last day on
9 duty. What time did you end your shift?

10 A. Without looking at my records, I did not work Wednesday
11 morning. I worked Tuesday, I believe, afternoon. I think the
12 last ship I had was the Busan going into the harbor.

13 Q. Okay. Now when you say Busan, you're referring to the
14 Cosco Busan?

15 A. Correct.

16 Q. Okay. Can you -- that assignment was given to you,
17 obviously, from the dispatch with the Pilots' Association?

18 A. Correct.

19 Q. Where did you meet the ship? Can you give me a, a
20 timeline of where you picked the ship up at?

21 A. Unfortunately, I don't have my records here, but it was
22 a daylight transit into Oakland, and it was an afternoon trip. I
23 don't remember the boarding time. That's all available in
24 records. But boarded in good visibility, 12 miles offshore,
25 proceeded to Oakland. It was an unusually long trip because I had

1 I think two or three ships ahead of me, a couple -- a ship astern
2 to me, and two ships sailing out of Oakland Inner Harbor coming
3 and going. So it was a, a real kind of a chore to, to find my
4 position in the pecking order to get in there and get tied up. So
5 it was I think almost a four, a four-hour transit or so to get in,
6 and I believe I was finished sometime near dark.

7 Q. All right. Once you disembarked the pilot vessel on the
8 pilot ladder, can you walk me through your experience getting up
9 to the bridge? Who greeted you on the deck? And just walk me
10 through scenario-wise anything that may have caught your attention
11 or, you know, you found ops normal or, you know, unusual ops.

12 A. Ops normal as far as the shipboard routine at sea went.
13 We got onboard and foremost in my mind was the amount of traffic I
14 had to deal with to get into the harbor and trying to position
15 myself in a way that I could safely get in there without
16 interrupting other people's transits or causing significant delays
17 without, you know, good reason. And I boarded the ship. I don't
18 remember who met me. I, I believe it was one of the third or
19 second mates, and they brought me up to the little house, normal
20 deal, headed on in, again followed other ships. I think I
21 proceeded at full bell for sometime until it became quite apparent
22 that there was going to be a delay, and then I backed off and went
23 easy. I met the captain in the wheelhouse, of course, and the
24 captain, I believe, was a Chinese fellow. I never looked into
25 that, and but I believe he was a Chinese fellow, and I believe the

1 quartermaster was a Filipino. However, that's foggy deal. I
2 don't really remember that. One thing that did stand out to me
3 was that there was one other crewmember, and I believe he was a
4 chief mate or a second mate that was not Chinese, and I think, I
5 think he was an Indian gentleman, and he was -- that kind of stood
6 out because usually it's a crew of all the same nationality.

7 Q. Right.

8 A. So that's one thing that does stand out as different to
9 me. And, anyway, any more pointed questions in that regard? I
10 don't know what exactly you're looking for there.

11 Q. Okay, well no, that was fine. Actually I'm just trying
12 to get a scenario of what you saw and what you experienced. No --
13 none of the members here with us, you know, here with me are
14 obviously with you at the time. So we're just trying to get --

15 A. Right.

16 Q. -- a general idea of what was going on with the ship at
17 the time. When you -- as far as communications on the bridge,
18 once you identified yourself, can you walk me through the
19 communications that were taking place between you and the master
20 of the ship?

21 A. Yes. It was fairly typical. There was the Captain
22 stood out as very polite and kind of a quiet and very respectful
23 and quiet, and we had a good working relationship right off the
24 bat. There was never any weird stuff going on. It was, it was a
25 good professional communication system we had going between us.

1 There was some difficulty in getting my point across when it came
2 to the finer details of the job, in which case the Indian
3 gentleman -- I believe he's Indian. Forgive me for not knowing.

4 Q. Okay.

5 A. I really don't know. But he seemed to be somewhat of a
6 facilitator and seemed to -- whenever, whenever he saw that there
7 was a question like I didn't understand the Captain or he didn't
8 understand me, that he was right there to, to facilitate that
9 conversation as if -- I don't think he spoke Chinese, but I
10 believe he, he could understand the guy's English dialect a little
11 better than I was able to.

12 Q. Right.

13 A. So, again, the Captain had very passable English unless
14 you got into some of the finer details of me trying to describe,
15 you know, what the traffic situation was I was getting into,
16 because it was very complex, and I had to do some describing in
17 order to in my mind make him feel comfortable with the transit.
18 So I ended up getting more detailed in my conversation with the
19 Captain than I might normally because it was a complex trans -- in
20 which case I think this other gentleman I mentioned was helpful in
21 facilitating our conversation and --

22 Q. Okay. As far as the exchange of information, can you
23 walk me through the, the course and speed over ground into the
24 berth? Who made the determinations? Did you? Did the ship's
25 crew? Did you ever look at a voyage plan? Was it presented to

1 you? Can you walk me through that aspect of the evolution?

2 A. Yes. When I, when I get on a ship, I have a typical
3 routine that I go through. I'll talk with the captain about
4 details of the trip, and in such a complex trip, it's -- you cover
5 the basics initially. You say, captain, we're going to go inbound
6 south of Alcatraz. Your draft is okay for this route inbound, and
7 we have a lot of ships to consider, and as things develop, I'll
8 keep you in the loop of thing. So it's such a dynamic situation,
9 constantly changing as, as the different ships begin their
10 transits that, you know, the master pilot conference pretty much
11 was kept to the basics. This is her draft. This is her engine.
12 They gave me a very professional pilot card that said, you know,
13 how deep she was and her length and her maneuvering, engine
14 speeds, all this stuff that we're -- used to seeing. So that's
15 typically what I really need to get started, and then as the
16 voyage progresses, I bring the captain in more and more as I see
17 various questions developing. So do you understand my --

18 Q. Yeah, absolutely, absolutely.

19 A. Okay.

20 Q. At any time did the crew relay any conditions of class
21 that were existing on the vessel or any equipment shortcomings?

22 A. Negative.

23 Q. Okay.

24 A. Not to my, not to my knowledge. Nothing that stood out
25 as hey this doesn't work. Nobody told me anything about that.

1 Q. All right. Was there any equipment that you utilized in
2 the performance of your job bringing the vessel safely inbound to
3 the berth that was determined to be in -- operating either
4 ineffectively or incorrectly or not operating at all that you
5 recall?

6 A. Again, it was a daylight transit. Very unexceptional as
7 far as visibility. It was excellent visibility. You could see
8 all the way to Oakland from sea as I remember, and the tools that
9 are good to utilize in that sort of situation with all this
10 traffic is the AIS because it gives a pretty good readout on the
11 speed ships are progressing, and gives you a better idea on where
12 you can meet them and so forth. So the AIS was a tool I did look
13 at as far as traffic movements were going. I didn't rely on it.
14 I stood at the front window instead of behind the electronic
15 equipment. So it wasn't like I was back there for, for that four-
16 hour transit looking at that stuff. I was looking out the window,
17 and that's the most comfortable position to be in as far as
18 knowing what's going on in that sort of situation. Of course, if
19 the visibility was different, I would have been back there really
20 making sure everything was here I needed it to be as far as the
21 equipment went.

22 Q. Okay. Was that particular aspect of the bridge
23 navigation and safety equipment functional in your assessment?

24 A. It was inasmuch as I personally would rely on it, and I
25 say that with condition, because for example just a few days ago

1 prior to that I sailed a ship out of the Richmond -- which was
2 Port Side 2, which is the Chevron Terminal up there, and it was a
3 charter ship, not a Chevron ship, but, you know, I'd ask the
4 captain, is there any problems with this ship and, and he said no
5 there's no problems, and then when I got underway it was, it was a
6 dark transit, however good visibility, and I steered the ship out
7 with my eye to get into this narrow channel outbound. And then I
8 went back to the ECDIS to start gathering the information I needed
9 for the transit, and the ECDIS displayed my position as way out in
10 the shoal area outside of the channel, far outside of where I
11 could safely navigate. So that's an example of how much I rely on
12 this equipment because it really -- what the crews put into it is
13 what you get out of it. And if they have an offset error or if
14 there's a very technical GPS issue going on for that day that, you
15 know, there might be a warning out about a GPS not, you know,
16 sending correctly, whatever, I don't know the technicalities of
17 that stuff. I just know my ship's in the center of this channel
18 and the track on this computer shows me almost a half a ship
19 length to the left of my position, which puts me out in shoal
20 water, I'd be aground by now.

21 Q. Right.

22 A. So I was concerned. You know, if this was the fog, what
23 -- if I had followed that, if I had relied on that equipment, then
24 of course I would have been in dire straits, right?

25 Q. Right. I understand.

1 A. So what I'm getting at is the equipment on -- the ECDIS
2 as I used it on the Cosco Busan was fine at a nice -- it had a
3 nice display. It showed the draft. It showed the landmarks. It
4 had a track on that the crew had put in there. And again, I --
5 when I'm boarding in the midst of a line of ships coming in to
6 scroll through their track and roll through the Bay on their
7 computer to make sure their track is where it needed to be is
8 usually outside of where I'll go with these things because it's
9 too distracting and it involves a lot of attention to the machine
10 when I need to be turning into the channel and so forth.

11 Q. Right.

12 A. But so what develops over the course of this is, you
13 know, I'll give the captain an idea of where we're going, and then
14 as we go there, the, the track unfolds on the machine as you see,
15 you know, as it -- as your position moves across the machine. And
16 frequently, and I'm talking maybe 20, 25 percent of the time,
17 you'll find that their track is -- elsewhere from where you intend
18 to go. Whether it's an unsafe track or not, I'm not saying, but
19 it's frequently like they'll take the deep draft route in and your
20 course is south of Alcatraz. Are you familiar with the
21 difference?

22 Q. Yes.

23 A. Okay. So that's something that you'll frequently come
24 upon, and to my knowledge to get into the voyage track for on that
25 ECDIS it's a substantial amount of effort of changing screens and

1 menus and -- it's not a matter of clicking a weigh point and
2 dragging it to where you wish the weigh point to be. It's a
3 matter of going in the back screens and -- and when I was sailing,
4 I didn't have these machines. It was -- I sailed when I was going
5 to sea as an officer. So I didn't, I -- that was not something
6 I've ever been involved in when the ships have the tracks there
7 and they, they plug them in. And then as a pilot, I use my
8 experience to put the ship where I need it to be and not
9 necessarily on the track that, you know, a third mate has seen fit
10 to put through the bay. You understand me?

11 Q. Yes, I do. I do.

12 A. So that is a very frequent occurrence. It's very
13 frequent that we get on and see a track run in a direction that we
14 don't wish to go. And it's also frequent that that track is laid
15 out in an unsafe position. And I can think of a couple of cases
16 in the last six months where I'm driving a ship of say 40 feet and
17 it brings me over a 35-foot shoal going outbound to sea. Because
18 it's kind of they draw a line from Delta Echo Span up past
19 Alcatraz and then the deep water out, and there is a shoal area
20 that, that doesn't jump out at these mates as they're laying out
21 these courses. Now these guys go to 20 or -- 10, 20 ports around
22 the world, and imagine how much, you know, navigation effort it
23 takes to lay out every track. And so it's very common to, to see
24 that. But that doesn't mean I'm going to follow that, right?

25 Q. Right.

1 A. And that also doesn't mean that I have time to go in
2 there and change it. However, I will point it out to them.

3 Q. Okay. Well on that same line of thought there, Captain,
4 when you and the master of the Cosco Busan were having the
5 interaction offshore before you began your inbound transit, were
6 there any concerns over a track line the ship had generated to the
7 -- on the inbound voyage to the Berth 56?

8 A. There were not while we were out at sea. However, as I
9 came in under the Golden Gate Bridge and went south of Alcatraz,
10 as I say this whole thing's scrolling forward, and you can see
11 where they've run their track. I noted to myself that and -- and
12 remember, I'm -- the -- current there. I'm going very slow
13 because I'm really delayed for almost an hour waiting for these
14 ships, two ships to depart Oakland.

15 Q. Right.

16 A. And I'm just holding position. So the main thing you
17 want there is not to get blown off course or to have the current
18 set you sideways off and, you know, so the, the AIS or the ECDIS
19 is a good tool for that. It shows where you are without a lot of,
20 a lot of, you know, work. So at that point when I'm stalled there
21 off of Pier 39 pointing at the Bay Bridge just waiting, I noted
22 that their track appeared to be West of where the center of Delta
23 Echo Tower is, okay. And that might seem exceptional, but it's
24 not exceptional. It happens all the time. These guys don't know
25 what span you're going to want to choose to use. They typically

1 run it through the middle of the whole bridge, which is like
2 through the Charlie Delta area, and it's very typical to see a
3 track run through there. It's not exceptional to a pilot to see
4 that. But I, I believe that their track line was west of where it
5 should have been to make Delta Echo Tower, and I, I said to the
6 captain, I said this -- it appears to be too far to the West. You
7 know, we're going to use the big span right there. And again I'm
8 doing all this visually. I'm not using that as a --

9 Q. Sure.

10 A. So, but and again it's, it's almost half the time that
11 they're using some other track than what you as a pilot intend to
12 use, and it's not -- I don't get into telling these, you know, I
13 don't -- really don't have time on my inbound transit to look
14 through the finer points of a lot of that stuff, but as I'm going
15 to use a track, I'll point out to the mate so he's not surprised
16 that we're off track. I'll point out to him, no, I'm not going to
17 go this side of the buoy. I'm going go to the other side of the
18 buoy. So it becomes a more of a verbal discussion. This is my
19 plan. I try and make them all know that on the bridge team so
20 that we're working together and they anticipate that.

21 Q. All right. Did you bring that -- your concerns over
22 that track line to the attention of the master or the mate? How,
23 how did you bring that up on the bridge?

24 A. Well, it's -- you know, in hindsight it seems like I
25 should be very clear on what that -- how that transpired, but I'm

1 not clear on it, and I believe I pointed it out to either a mate
2 or the captain, and I'm not sure who. And I'm -- I've been
3 scratching my head thinking about it, but again it was a very
4 unexceptional issue at the time because I had no intention of
5 using this tool to get into the harbor. I believe I pointed it
6 out to the captain or one of the mates.

7 Q. Okay. And I want to continue on this, this -- kind of
8 these thought processes, this line, but before we do that, I don't
9 want to lose this question that's in my mind. Would this -- did
10 you talk to anyone else in the -- within the pilots group once you
11 got off the ship or anywhere describing this experience you had on
12 the bridge regarding the, the track line we just discussed? Did
13 you have -- did you -- I mean just through, you know, occasional
14 conversation did you talk with anybody else in the pilot group
15 with the -- what you did?

16 A. I did.

17 Q. Who did you talk to on that about that?

18 A. I -- Wednesday morning is our monthly meeting, and I
19 didn't realize this action had happened. I came into the Pier 9,
20 went upstairs to our conference center, and I saw the Cosco Busan
21 coming out of Anchorage 7 and going back down towards Anchorage 9,
22 and I was surprised because I recognized her as a ship I put in
23 Oakland, and it would be very unusual for that ship to be coming
24 to the wrong direction unless something had happened or something
25 was wrong, like if they had a breakdown or something.

1 Q. So this was definitely post-casualty, correct?

2 A. Yes.

3 Q. Okay. Go ahead. I'm sorry.

4 A. And who did I talk to? I sat down without knowing that
5 happened, and I leaned over to whoever was next to me. I don't
6 know who that was. And I said, why is that ship going back to
7 Anchorage 9? And they said, haven't you heard? And I said, no.
8 And they briefly told me about that situation. And I don't know
9 who -- I don't remember who that was I was talking to because
10 there's probably 35 people there, and we had -- I talked to a lot
11 of people --

12 Q. Sure.

13 A. -- about, gee, you know, what happened and where did
14 that go, and I got to thinking, you know, I brought that ship in,
15 and I tried to remember where, you know, what issues I might have
16 had with it, and what my, you know, if I had any difficulties or,
17 you know, bad helmsman or anything like that. Nothing stuck out
18 in my mind except that I, I remembered that, gee, I think that
19 ECDIS display was showing a poor course as far as -- a poor
20 planned route through Delta Echo span, and I wondered if they had
21 tracked the same deal coming outbound. Of course, recognize that
22 when you use that machine that, you know, the inbound voyage is
23 going to be a whole different name on a menu than the outbound
24 voyage. You know what I mean? That when --

25 Q. Yes.

1 A. -- when they get onboard to -- sail in Oakland, they're
2 going to say okay now this is the Oakland to Yokohama route,
3 right, and they'll call that up, and there's a whole route in
4 there that's been put in there ahead of time and they'll, they'll
5 select that route and they'll put it in. So the route that was
6 used outbound is not necessarily, and is quite likely not the, the
7 track line that I was using inbound or that I would have been
8 using if I needed that machine, right?

9 Q. I, I understand.

10 A. Okay. So I'm sorry, I'm being probably --

11 Q. No, that's very good information, Captain. Go ahead.

12 A. All right. So anyway, your direct question was who did
13 talk to, and I became very concerned, of course, and I, I talked
14 to Pete McIsaac, I believe. I'm sure I did because he called me
15 later on and said, you know, you told me some information and you
16 might be called to describe that information. So I did tell Pete.
17 And the other person that stands out that I told was John Cota,
18 who entered the room during the meeting and actually sat down
19 within 3 or 4 feet of me, and I scooted my chair over and out of
20 concern asked him, John, how you doing? He described how he was
21 doing. Oh, my God, John, what happened? And, and he was visibly
22 shaken. And I said you know what you should look into that -- you
23 should look into this ECDIS display because I believe it was, it
24 was running West of where it should have been on my inbound. And
25 of course I didn't need it, but if you relied on it at all maybe

1 it ought to be something that is investigated. And, and then John
2 called me last night, and he had actually -- didn't recall me
3 telling him that. He's like there's rumor around that you saw
4 this or saw that, and I'm like, John, I talked to you at the
5 meeting. Didn't you remember that meeting? He said, no. I was
6 really rattled, and I probably talked to people I didn't, I don't
7 remember talking to. And that's very understandable, you know.
8 He was, he was visibly shaken of course. And then Pete called me,
9 Pete McIsaac, and then he said the commission investigator, whose
10 name is Reynolds, Bob Reynolds, I believe.

11 Q. Okay.

12 A. Called --

13 Q. He is present, by the way.

14 UNIDENTIFIED SPEAKER: No, Reynolds is not present.

15 INVESTIGATOR ROTH-ROFFY: He's one of the investigators.

16 MR. NYBORG: He is an assigned investigator. I believe
17 that was assigned. That's the way I understand it. And he called
18 and, you know, I think I called him first. I reached out to him
19 and -- or we were playing phone tag. I don't remember how it
20 went. But what I really wanted him to do was to get onboard that
21 ship right away and try to get a handle on, you know, what that
22 ECDIS said. And those things have a way of disappearing within
23 hours or days of an incident. So I really wanted for John's sake
24 that he would know, you know, if there was any problem with the
25 track line. Not that, you know, that has -- it's not the be all

1 end all of this whole thing at all, but it is one thing. So
2 you've asked me who did I talk to. I told you Pete. I told you
3 Rob, the investigator.

4 BY INVESTIGATOR ROTH-ROFFY:

5 Q. Right.

6 A. Reynolds, I believe.

7 Q. Right.

8 A. And I did talk to Cota. And in that meeting I might
9 have mentioned it to one or two other people, and I don't recall
10 who that would be.

11 Q. Okay. Do you recall approximately what time John Cota
12 entered the, the meeting?

13 A. No, but I would say it would be between -- I think he
14 had had his drug test and then came upstairs or something. So it
15 was probably -- the meeting starts at 9:30. I was slightly late.
16 So I might have seen him around 10, but that's kind of a guess
17 within an hour, you know.

18 Q. Okay. Now I'll come back and ask you a few questions
19 related to your interaction with him in just a minute, Captain, if
20 we can. But I want to go back to the -- on the bridge the
21 interaction you were having with the vessel management, bridge
22 management team and then want to follow-up with the -- once you
23 brought this to their attention that you felt the intended track
24 line was a little I guess they had it coming in too close in a
25 westerly track to the DE Tower, that you brought to their

1 attention. Can you walk me through what happened at that point?

2 A. The reason, the reason I'm having a hard time with this
3 is because I don't know what brand of ECDIS that was.

4 Q. Right.

5 A. ECDIS is of course its own brand, but I don't remember
6 what brand that machine was.

7 Q. Okay.

8 A. And all the brands are slightly different on their
9 display. Some of them excel. Some of them are extremely good.
10 It's like looking at a NOA chart. Others are way, way substandard
11 to that. And what I'm getting at here, yeah, it's -- you can
12 figure out where the deep slots are that you need to put the ship,
13 but some of the, the main problem is that if a guy, if a mate is
14 plotting a track through a bridge pier, there's a reason for that.
15 He doesn't mean to do that. He's a professional.

16 Q. Right.

17 A. It's because the bridge piers on a lot of these machines
18 aren't obvious. Sometimes a pier might look like a nava-light
19 which could be a RACON in the center. Like I think in that one I
20 think there was a little circle in the center of the Delta Echo
21 span where you preferably navigate through. And that little
22 circle that says RACON might -- some may, might perhaps think, you
23 know, this is, this is a bridge pier.

24 Q. Right.

25 A. And that's an artist interpretation or an artist

1 depiction of that navigational span. And with a lot of thought, I
2 think he can really pick it out and figure it out, you know, this
3 is actually the tower and this actually a light. If you really
4 look it over carefully and say, no, no, your track needs to be
5 over here under the RACON and you're thinking that's a bridge
6 pier. So you can point out their mistake to the, you know what I
7 mean?

8 Q. Right. Is that what you did in this case?

9 A. As I mentioned before, I think I brought it to the
10 captain's or the mate's attention that the track appeared to be --
11 and I believe what I said is appeared to be through the tower
12 itself and not through Delta Echo span. This is a little
13 embarrassing to me because now it seems so important where at the
14 time it certainly did not even strike me as important for my
15 situation because I had clear visibility. I had no, no intention
16 of even looking at that machine other than to determine where the,
17 where the traffic was moving that I couldn't see.

18 Q. Okay.

19 A. So I -- again the important thing I think that needs to
20 come out of this, and you asked me not to give opinions, but I
21 think that the artist interpretation of that whole bridge is not
22 easy to understand at first glance, and I think if you looked at
23 it and you look at the bridge piers and now put yourself in, in
24 the heat of the moment and poor visibility or something, then it
25 becomes even more difficult to figure out. But I, I've seen some

1 Russian units, I believe they're made in Russia, that are really
2 lousy. I've seen a couple of good ones too, but --

3 Q. Okay.

4 A. -- some of them are just standout super poor, and it's
5 like what is going on here? Some of them have so many sounding
6 marks on the chart that you can't -- it's so busy that you can't
7 pick out another ship target, whereas what you'd really want to
8 see is a blank screen on any deep water and then maybe some
9 sounding marks where it shoals up. You know what I mean? And
10 that gives you a more clear, hey, this is where I am, this is
11 where the ships are. But some of these, these ships have so much
12 information, so many layers of information on those ECDIS machines
13 that they're just too cluttered to be real useful.

14 Q. Was that -- that was not the case in this situation or
15 it was the case in this situation?

16 A. No. It was not the case, but it's very typical that it
17 is the case, and that -- we need some standardization in this
18 regard, you know. We need some standardization on how you label a
19 bridge pier, you know, and --

20 Q. Okay.

21 A. -- I think with some study you can sit down there and,
22 you know, the buoys mark appears and so forth and you can say, oh,
23 there's a buoy so we know that's the pier. So, yeah, with some
24 study, but it ought to be intuitive when you look at these very
25 advanced navigation computers that are designed to help you

1 navigate in the fog, it should be intuitive where these
2 obstructions are.

3 Q. Okay. Captain, once you cleared the San Francisco
4 Oakland Bay Bridge, the transit from that point to the berth, were
5 there any other events that struck your attention or you recall or
6 was it a fairly uneventful transit

7 A. It was anything but uneventful because of like I
8 mentioned before the traffic, but in dealing with that, after
9 dealing with that, it was, it was unremarkable, you know. It was
10 not anything --nothing stood out to me as problematic that
11 affected my voyage.

12 Q. Okay, a couple -- few, a few more questions from me
13 regarding just some navigation, and then I want to go back to just
14 your interaction with John Cota at the meeting, and I'll forward
15 the floor over to some of my counterparts. So bear with me here.
16 You disembarked the ship at Berth 56, correct?

17 A. That's correct.

18 Q. All right. What time approximately do you recall
19 getting off the ship?

20 A. That's all available through my dispatcher, but it was
21 evening, and I believe it was dark. So I'd say probably around 7
22 or 7:15.

23 Q. All right.

24 A. Somewhere in there.

25 Q. We'll follow-up on that. Two quick questions regarding

1 the vessel systems. Do you -- again in your assessment for this
2 inbound transit, were there any issues that you felt related to
3 the vessel's steering system?

4 A. No. I, I had no problem with, with the rudder ever
5 going the wrong way on this ship, which, you know, semi-frequently
6 happens.

7 Q. Sure.

8 A. I had no problem with communication with the helmsman.

9 Q. Okay.

10 A. There were a couple of times that I seemed to have to
11 repeat myself when I thought I was being clear, but, you know,
12 you're not in that guy's shoes. You don't know what he was
13 listening to. He might have heard the radio squawk at the same
14 time I squawked. So, you know, it's -- I do remember a couple of
15 times repeating myself when I thought I'd been clear, but I would
16 say that the helmsman I had in was as good as you could ever
17 expect, you know. I didn't have any problems with him.

18 Q. All right. What about vessel propulsion? Were you
19 getting what you asked for when you -- with your forward speeds?

20 A. Yes, I was. It was -- I remember that, you know, the
21 bells were laid out well. I believe it had a 17-knot full bell,
22 and I believe it had about a, a 6-knot or so dead slow bell, which
23 is the optimum operating range for us because we can get up to our
24 15-knot speed requirement in the Bay, and we can also maneuver
25 carefully and slowly in close quarters. So it's a good range

1 whereas many of the new ships that are built now don't have a good
2 range.

3 Q. Okay. Did you ever bring the bell into a stern
4 propulsion at any time during you --

5 A. Yes.

6 Q. Were there any issues there?

7 A. No.

8 Q. Okay. All right, just a few more questions from me,
9 Captain, and I'm going to turn it over to the Coast Guard
10 representative. Referring to that meeting you -- when Mr. Cota
11 came into the meeting, you made -- used the term, you said he
12 appeared visibly shaken. What did you mean by that?

13 A. Well, I, I only said that because he didn't seem to
14 remember the specifics of my conversation of, hey, you know, did
15 you -- was the track laid out correctly? And he didn't, you know,
16 to me if I had, if I had hit the bridge, if I had had an incident
17 and someone said that to me, that would have been a big, a big
18 note in my mind. I would have said, really? You know, I would
19 have thought, wow, this could be important to me, and I think I
20 would have noted that.

21 Q. Okay.

22 A. But and that's what I mean by visibly shaken. He was,
23 he was talking under his breath because there was a meeting going
24 on, and it was a hushed conversation that he and I had, very
25 brief. And he, he -- a bit of a shimmy in his voice is what I

1 mean, kind of visibly shaken in that regard, just talking quiet
2 and, you know, obviously upset by this thing.

3 Q. Okay.

4 A. It was very upsetting to him.

5 Q. One last question from me, Captain. The -- would you
6 attribute that behavior to the incident or were there other
7 factors that you would attribute that behavior to?

8 A. I would certainly attribute it to the incident. I would
9 have been really shaken up too if I had been through what he'd
10 been through. I mean that is just the most terrifying thing that
11 could happen to a pilot, and, you know, it's horrible, and he, you
12 know, the oil was going by Pier 9 that day and he'd seen it, and,
13 you know, that's the stuff that we as pilots are just terrified
14 will happen in our career, and it happened to him now. And so I
15 would, I would definitely attribute his -- this shaken up demeanor
16 as, you know, he's in trouble and he feels it, and he needs to,
17 you know, it took some time to calm down after that, and he hadn't
18 had that opportunity. He came right up to the meeting, you know.

19 Q. Okay. Captain, I'm going to -- bear with us a second.
20 We promise to continue to try and expedite this interview. I'm
21 going to basically change positions so that the next person
22 conducting the interview portion will come over here and get to
23 the mic, and that will be the Coast Guard representative, Mr. Ross
24 Wheatley.

25 INVESTIGATOR ROTH-ROFFY: I'll ask when you come on you

1 basically identify yourself for the record, okay.

2 Bear with us, Captain.

3 INVESTIGATOR WHEATLEY: Good morning, Captain. My name
4 is Ross Wheatley. As he indicated, I'm the senior investigator
5 here at Sector San Francisco. I certainly appreciate your time
6 today. I actually don't have any additional questions for you at
7 this point, so I'm going to hand you off to the next member, which
8 is Mr. Holly from the State.

9 UNIDENTIFIED SPEAKER: Okay, Ross.

10 MR. HOLLY: Good afternoon, Captain. My name is Rick
11 Holly with the Department of Fish and Game, Office of Spill
12 Prevention Response. And actually I don't have any questions
13 either. So thank you for your time.

14 And the next person in line here will be a -- somebody
15 that you know, Captain Moloney.

16 CAPTAIN NYBORG: Okay, Mr. Holly. Thank you.

17 MR. HOLLY: Thank you.

18 BY CAPTAIN MOLONEY:

19 Q. Hey Einar, I'm not going to come over to the phone.
20 I'll just yell at you. I'm Moloney, Pilot Commission.

21 A. Yes.

22 Q. You know well who I am. Only one question. You said
23 early on in your conversation we got aboard. Were you using the
24 royal we or did you have a trainee with you?

25 A. No, I was alone.

1 Q. Okay.

2 A. I believe I, I believe I was alone. I'd have to look,
3 but no, that was, that was a solo voyage. I was, I was alone on
4 that one.

5 Q. Okay. That's all I have. Thank you.

6 A. Okay.

7 INVESTIGATOR ROTH-ROFFY: Stand by one second, please.

8 BY CAPTAIN AGA:

9 Q. Hi Captain. My name is Captain Aga. I work with Fleet
10 Management. We are contributing to the investigation in a
11 technical manner.

12 A. Captain who, please?

13 Q. Captain Aga. I'm not from the United States. I've come
14 from overseas. So --

15 A. I see. Would you spell your last name, please?

16 Q. Aga, A-g-a.

17 A. Okay. I got it. Thank you, sir.

18 Q. Just one question. Did you ever look at the radar
19 picture when you came in? I know it was a clear visibility and
20 most pilots will always do a visual transit normally. Did you get
21 a chance to look at the radar and did you see the radar working
22 properly?

23 A. Yes, sir, I did look at the radar on a number of
24 occasions, and it was in larger scales out at the pilot area, and
25 probably in the six-mile range initially and then down to maybe a

1 three-mile range, but it was a cursory glance. It was -- if the
2 heading flasher was true to my inbound course, it was -- that's
3 something I always check, so that if I get into a situation I'm
4 not relying on bad information. It was unexceptional. It was a
5 decent radar with a decent picture, and it was -- I didn't have
6 any problems operating it, and I had no questions about it because
7 I really didn't need it. But, yes, I would say that I, I did use
8 it and but didn't rely on it so to speak.

9 Q. Okay, sir, thank you very much. I --

10 A. You're welcome.

11 MR. BOWLING: Captain, this is Larry Bowling again.
12 Bear with us. We have one last representative. It's a Coast
13 Guard District -- can you hear us okay, by the way?

14 CAPTAIN NYBORG: I can, yes.

15 MR. BOWLING: Okay.

16 BY MR. SCHAEFER:

17 Q. Good morning, Captain. It's Scott Schaefer, Coast Guard
18 District 11, Incident Management.

19 A. -- Scott. How are you?

20 Q. It's been a long time, sir.

21 A. Did we meet at --

22 Q. I was in vessel traffic for six years back years ago.

23 A. Oh, I got you. Okay. I got you, Scott. Go ahead,
24 please.

25 Q. Okay. So if you were driving a vessel out in the fog

1 from Oakland planning on using Delta Echo span during a flood, can
2 you give us some of your thoughts like, you know, do you have a
3 typical course over ground you like to make through the bridge or
4 a distance from YBI or what are you thinking about and how are you
5 doing that?

6 A. There's a lot of considerations of course. Flood --
7 changes everything by as much as 20 degrees on courses. So it's
8 not an area where I memorize a course or rely on my memory as a,
9 as a course to come in or go out of Oakland. They're basically
10 not useful as far as -- it's such a dynamic area with a lot of
11 current moving through it that it's, it's a visual exercise and
12 not a mathematical one that, you know, you could do it easily say
13 with a Coast Guard 41-footer, you can go point-to-point and change
14 course at a turn bearing and come to a new course. That's not the
15 way these ships happen. We'll go transit that area and, you know,
16 you're -- you've got 1,000 feet of ship going through this
17 sideways current of up to 2, 3 knots, and it's just a -- it's a,
18 it's a exercise in motion and sliding sideways and adjusting your
19 course as necessary to pick up the next reach that you know you
20 should be on. So, no, there aren't things that I rely on, courses
21 I rely on by memory. As far as things that -- yeah, outbound on
22 the flood, you know, it's -- that's, that's a more doable job than
23 outbound on the ebb, you know. It's a little more straight
24 forward because the ship likes to steer into a current. And as
25 you, as you come around, there's a shadow of current there Yerba

1 Buena Island where the flood it doesn't impact the vessel so much.
2 And as you -- let's say you depart Oakland 56 outbound, you've
3 got flood tide right off the bat. Very little in the, in the
4 harbor, and then as you head out towards Berth 38 Oakland, you
5 come into more and more flood which is setting you sideways. So
6 you hold your course more to the North or you hold on to your
7 course longer before you start coming over because the flood will
8 set you sideways to the South out of the channel. And then you
9 enter an area where the, the flood coming down the East side of TI
10 starts pushing on your quarter more than your bow because your bow
11 enters a bit of a shadow, and so the ship starts to want to come
12 right, you know. And you pass through that shadow, and then you
13 start feeling the new flood that's coming through Delta Echo span,
14 and you, you know, on the West side of Treasure Island. And it
15 hits you bow and has the opposite effect. It wants you to go
16 left. And now you're stern is in slack water and you flood on
17 your starboard bow, and it's more of a chore. You've got to, you
18 know, watch that and then crank her around. But the ship, as the
19 ship transfers out into this flood tide, you're pivot point on the
20 ship is well forward, and so that flood tide is affecting you in a
21 way that she, she readily comes right. She usually steers right
22 fairly easily during the flood current. Whereas during ebb
23 current it's more of a struggle to, to get her to round up to
24 Delta Echo Tower. And hold on one second, please. Sorry. Had to
25 make that phone -- so you're asking me about courses and such, but

1 you know, I'm trying to describe a very fluid situation, and
2 you're passing through zones, and like for example the flood tide
3 changes at, changes at high and low tide there at the Berth 38,
4 but you'll still have ebb tide down in Delta Echo span. So it's
5 not -- the flood doesn't just start all across the Bay at the same
6 time. You're passing from one zone out into another zone where
7 there might be a different current until all, until all of the bay
8 is flooding a few hours into this whole thing. Are you, are you
9 understanding what I'm getting at here as far as a very fluid
10 situation?

11 Q. Yes, Captain, get that, and then just trying to get --
12 then for navigation are you trying to keep a certain distance off
13 YBI or what are you looking at then?

14 A. Yeah. You round that and you can use the radar and a
15 VRM at 33 to go through Delta Echo and but you know I'm -- so,
16 yeah, if you're, if you're doing it in zero visibility, that, that
17 would be a good aid to use is the radar. If you had a good clean
18 picture and you can see the island clearly, you can use the VRM
19 and round up into that flood, keeping a distance off of TI.

20 BY MR. BOWLING:

21 Q. Okay, Captain, Larry Bowling here with the NTSB. The
22 members present don't have -- we have no further questions. I
23 would like to close with one question. How many times in your
24 estimate or your estimation would you say you have been through
25 the, through the bridge span there between D and E?

1 A. How many times all together?

2 Q. Yes, since you've been operating as a bar pilot here in
3 San Francisco.

4 A. Let me guess. Let's say I do, I'd say 50 percent of my
5 work goes through Delta Echo span, and I'd say maybe I handle 600
6 ships a year and maybe 300 of those a year in 13 years, I'd say
7 thousands, you know. Do the math. I'm not sure.

8 Q. Okay.

9 A. That's, that's many thousands of times.

10 Q. Okay, and that's fine. I'm just trying to get an idea
11 of your experience level.

12 A. Yeah.

13 Q. Have you ever been involved in any allisions on this
14 span or any other spans?

15 A. Negative.

16 Q. Okay. What about any near misses on any of the spans in
17 the San Francisco --

18 A. As far as the bridge tower?

19 Q. Right.

20 A. No. It's -- I've never had a near miss. I'm -- every
21 time and have not -- I can't say that I've had one where, oh, gee,
22 I almost hit that, you know?

23 Q. Right. What about transits through the bridge span
24 Delta Echo or other spans on the same bridge in low visibility or
25 other conditions which may present a little bit of a more riskier

1 maneuver than, you know, your flat water, calm winds?

2 A. I didn't detect a question in there. Are you asking me
3 how many times I've done --

4 Q. Yeah, have you -- yeah. If you were to tell me -- if I
5 were to ask you the number of transits through there and when
6 you've had situations presented environmentally with regard to the
7 weather, be it winds or reduced visibility, have you had any
8 experiences there that you'd like to share with us, particularly
9 any related to low visibility situations?

10 A. We come through Delta Echo and other, other spans
11 frequently on, on poor visibility, but not to the harbor. Usually
12 it's a matter of getting down to anchorage to, to wait it out. I
13 prefer to wait at Anchorage 7 inbound so that I can see the
14 visibility at the bridge as it clears and I have a straight shot
15 into the harbor from my normal approach angle versus being down
16 the in the South Bay. So if we're moving a tanker say from
17 Martinez down to Anchorage 9, it's quite frequent that fog will
18 get us somewhere along the way, but that's a different approach,
19 you know. You're not doing a big turn as you go under the bridge.
20 You're lining up your towers and you're approaching them on the
21 same heading for a long period of time and you're, you're squaring
22 away on the, the RACONS which are notoriously intermittent, right,
23 and it's a very -- it's a much more cut and cleared operation than
24 trying to leave Oakland or enter Oakland in the fog. So I can't
25 say I haven't left Oakland in a fog. I can tell you I have once,

1 and it was memorable, and it's not something, you know, but it can
2 happen to anybody, you know. You can depart with a quarter mile
3 or half a mile, and it can be zero when you get there. So yeah,
4 it stands out as one, one fog sailing, and, and many transits
5 through the bridge, however not going into Oakland with fog.

6 MR. BOWLING: Okay. Stand by one, Captain, for me.

7 Any further questions, gentlemen?

8 MR. BOWLING: Okay, Captain, we have wrapped it up. We
9 kept you a lot longer than we should have. I'm showing about 53
10 minutes on the timing device. I appreciate you taking the time on
11 your limited day off there to talk with the, the parties here.

12 CAPTAIN NYBORG: Okay, Mr. Bowen, Bowling, there. And
13 hopefully this will all get squared away and figured out there.
14 But if anything good can come of this, it would be some
15 standardization of those ECDIS displays so it became very obvious
16 where the bridge towers are. And I don't see that happening
17 because there are so many competing forces in that business,
18 different people making those -- that equipment. And it seems
19 just forever and a day to get changes in our, in our world, and
20 they're only now becoming available to use on maybe 50 percent of
21 the ships. And what's the delay? The technology is out there.
22 Why, why aren't ships required to have this? You know, people ask
23 me do you use a laptop? And so far I haven't. I probably will
24 now, but, you know, I don't bring a radar aboard. Why do I have
25 to bring an ECDIS aboard? And, and even if you plug into their

1 pilot outlet with your laptop, then you're relying on information
2 as I said on that other ship, I took out a -- for that, a terrible
3 offset error, and I'm going to read the same information that that
4 antenna is providing, you know.

5 MR. BOWLING: I understand.

6 CAPTAIN NYBORG: We really need some help in this whole
7 thing, and I would appreciate, you know, some help in that regard
8 if at all possible from -- the outcome of this could help us get
9 things squared away with ECDIS machines.

10 MR. BOWLING: Captain, your input is noted, and that may
11 very well be something that the Investigator in Charge looks at
12 down the road, and we may get back in contact with you, you know,
13 at a later date. Again, I appreciate your contribution and
14 certainly appreciate the surf report you gave me off the record
15 earlier. So we'll let you get back to it, and you have a good
16 afternoon.

17 CAPTAIN NYBORG: Okay, gentlemen. Thank you.

18 MR. BOWLING: Thank you all.

19 (Whereupon, the interview in the above-entitled matter
20 was concluded.)

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CERTIFICATE

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

IN THE MATTER OF: The Investigation of the Cosco
 Busan/Bridge Allision
 San Francisco, California
 Interview of Captain Einar Nyborg

DOCKET NUMBER: DCA-08-MM-004

PLACE: San Francisco, California

DATE:

was held according to the record, and that this is the original,
complete, true and accurate transcript which has been compared to
the recording accomplished at the hearing.

Katherine Motley
Transcriber