

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

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Investigation of: *

*

FIRE AND SINKING OF THE *CONCEPTION* *

WITH LOSS OF LIFE NEAR * Accident No.: DCA20FM003

SANTA CRUZ ISLAND, CALIFORNIA, *

SEPTEMBER 2, 2019 *

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Interview of: ANDREW LACHTMAN, Staff Engineer
United States Coast Guard

Wednesday,
December 4, 2019

APPEARANCES:

BART BARNUM, Marine Accident Investigator
National Transportation Safety Board

ANDREW EHLERS, Marine Accident Investigator
National Transportation Safety Board

CAPT JASON NEUBAUER, Chairman, Marine Board of
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United States Coast Guard

ADAM TUCKER, Investigator in Charge
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United States Coast Guard
(On behalf of LT Anderson)

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I N T E R V I E W

(1:05 p.m.)

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2
3 MR. BARNUM: Okay. This is Bart Barnum with the NTSB. It's
4 December 4th; 1305. I'm at Coast Guard Headquarters. This
5 afternoon, we're conducting an interview with Mr. Andrew Lachtman
6 of the Coast Guard MSC.

7 I want to go around the room and everybody can introduce
8 themselves starting with you.

9 MR. EHLERS: Drew Ehlers, NTSB.

10 MR. TUCKER: My name is Adam Tucker. I'm with the National
11 Transportation Safety Board.

12 MR. LACHTMAN: Andrew Lachtman, staff engineer, at the Coast
13 Guard Marine Safety Center, Hull Division. Spelling A-n-d-r-e-w,
14 L-a-c-h-t-m-a-n.

15 LT [REDACTED]: LT [REDACTED], legal representative for the
16 witness.

17 CAPT NEUBAUER: CAPT Jason Neubauer, Chairman, MBI.

18 MR. BARNUM: And on the phone, do we have Mr. Muise and

19 [REDACTED]?

20 MR. MUISE: Marcel Muise with NTSB.

21 MR. [REDACTED]: Yes, good afternoon. This is LT [REDACTED].
22 I'm a national technical advisor at the Coast Guard Investigations
23 National Center of Expertise.

24 MR. BARNUM: Okay. Great. Thank you.

25 Okay. May I call you Andrew? Is that --

1 LT LACHTMAN: Yes.

2 INTERVIEW OF ANDREW LACHTMAN

3 BY MR. BARNUM:

4 Q. Andrew, could you just start us off, tell us a little bit
5 about yourself, your position. I know you just did, but can you
6 go over that again and job duties, what you do here?

7 A. Yes, absolutely. So I am a staff engineer at the Coast Guard
8 and Marine Safety Center in the Hull Division, Small Vessel
9 Branch. My primary responsibilities include plan review and
10 approval for small passenger vessels certificated under 46 C.F.R.
11 Subchapter T, towing vessels certificated under 46 C.F.R.
12 Subchapter M, as well as small amounts of other vessels including
13 small cargo vessels, sailing school ships, other small vessels of
14 that nature. My subject areas of expertise include structures,
15 stability, arrangements and structural fire protection.

16 Q. Great. And what kind of schooling did you have for this
17 position?

18 A. So I have a bachelor's of science in naval architecture and
19 marine engineering from Webb Institute and a master's of science
20 in mechanical engineering from UCLA. And I've been at the Coast
21 Guard Marine Safety Center for approximately 2 years.

22 Q. Okay. In the same capacity as you are now, the same job?

23 A. Yes, I've been in my same role for 2 years at the Coast
24 Guard.

25 Q. Okay. What did you do previously?

1 A. The position prior, I was working for the U.S. Department of
2 Transportation, Maritime Administration, in their Division of
3 Maintenance and Repair, and prior to that, I was a naval architect
4 in private industry for approximately 5 years working for a small
5 naval architecture firm, Bruce S. Rosenblatt and Associates.

6 Q. Where are they out of?

7 A. So I worked for multiple offices. There's one in Oakland,
8 California, and another in Arlington, Virginia.

9 Q. Could you explain to me, I just -- I'm somewhat familiar, but
10 not intimate, the structure, the MSC, and you said you're the hull
11 division.

12 A. Yes.

13 Q. How many divisions are there? Are they subdivided?

14 A. Yep, I can do that for you. So the Marine Safety Center is
15 an independent unit of the Coast Guard. It is located here at
16 headquarters. There are four divisions. One is the Hull Division
17 of which I'm a part, which is subdivided further into the major
18 vessel branch and the small vessel branch, the small vessel branch
19 of which I'm a part. Then the other divisions are Engineering,
20 which covers mechanical and electrical branches, as well as a
21 Tonnage Division and a Vessel Security Division.

22 Q. What is your hierarchy, your command structure look like?
23 Who is your boss? Do you have subordinates?

24 A. Yes. So I don't have any direct subordinates. I'm a staff
25 engineer. I report to the branch chief of the small vessel

1 branch, who reports to the hull division chief, who then report to
2 the executive officer and the commanding officer.

3 Q. Is that structure typical for each branch?

4 A. Yes. The branches are laid out similarly. Some have more or
5 less engineers. So the hull division and the engineering division
6 are the two largest whereas the vessel security division and
7 tonnage division are not subdivided into branches because they're
8 smaller.

9 Q. Okay. Just curiosity, where is the makeup of military versus
10 civilian within your shop?

11 A. It's in the Marine Safety Center approximately half active
12 duty military and approximately half civilian.

13 Q. Okay. This question, I'm curious of how your role at the MSC
14 -- what is your relationship with the individual sectors, the
15 boots on the ground if you will? How is your -- how's that
16 interaction made and how is it, you know, continued? Is it daily
17 you're speaking to these people or how do you -- is it emails, on
18 the phone? How is that done?

19 A. I'd say it's a combination of emails and phone calls. So
20 within Subchapter T certificated small passenger vessels, the
21 OCMI, officer-in-charge, marine inspection, at local sectors.
22 They're responsible for the project management, for plan review.
23 They have the final authority for plan review and approval,
24 although much of that is given to the -- delegated to the MSC to
25 conduct on their behalf. So they are the ones who are primarily

1 responsible for managing a plan review project for Subchapter T,
2 small passenger vessels.

3 So we are reviewing on their behalf and so they will work
4 with us to determine which plans they are reviewing and which
5 plans the Marine Safety Center is going to review, and then we'll
6 have regular discussions with them and with submitters in the
7 industry in order to receive the plans and review them and provide
8 either approval correspondence or other correspondence returning
9 plans and other submissions for revision, requesting additional
10 information or drawings, calculations, et cetera.

11 I have a document here that can hopefully better explain the
12 plan review process for Subchapter T. So this is a Marine Safety
13 Center MTN 1-03, which helps to explain the process. On the third
14 sheet, there's an enclosure which shows a breakdown that would be
15 completed by the vessel representative and the OCMI representative
16 indicating which systems are to be reviewed for plan approval and
17 who will be the reviewing authority, whether that's the OCMI or
18 the Marine Safety Center. That also leads to plan review guides
19 to help further demonstrate what is required for plan review.

20 Q. Okay. This is great. Thank you. That's kind of moving
21 right into my next line of questions for you on plan review
22 process and their approval. I think you might have touched base,
23 and might explain it better, if you could just tell me, like what
24 determines whether the approval is done locally or if it's sent to
25 you? Is this the guidelines you speak of that says, okay, this

1 major modification is going to go over to the experts or we can
2 take care of it locally here. Who makes that decision?

3 A. So I think that's sort of two questions, and I can answer
4 them separately. One of them is in terms of plan review, but you
5 also said major modifications.

6 Q. Yes.

7 A. So I'll start with plan review in general is up to the OCMI
8 who is to be reviewing them under 46 C.F.R. Subchapter T vessels.
9 Again, I want to preface that this is specifying on Subchapter T,
10 small passenger vessels, whereas the process may be different for
11 vessels certificated under different subchapters. So focusing on
12 Subchapter T vessels, which the *Conception* was, so that is up to
13 the OCMI as to who will be reviewing those plans.

14 You mentioned major modifications. The Marine Safety Center
15 is responsible for conducting all major conversion determinations
16 for the Coast Guard. So if there is a major conversion
17 determination to be made, the Marine Safety Center is the sole
18 authority for making that determination.

19 Q. And who determines if it's major or not?

20 A. The commanding officer at the Marine Safety Center has the
21 final authority for that decision.

22 Q. So if I'm the boots on the ground, the local OCMI, I
23 initially have to make the request --

24 A. Correct.

25 Q. -- that he determine if it's major or not.

1 A. Correct.

2 Q. For the plan reviewers, for the plan reviews that come to you
3 here at headquarters, is there any -- do you receive any kind of
4 training to review these or how are you trained to complete your
5 job here?

6 A. Yes. So all staff engineers at the Marine Safety Center go
7 through a qualification review process for the different systems
8 that they will responsible for reviewing. Within our branch,
9 there are specifically three that we receive detailed training on,
10 and those would be a general Marine Safety Center wide
11 familiarization training, a stability training and a structures
12 training. And so those are conducted throughout the first 6
13 months to a year as the staff engineer enters the Marine Safety
14 Center in order to become qualified.

15 Q. So I would assume your hull division, your training is
16 different than the mechanical and electrical division?

17 A. Absolutely.

18 Q. Could you elaborate on theirs at all? Is it in addition to
19 yours or, you know, you say you have three. Do they have --

20 A. I don't know the specific ones that they have qualifications
21 for. I'm not sure how they delineate that.

22 Q. Okay. Their process would be the same though in regards to
23 the OCMI sending a plan review to them as opposed to say it was an
24 electrical modification and yours is a hull modifications.

25 A. Correct.

1 Q. It's the same process for determining whether it would be
2 major?

3 A. Correct, yes.

4 Q. Okay. All right. So when the owner of a vessel is
5 completing -- let's just say he's doing a modification -- changing
6 his generator to a different type or whatever. Or he's redoing
7 his electrical system. He's required to submit plans for that
8 plan review?

9 A. Correct.

10 Q. Who can create those plans? Is there a standard that need to
11 be met? Is there a standard or do you need to be a licensed,
12 professional engineer or electrician? Who make the --

13 A. No, there is no standard for who is required to submit plans.
14 They do not need to be certificated professional engineers,
15 although if a certificated professional engineer does submit plans
16 to the Marine Safety Center, they will receive an expedited review
17 through NVIC 10-92.

18 Q. Okay.

19 A. NVIC, Navigation Vessel Inspection Circular.

20 Q. But there's no less stringent of the review process. It's
21 just an expedited one?

22 A. Correct.

23 Q. Okay. So we've been talking a lot about this reading the
24 regulations, and there's kind of a question arisen between us,
25 and I'd like to know your opinion of the definition of replacement

1 in kind, and what that means to you. It's mentioned in the
2 regulations.

3 A. So a replacement in kind is not typically something that I
4 would be looking at, at the Marine Safety Center. That would
5 typically be something that the local inspector would be making a
6 decision upon, as they have seen what was being removed and what
7 is particularly being installed as they have the firsthand visual
8 information to be able to better make that determination.

9 Q. So that decision is made by the local inspector?

10 A. Correct, for the determination of minor modifications, in
11 kind replacements.

12 Q. What if it's a major modification like in kind, replacing
13 your main engine?

14 A. If the inspector or the vessel owner or a staff engineering
15 at the Marine Safety Center believes that it may be a major
16 modification, they can submit a request for a major conversation
17 determination to the Marine Safety Center for making a final
18 determination.

19 Q. But still that would fall in the arms of the local inspector
20 to determine whether that meets to be elevated?

21 A. Correct, to make that request.

22 Q. Okay. That answers a couple of questions I had. A couple of
23 these questions I had were pertaining to the electrical systems.
24 I know you're specializing in the hull. Do you have any crossover
25 with different modes of the MSC or do you deal with electrical at

1 all?

2 A. I have some background knowledge in my education but no
3 specific roles or responsibility for electrical reviews at the
4 Marine Safety Center.

5 Q. So after someone has submitted the plan review and it's been
6 approved, I assume you send a copy to the submitter?

7 A. Correct.

8 Q. Do you also send a copy to the Sector?

9 A. Yes, the OCMI is copied on all plan review correspondence.

10 Q. Do you also keep a copy here?

11 A. Yes, we keep electronic copies of all plan review
12 correspondence both internally as well as on the Coast Guard
13 database.

14 Q. And how long do you keep those for?

15 A. Based upon the Federal Records Administration.

16 Q. So if we were to ask for records from 20 years ago, would you
17 say you have those here?

18 A. It would depend based upon the file, file retention processes
19 and policies. We may or may not.

20 Q. Okay. So if I'm the owner of a vessel and I'm required to
21 submit a plan review, I have the right to appeal that, correct?

22 A. Correct.

23 Q. How does that process work?

24 A. The appeal process is better specified in the CFR. It
25 depends upon what type of vessel it is and when in the process it

1 was and what decision it was. There's various appeal processes
2 depending upon whose decision is being appealed and at what stage,
3 whether the vessel is a new construction, not yet certificated or
4 whether it's a vessel that's currently certificated.

5 Q. So let's say it's a current certificated vessel. Would you
6 have the potential of reviewing that appeal or is that determined?

7 A. No. So for a certificated vessel, that appeal process would
8 go -- would be originated through the OCMI, and I don't recall
9 exactly who it goes to up the chain. I know that some appeals go
10 to the Coast Guard District level which oversees some multiple
11 sectors. Some appeals go to the Marine Safety Center and some
12 appeals go to CVC, the Office of Commercial Vessel Compliance.

13 Q. Same question regarding retention of these appeal letters.
14 If you received them here, they would be retained for a certain
15 number of years depending on the regulations?

16 A. Correct. And certain different kinds of plans have different
17 timelines based upon how long we would retain them for different
18 vessel types as well.

19 Q. Okay. The other questions I had were pertaining to the
20 electrical systems. So I don't believe they can be answered here.
21 So at this point, I'm going to turn it over to my colleagues here,
22 and see if they have any follow up questions, but thank you very
23 much.

24 A. Okay.

25 BY MR. EHLERS:

1 Q. Hi, how you doing? I just have a couple really simple follow
2 ups I think. Once a plan has been reviewed, you mentioned
3 sometimes it can be reviewed at the sector level. Sometimes it
4 could be reviewed here at the MSC level. Once they've been
5 approved, is there -- and the records, the plans you mentioned
6 being held. If it's approved at the local level, does MSC keep
7 any of the copies of the plans or anything?

8 A. No. So the plan retention is the responsibility of the
9 OCMI --

10 Q. Okay.

11 A. -- even for plans we approve.

12 Q. Oh, okay. Okay. All right. Is there ever a -- well, first
13 of all, for a plan review, is it strictly a regulatory review?
14 And what I mean by that is if you're looking at, for instance, a
15 whole plan or such like that, if it's a poor design, or maybe even
16 an unsafe design, but it meets all regulations, can you take any
17 action or is it strictly based on what's regulated?

18 A. We are reviewing plans based upon the regulations in the Code
19 of Federal Regulations as well as any other Coast Guard policy.

20 Q. Okay. And where are those other policies contained?

21 A. They're different policies. Most of them I believe are
22 promulgated through CVC, the Office of Commercial Vessel
23 Compliance.

24 Q. Okay. And is that through NVICs or other --

25 A. Some through NVICs. NVICs tend to be the primary means for

1 promulgating Coast Guard inspection policy.

2 Q. Okay. As far as existing vessels, other than for a major
3 alteration, major conversion, is there any reason -- is there ever
4 a reason for a plan review to be done or reviewed?

5 A. So specifying back to -- for Subchapter T, small passenger
6 vessels --

7 Q. Yeah, yeah.

8 A. -- no, that would not come to the Marine Safety Center,
9 although that might be done by the local inspector depending upon
10 the size of the modification.

11 Q. Okay. And for OCMI's, it sounds like they have a lot of
12 leeway especially for small vessels. OCMI's, do they have an
13 engineering background do you know?

14 A. They may or may not have an engineering background but they
15 do have inspections training background. The engineering
16 background will vary and that leads to whether they may reach out
17 to us to do the plan review on their behalf depending upon their
18 expertise.

19 Q. Okay. All right. Thanks. All right. That's all I have for
20 now. Thanks.

21 BY MR. TUCKER:

22 Q. All right. Thanks. Thanks for talking with us. As
23 mentioned, my name is Adam Tucker. I'm also with the NTSB. I
24 have a few small follow ups, and it comes with a disclaimer of I
25 ask some really dumb questions, and because reading this stuff is

1 very complex for me.

2 A. Understood.

3 Q. So thanks for being here and thanks for being able to explain
4 at least some of it. Further, my questions are related to
5 Subchapter T vessels, and in particular, the *Conception*. I know
6 you may not have reviewed anything from the *Conception*. I don't
7 know whether or not I'll ask you that --

8 A. Okay.

9 Q. -- but the *Conception* being, of course, built in 1981, 75
10 foot in length, 97 gross tons. So I just want to get that in the
11 air, so anything I ask you is in that realm.

12 A. Yes.

13 Q. And, first of all, again this is all unknown to me. What
14 type of plans would have to be submitted back in 1981 for the
15 *Conception* for approval or sorry, for a review?

16 A. So the required plans in 1981 is specified in the CFR and as
17 reference to *Conception*, under 46 C.F.R. Subchapter T, and
18 referring to the regulations at the time as quote, "old T," to
19 differentiate from the regulations that went into effect in 1996
20 as quote, "new T," in order to help differentiate that as we go
21 forward.

22 Q. So, and I'm looking at some of the like -- this old T that
23 I'm looking at right here --

24 A. Yes.

25 Q. -- so I see, but again hence, why the dumb questions come up,

1 because I see required plans but then not more than 150
2 passengers, and then there's a S behind it. And I understand that
3 S is not applicable to the *Conception*. So like when I look at
4 like midship section, outboard profile, inboard profile,
5 arrangement of decks, machinery, electrical, fuel tanks, is --
6 would you know, like of these required plans to be submitted, are
7 they also applicable or is there different regulations that I have
8 to go to find out what plans that need to be submitted?

9 A. If you don't mind I'm going to look at my copy of the
10 regulation.

11 Q. Yeah. Again, I'm just --

12 A. Make sure we're on the same page.

13 Q. Yeah. That's all I'm trying to figure out is what playbook
14 to be looking at.

15 A. Yes. Those plans specified in old T, subpart 177.05 plans,
16 those would be the ones required to be submitted as it was a,
17 quote, "S old T vessel not carrying more than 150 passengers."

18 Q. Okay.

19 A. The differentiation there would be between S and L vessel is
20 further described after that based on the type written in
21 Subchapter T which is a nomenclature that is no longer used in the
22 new regulations.

23 Q. Okay. So is it -- as applicable to this then, so S and L are
24 no longer utilized?

25 A. S and L were broken out into -- so, in general, the S vessels

1 are what is covered under "new T" for the new regulation and L
2 vessels were moved into a new subchapter, Subchapter K --

3 Q. Okay.

4 A. -- for vessels under 100 gross tons but carrying more than
5 150 passengers, were separated into a different regulatory
6 subchapter in order to avoid some of the confusion of going back
7 and forth between S and L type vessels.

8 Q. So L is K and S is the "new T."

9 A. Yes.

10 Q. Okay.

11 A. For the vessels it is applicable to, yes.

12 Q. Thanks for clarifying that. And then so looking at midship
13 section, outboard profile, inboard, arrangement of decks,
14 machinery installation, electrical. So these would have had to
15 have been submitted, of course, back in '81 I presume. Is that
16 correct?

17 A. Yes, with the caveat of Subparagraph C, quote, "The officer
18 in charge of marine inspection may accept specifications,
19 sketches, photographs, lines, drawings or written descriptions in
20 lieu of any or all of the required drawings provided the required
21 information is adequately detailed," end quote.

22 Q. Okay. And I know '81 was a long time ago, way before email
23 and anything like that. So when this correspondence took place
24 back then, is there a repository for all this information? Is it
25 archived somewhere or again related to the *Conception*? Would you

1 know where that is?

2 A. I would recommend looking with either the Sector or the
3 District that was overseeing the inspection and construction,
4 Sector LA/LB or District 11, but again that would all be retained
5 in accordance with our federal records policies.

6 Q. Okay. But you mentioned as well the MSC. Did the MSC even
7 exist --

8 A. No, it did not.

9 Q. -- in '81?

10 A. It did not. The MSC was formed in 1986 as a consolidation of
11 MSO, Marine Safety Offices that were in various locations
12 throughout the country.

13 Q. Okay. So that was a consolidation.

14 A. Right.

15 Q. So before, like back in the '80s, it was, sorry, in the early
16 '80s, it was MSOs.

17 A. Correct.

18 Q. So MSO would have handled the *Conception* or the --

19 A. Sector.

20 Q. -- sector.

21 A. Okay.

22 Q. I learned something new. And so everything consolidated then
23 to the MSC as it is today --

24 A. Correct.

25 Q. -- in '86. Okay.

1 LT [REDACTED]: To clarify, the MSOs were consolidated.

2 MR. TUCKER: Yes. Thank you.

3 BY MR. TUCKER:

4 Q. The MSOs were consolidated to the MSC, and there's only one
5 MSC and that is in -- at headquarters in DC.

6 A. Yes.

7 Q. Okay. All right. So with all these MSOs around, and I know
8 it's probably -- it is way before your time but did all of those
9 people have to have certain qualifications and the same type of
10 quals that you guys have to have today or --

11 A. I'm not familiar with what the qualification requirements
12 were at the MSOs.

13 CAPT NEUBAUER: This is Captain Neubauer. This would be a
14 great question for Captain Edwards. He can talk about the MSO
15 consolidation and which parts went to sector and which parts went
16 to MSC.

17 MR. TUCKER: Okay. Thank you.

18 CAPT NEUBAUER: He's got the history on that.

19 BY MR. TUCKER:

20 Q. And a lot of this is just kind of curiosity.

21 A. Understood.

22 Q. So if you don't know, you don't know, and as I said, that's
23 way before anybody's time. All right. So I guess related to
24 *Conception*, and if you don't know, it hasn't rolled across your
25 desk, has anything rolled across your desk or any of your --

1 within the MSC office related to plan review of the *Conception* or
2 any of the Truth Aquatics vessels?

3 A. For *Conception* in particular, I know that none of the plan
4 review was conducted by the Marine Safety Center. I do not know
5 about any of the other Truth Aquatics vessels.

6 Q. Okay. And we understood that the *Conception*, and it's
7 documented in MISLE (ph.), it did go aground a couple of years ago
8 as a result of a theft. And I think there was substantial hull
9 damage. I don't have the MISLE in front of me, but I'm curious.
10 When you go back on hull damage, and you're a hull guy, would that
11 be something that would roll through the MSC or again that's left
12 at the OCMI level?

13 A. It may at the request of the OCMI come to us. I am aware of
14 the fact that there may have been some hull damage through public
15 reporting, but none of that was provided to the Marine Safety
16 Center for review.

17 Q. Okay. Shifting gears, you mentioned as well, just plan
18 review in general, one thing we've learned is these "old T"
19 vessels for lack of better words, there seems to be a lot of them.
20 Curious, are you seeing a lot of plan reviews for new build T
21 boats specifically the live aboard type that we're dealing with in
22 this accident?

23 A. I'm sorry. Can you better specify what do you mean by live
24 aboard type?

25 Q. The vessels with overnight accommodations.

1 A. Overnight accommodations?

2 Q. Yeah.

3 A. We see some in Subchapter T, definitely not the majority, but
4 some Subchapter T vessels do have overnight accommodations as the
5 *Conception* did, but it is not the majority of Subchapter T vessels
6 that we see or review.

7 Q. Okay. So say, for example, if I'm a dive boat owner, or I
8 want to get into this business. I want to build a dive boat. I
9 want to build it to the Sub T requirements, and I'm just going to
10 build a boat. I got the napkin out. I drew something on the
11 napkins, and now I've contracted a shipyard. So tell me how that
12 works with MSC for the plan review. What -- how that would funnel
13 in through MSC and how that review -- basically walk me through
14 the process of a typical construction of a new vessel.

15 A. So the first step would be that the vessel representative, I
16 will say in that regard in order to allow it to be owner, builder,
17 design agent, et cetera, the vessel's representative will submit
18 an application for inspection to the OCMI within the vessel -- the
19 shipbuilder's area of responsibility. Sorry. Let me rephrase
20 that. The area of responsibility of the OCMI that the ship
21 building location is with him. Sorry. Does that clarify?

22 A. Yeah.

23 Q. Such that the OCMI may review and either accept or return for
24 revision that application for inspection which will then serve to
25 kick off both the plan review process and the construction

1 oversight process. Plans for review may be submitted to the OCMI
2 prior to construction or shortly after construction has begun for
3 vessels certificated under Subchapter T.

4 Q. Okay.

5 A. And then based upon the guidance in the MTN that I previously
6 provided, that specifies the systems that may be required as not
7 all Subchapter T vessels have the same systems or are required to
8 have all the same systems, depending upon the applicability. Then
9 the OCMI will work with the vessel representative to determine
10 whether the OCMI or the Marine Safety Center will be conducting
11 the plan review of that system.

12 Q. Okay. And so the OCMI will -- again, they make that
13 determination.

14 A. Correct.

15 Q. Okay. Do the OCMI's, and if you don't know, just let me know.
16 You mentioned like three qualifications you have to have in order
17 to do plan review.

18 A. Correct.

19 Q. Do the OCMI's have to have the same?

20 A. They have different levels of qualifications. Primary
21 qualifications for inspectors vary depending on the vessel class
22 that they are inspecting, whether it is a T boat, crews, et
23 cetera.

24 Q. Okay.

25 A. So they will have all different qualifications based upon the

1 vessel type primarily.

2 Q. Okay. And apologizes for again taking notes.

3 A. No, please.

4 Q. But this is a mental capture for me. And I think I know the
5 answer but just to confirm, I believe I read it in the regs, but
6 the *Conception* was not required to have a load line. Is that
7 correct?

8 A. I don't know the specifics of it, but the load line
9 regulations are within 46 C.F.R. Subchapter E --

10 Q. Okay.

11 A. -- and are based upon vessel length and whether its voyage
12 extends beyond the boundary line as also defined in 46 C.F.R.
13 Subchapter E, but I'm not familiar enough with the *Conception* to
14 know whether it was required to have a load line or not.

15 Q. That's fine. You mentioned also that you're in the small
16 vessels.

17 A. Correct.

18 Q. What's a small vessel?

19 A. So the Marine Safety Center's operating manual describes
20 which branch is responsible for reviews of what systems and for
21 which types of vessels. The small vessel branch of which I am a
22 part is responsible for reviews of small passenger vessels
23 certificated under Subchapter T, towing vessels certificated under
24 Subchapter M, as well as some smaller cargo vessels based upon the
25 length as well as school ships certificated under Subchapter R.

1 There may be some confusion in that Subchapter K vessels may also
2 be referred to as small passenger vessels. Those are vessels
3 under 100 gross tons but more than 150 passengers. Those are
4 reviewed by the major vessel branch.

5 Q. Okay. And the K vessels they used to be the L vessels?

6 A. I just want to make a slight correction. That might not be
7 100 percent overlap but that's in terms of us going S going into T
8 and L going into K. I'm not as familiar with the S/L breakdown in
9 Old T.

10 Q. Okay.

11 A. So in case that's not 100 percent, it's not directly
12 aligning.

13 Q. So you mentioned hull, and that's your specialty is hulls.

14 A. Yes.

15 Q. So what type of plans do you specifically look at in your
16 ballpark. The midship -- I assume it's not the electrical or
17 machinery.

18 A. Correct.

19 Q. Or maybe, I don't know.

20 A. So it would be plans, as an example, listed in old Subchapter
21 T 177.05 plans. That would be ones reviewed by the small vessel
22 branch, could include the midship section, outboard profile,
23 inboard profile, arrangement of decks. The others past that would
24 generally be reviewed by the machinery, or sorry, the engineering
25 division, either the electrical or machinery branch. And again,

1 at the discretion of the OCMI as to who is reviewing, either
2 locally or Marine Safety Center.

3 Q. Okay. And so within the hull, the realm of the hull again,
4 we've learned a lot since the *Conception*, and I think all of us
5 here are steel hull guys, but the *Conception* was not unique.
6 There's a lot of vessels out there, but it was a hull with glass
7 reinforced plastic around it.

8 A. Yes.

9 Q. But still was categorized within the regs as a wooden hull
10 vessel.

11 A. Yes.

12 Q. It presents some unique inspection challenges, but I know
13 you're not an inspector. The question is do you get involved in
14 the fire retardancy materials and the treatment of those hulls as
15 per the regs?

16 A. So the Marine Safety Center specifically involved with the
17 materials themselves, that would be overseen by the OCMI's, but we
18 are familiar with the materials and in terms of the fire retardant
19 resin requirements.

20 Q. Okay. I'm just curious. Like you're familiar, so how do you
21 evaluate that it meets the requirements or how is it evaluated?
22 Do they like have to send a sample and it goes to a burn lab or is
23 it just a matter of sending documentation showing that, you know,
24 meets requirements from a lab somewhere?

25 A. So for structure fire protection under 46 C.F.R. Subchapter

1 T, that is Section 177.410 and point (b) discusses composite
2 materials and the MIL standard requirements for testing of that
3 fire retardancy.

4 Q. To clarify, you're reading from the new Subchapter T?

5 A. Correct. I believe the requirements are similar in old
6 Subchapter T, and I can look that up as well, but -- I would have
7 to look at the details but old Subchapter T, it's in Section
8 177.10-5 under fire protection, also discusses old T testing for
9 fire retardancy. I would have to take a look at the wording of
10 the two to determine the differences, but my understanding is that
11 they're similar from old T to new T in terms of fire retardant
12 resin used in construction.

13 Q. Yeah. And I guess that's one of my curiosities again is, you
14 know, the vessel was built in '81 and is there -- we've understood
15 that fire treatment, fire retardant treatment does not last
16 forever, and if there's any type of future reevaluation of that
17 material. I don't -- is there? Are you aware of anything?

18 A. I'm not aware enough of that to know if there's any in the
19 future requirements --

20 Q. That's fine.

21 A. -- or continual testing of that. I'm not sure.

22 Q. Again, just in your line of work, do you -- we've already
23 read that the Yacht Safety Bureau and the American Bureau of
24 Yachts, let's see, Charters, just curious, do you have any
25 engagement or interaction at your level?

1 A. So I believe you're referring to ABYC. I forget what the
2 acronym stands for, ABYC. They do publish some standards for
3 guidance in design. Within the hull division, we do not actively
4 use them in very many areas. However, some of them are
5 incorporated by reference into 46 C.F.R. Subchapter T, for
6 specific areas. I believe those are more primarily in machinery
7 and electrical, but those standards are incorporated by reference.

8 Q. Okay. And staying in the ballpark with hull, I'm going to
9 open it up to either new T or old T, but is that in your ballpark
10 where you're because the combination -- within the combination as
11 below the main deck, within the hull, is that something that you
12 review the plans for?

13 A. Which plans in particular are you referring to?

14 Q. I would have to assume it would probably be under the
15 arrangement of decks or inboard profile.

16 A. Yes, that would be within our purview.

17 Q. Okay. And do you guys -- so if there's a bunk room, or as we
18 call it, sorry, on the *Conception*, the bunk room or I guess
19 passenger accommodations, sleeping space, does the MSC look
20 specifically at the arrangement of sleeping spaces and egress
21 routes?

22 A. For Subchapter T, if the OCMI has requested the MSC to do
23 that review, then, yes, we will look at the arrangements per the
24 requirements or regs. However, many arrangement plans are
25 reviewed locally by the OCMI's as those have details that are

1 easier for them to verify onsite in terms of things such as
2 lengths of passages, aisle widths, et cetera. That may be more
3 difficult to determine from a drawing that is showing them.

4 Q. Understood. Okay. They always leave me for last because I
5 ask the dumbest questions. So. In that ballpark, if you know,
6 you know, if you don't know, but is there any type of -- let's
7 see. You've got a certain amount of people in this space. I
8 believe the Subchapter T regs at 49 and less. So is there any
9 type of calculation evacuation analysis, kind of similar to what
10 they do in the large passenger vessels, where egress routes and
11 timings of people getting out of spaces and all that. Is there
12 anything done on the small vessel side that you're aware of?

13 A. Not that I'm aware of, and there are no specific regulatory
14 requirements for time to evacuate for Subchapter T vessels.

15 Q. Are there any specific requirements for certain individuals
16 occupying a certain footprint of space in an accommodation space
17 below the hull, or sorry, below the main deck?

18 A. Accommodation spaces in both new T and old T, although the
19 regs vary, do have regulations stating passenger or square feet
20 per passenger, bunk widths, et cetera.

21 Q. Okay.

22 A. Although they do vary some between the new T and old T.

23 Q. Yeah, there's a difference in new T and old T. Okay. I read
24 somewhere that calculations are also done. Do you do any
25 calculations?

1 A. Yes, I do calculations.

2 LT [REDACTED]: Calculations as far as what?

3 THE WITNESS: Yeah.

4 BY MR. TUCKER:

5 Q. I believe it was calculations for passenger space, occupation
6 in the decks. I think I read something, computations for deck
7 space and rail length. Do you do any of that?

8 A. Yes. Typically that is left to the inspectors but, yes, we
9 do it from time to time.

10 Q. Okay. So that's still at the inspector or OCMI level?

11 A. But they may request us to do that.

12 Q. Understood. Okay. Now a curiosity question. How are these,
13 based on the deck space rails and all that, how are these done?
14 Are they mathematically or graphically or --

15 A. A drawing is typically used in order to verify those rail
16 lengths, deck square footage and seats in order to determine the
17 passenger count for the vessel. I'm more familiar with the new T
18 regulations for that than the old T, but I could look up the regs
19 in old T if you'd like.

20 Q. No, that's fine. Let's see. I'll let my coworker, Marcel,
21 he's on the phone, I'll let him ask a couple. I always have a few
22 follow ups, but thank you very much.

23 A. You're welcome.

24 BY MR. MUISE:

25 Q. Yeah, this is Marcel Muise at NTSB. I just have a couple of

1 follow ups. You mentioned training earlier. Is there still a T-
2 Boat Plan Review School in your town for inspectors there in the
3 field?

4 A. So to my knowledge, there is a plan review component of the
5 MIC course, the marine inspector course. As being a pure civilian
6 and not a marine inspector, I have not attended that course. So I
7 am not familiar with the level of training involved in that, but I
8 believe there is plan review training within the MIC course at
9 Yorktown.

10 Q. Okay. Is it a dedicated course?

11 A. There is a separate plan review course that the Coast Guard
12 provides funding for that is contracted through a third party but
13 I do not believe that it is a required course to attend although
14 Capt Edwards of CVC could provide more information on Coast Guard
15 training courses as the Office of Commercial Vessel Compliance is
16 responsible for those areas.

17 Q. Okay. Thanks. I think there's still some confusion over
18 T/Ls and T/Complainant. Do you want to have that discussion now
19 or do you want to save that for later as well? So my
20 understanding is that T/L -- there is no length requirement for K
21 vessels. So T/Ls are not the same as a K vessel. Is that
22 correct?

23 A. Yes. When I said earlier that it was a direct, that was
24 probably not correct in terms of figuring out the exact carryover
25 from L to K. So if you would like, I could go more into detail in

1 the regs to find that cutoff.

2 Q. Right. So my understanding is there's special provisions in
3 old T that refer you to S and H and a couple others, but I called
4 those Super T once upon a time, and that became K. But T/Ls are
5 different. T/Ls go to the length issue, not passenger issue.

6 A. Yes, and again, there may have been a misstatement earlier as
7 to how exactly T/S and T/L converted into new T and K. So.

8 Q. Thanks. That's all I have.

9 MR. BARNUM: Captain Neubauer.

10 CAPT NEUBAUER: Okay. LT [REDACTED], do you have any questions?

11 LT [REDACTED]: This is LT [REDACTED] from the Investigation's
12 National Center of Expertise. I do not have any questions. Thank
13 you.

14 CAPT NEUBAUER: Okay. Thank you. This is Captain Neubauer.

15 BY CAPT NEUBAUER:

16 Q. I just have a couple of follow-up questions, Andrew. Does
17 the MSC, including staff engineers, ever visit the field units to
18 help inspectors with plan verifications or does your staff ever
19 travel?

20 A. Our staff does travel. I'd say it's probably not
21 particularly for plan review assistance. As an example, being in
22 the small vessel branch, we do travel some for certain stability
23 tests.

24 Q. Is that generally what it's for, stability -- simplified
25 stability tests?

1 A. Within the small vessel branch. However, the other branches
2 do travel to the field for different requirements that they're
3 responsible for, that I'm not sufficiently familiar with to be
4 able to state any further on.

5 Q. But there is a field element where you can help operations by
6 deploying?

7 A. Yes, all the different branches do different amounts of
8 travel based upon their responsibilities.

9 Q. Do you know if old T for wooden vessels with fiberglass
10 coatings, similar to the *Conception*, would have to have fire
11 retardant resin?

12 A. I'm not familiar enough with the *Conception's* construction to
13 know the amounts of or kinds of resin that have been used.

14 Q. Okay. But if a vessel is considered a wood vessel by the
15 Coast Guard, with like a coating of fiberglass, do you know, in
16 that type of construction, do we require fire retardant resin?
17 And if not, it's okay. I can ask it to another source.

18 A. Yeah. So I'd say the regs on the fire retardant resin in old
19 T and 177.10-5 state the requirements. I'd have to -- I'm not
20 certain enough to state --

21 Q. Okay.

22 A. -- whether that requirement would have been there for a wood
23 vessel with fiberglass --

24 Q. Right.

25 A. -- on the outside of it.

1 Q. And that's why I asked it. I believe that that applies to
2 fiberglass vessels only, and if it's a wood vessel, that it does
3 not have to be fire retardant. Maybe that's a question that if we
4 could -- if MSC could get back to us on that.

5 A. We can look into that further.

6 Q. Just to make sure. I want to clarify like -- because like
7 *Conception*, does it have to have fire retardant, that is the
8 question we're trying to drill down on.

9 A. Yeah, I don't have a concrete answer on that for you.

10 Q. Okay. And just to clarify, part of your arrangement review,
11 if you were doing a new T vessel, would be the sufficiency of
12 emergency exits from spaces. Is that correct?

13 A. We do review means of escape.

14 Q. If the OCMI asks you?

15 A. Yes.

16 Q. Okay. Now if you have a vessel with a larger area under the
17 main deck, so no windows, no egress points available except
18 upwards to the upper deck, and it emptied into the same space with
19 no division, under new T, would that be acceptable?

20 A. Again, that would be up to the final approval of the OCMI.

21 Q. Okay. So there's no definitive regulation on that. Is that
22 correct?

23 A. So under new T?

24 Q. Right, under new T. I'm curious if a new vessel can have two
25 egress routes from the lower space into the same space.

1 A. So in accordance with new Subchapter T 177.500(b), two
2 required means of escape must be widely separated and if possible,
3 at oppose ends or sides of the space to minimize the possibility
4 of one incident blocking both escapes. So there's nothing there
5 that would preclude the arrangement that you are postulating.

6 Q. I understand. So then the final authority for approval would
7 be the OCMI during the initial inspection?

8 A. Correct.

9 Q. Okay. I think that's all I have right now. Thank you.

10 BY MR. BARNUM:

11 Q. I just have a couple of follow up questions I want to touch
12 base on. This is Bart Barnum with NTSB again. I'm not trying to
13 beat a dead horse here, but for the plan retention, plan review
14 retention, I just want to clarify. So the OCMI is responsible for
15 retaining all plan review submittals, correct?

16 A. Right.

17 Q. On top of that, in addition, the MSC will retain any that
18 they receive.

19 A. We will retain plans that we review and approve for a certain
20 number of time based upon our federal record policy.

21 Q. So there could be some duplication there and you both could
22 be retaining the same plans?

23 A. We could, but the ultimate responsibility is the OCMI.

24 Q. Okay. Great. Thank you. I'm just curious. A lot of the
25 work appears to be done by the OCMI. What is your bulk of work on

1 a daily basis? What are you doing?

2 A. So within Subchapter T, again just trying to emphasize that
3 most of the points I'm making here are with regards to Subchapter
4 T vessels. We, in the small vessel branch, review regularly hull
5 structures for new construction vessels. We review stability
6 calculations submitted under Subchapter S which the Marine Safety
7 Center is required to do the reviews for the Subchapter S
8 stability calculations. Those would be the two primary review
9 areas that we are doing on a daily basis, would be structures,
10 primarily for new construction as well as stability, both for new
11 construction vessels or for vessels whose stability needs to be
12 reassessed based on Coast Guard policies.

13 Q. Okay. Have you been doing any plan review or have you seen
14 any plan review for egress hatches that are going through a water
15 tight bulkhead? Do you see many of those?

16 A. Can you clarify what you mean by egress hatch?

17 Q. Someone would want to install a penetration or emergency
18 escape hatch through a water tight bulkhead. They would obviously
19 need plan review to do that.

20 A. Correct.

21 Q. Have you seen any of those?

22 A. So for water tight doors for Subchapter T vessels, we do see
23 them from time to time and for new Subchapter T, those are in
24 179.330 and the Marine Safety Center does not have the authority
25 to approve the water tight doors specifically. Those either need

1 to go to approval by the OCMI or by the Office of the Commandant
2 through the Office of Commercial Vessel Compliance, depending upon
3 the different spaces that it's separating.

4 Q. That's all I have. Thank you.

5 MR. EHLERS: I have nothing further. Thanks.

6 BY MR. TUCKER:

7 Q. I've always got one or two.

8 A. Okay.

9 Q. Adam Tucker again with the NTSB. And so you're a naval arch.

10 A. Yes.

11 Q. And again I'm probably presenting the wrong verbiage, but I'm
12 a solace (ph.) guy and all that. In Subchapter T, is there any
13 definitions of space categorizations? Like I know machinery space
14 is probably there but is there any area where we can go to find
15 out, say, for example, on the *Conception*, they've got the bunk
16 room, which we see that as being a passenger sleeping space, but
17 then on the deck above, we have the salon and the galley. I know
18 you're not familiar with the vessel. You've probably seen
19 pictures of it though.

20 A. Just public information.

21 Q. But in that salon basically there's only one exit. They can
22 also use the windows, and there's tables and there's chairs and
23 then there's a galley right up forward. There's no subdivision,
24 no wall, or anything like that between it. I'm curious to know if
25 that space is categorized or has a certain type of name?

1 LT [REDACTED]: To clarify, under old Subchapter T or new
2 Subchapter T?

3 BY MR. TUCKER:

4 Q. Yeah, under old, relative to the *Conception*.

5 A. So the definitions in old Subchapter T are in 175.10. I'm
6 not as familiar with this definition section as I am for old
7 Subchapter T.

8 LT [REDACTED]: New Subchapter T.

9 THE WITNESS: Sorry, as with new Subchapter T. Thank you.
10 So the definitions are listed in there in 175.10 for old
11 Subchapter T.

12 BY MR. TUCKER:

13 Q. Okay. So there's -- I didn't see anything here.

14 A. I do not see any specific space definitions in here, and I
15 know that some were added into the new Subchapter T regulations
16 that does provide additional definitions, but again, that's in the
17 new Subchapter T which is based on the applicability of old versus
18 new.

19 Q. Okay. Would you know -- you mentioned new. I don't have the
20 new in front of me. But are there space categorization
21 definitions? Again, I'm probably using the wrong language.

22 A. I understand. In new Subchapter T, 175.400, there are
23 additional definitions. As an example, there is a definition for
24 passenger accommodation space in new Subchapter T but I just want
25 to clarify that the definitions provided in new Subchapter T would

1 only be applicable to new Subchapter T and would not be
2 retroactive definitions applying back to old Subchapter T.

3 Q. Okay. Thank you. You've actually clarified that. So thank
4 you very much for that. Again, in plan review I know you haven't
5 done anything specific to *Conception*. I'm just trying to get a
6 visual. So the OCMI comes to you and says, okay, I want you to do
7 a plan review. Do you look at signage for emergency egress
8 routes? Is that something that's in your realm of responsibility
9 or --

10 A. We could review that, but signage would typically be
11 something that is reviewed and approved by the OCMI.

12 Q. Okay. And how about fire detection systems?

13 A. Fire detection systems are something that is reviewed
14 sometimes by the MSC at the discretion of the OCMI but that would
15 be within the engineering branch, not a responsibility of myself
16 in particular.

17 Q. Okay. And same for lighting, specifically emergency
18 lighting?

19 A. I'm not familiar enough with the lighting regulations.

20 Q. Okay.

21 A. But presume typically by the OCMI or the engineering branch
22 at the Marine Safety Center.

23 Q. Okay. I do have one last one -- well, the last one for now
24 but I've always got one. These guys are used to it already, but
25 does anybody ever reach out to you specific to hull and your

1 tasks, your job, for any type of interpretations specific to old
2 T?

3 A. So the Marine Safety Center does not develop regulations.
4 However, being a reviewer, we do need to interpret the wording and
5 we work with the other headquarter units such as CDNG (ph.) to
6 help determine if there is an ambiguous interpretation to the
7 regulations and if necessary, have internal correspondence with
8 CDNG to determine the correct interpretation.

9 Q. Okay. Just some general, again related to old T boats, like
10 the *Conception*. Are there any common, off the top of your head,
11 if you don't know, you don't know, but are there -- have you seen
12 anything come through commonly looking for interpretations?

13 A. Not with respect to old Subchapter T, am I aware of any. Any
14 common interpretations that we regularly receive questions on --

15 Q. Okay.

16 A. -- specifying that much of the review that we do is for new
17 Subchapter T that came into effect in 1996

18 Q. Right. But if there were -- so if there say -- is there a
19 repository for interpretations other than those in the NVIC. Is
20 that the right thing? Is that where an interpretation would be
21 put into or that kind of database or --

22 A. NVICs would be one place that policy interpretations would be
23 made. Local OCMI's also have policies for their specific zones and
24 inspections. So it can vary.

25 Q. Okay. And also started -- you know, that there -- I

1 understand you're well versed in new T. And it was one of the
2 questions asked earlier, but I'm going to be more specific, is
3 with escape hatches. Are there any required -- again this related
4 to the *Conception*. There was an escape hatch with one egress
5 route and another egress route with an escape hatch. Are you
6 aware of any dimensional requirements under the new T regulations
7 for emergency escape hatches or as they call it, avenues?

8 A. Sorry. Can you clarify if that was for new Subchapter T?

9 Q. Correct. Yeah, yeah. Because I'm wondering about new T, and
10 then I'm going to ask if there was any retro requirement for the
11 older vessels.

12 A. Let me look at my notes here.

13 Q. If you don't know, we can find it later.

14 A. I do have the information. Just one moment. In new
15 Subchapter T, Section 177.500(1) when a deck scuttle, similar
16 wording in the definitions, to a vertical hatch, quote, "When a
17 deck scuttle serves as a means of escape, it must not be less than
18 455 millimeters (18 inches) in diameter and must be fitted with a
19 quick acting release and a holdback device to hold the scuttle in
20 an open position," end quote. And clarifying, new Subchapter T.

21 Q. Okay. And are you aware, is that retroactive to old T?

22 A. No, it is not.

23 Q. Okay. Are you familiar, is there anything in old T? I
24 couldn't really find a lot. If you don't know, that's fine.

25 A. One moment. No, I'm not aware of any require in old

1 Subchapter T regarding minimum diameters for deck scuttles or
2 hatches.

3 Q. Okay. That is -- like I said, I've always got a last one.
4 That's the last question I have for right now.

5 MR. TUCKER: So, Marcel.

6 MR. MUISE: All good. Thank you.

7 BY CAPT NEUBAUER:

8 Q. Thanks. This is Captain Neubauer again. Just a couple more.
9 I want to talk about your experience with old T plans, and like
10 how frequent do you get those and what types of things do you
11 review like for arrangements or was it more stability related?

12 A. For old Subchapter T, we do not regularly receive plans for
13 them as previously stated. The OCMI is responsible for the plan
14 review for Subchapter T vessels, and will request the MSC to do
15 reviews as needed. We do not see very many arrangement plans for
16 old Subchapter T vessels. We primarily will see stability reviews
17 for old Subchapter T vessels as well as if there's a major
18 conversion determination to be made for a Subchapter T vessel.
19 Those would be the primary regular reviews that we do. It's not
20 to say those could be the only ones but those are by far the most
21 common --

22 Q. Okay.

23 A. -- for old Subchapter T.

24 Q. Perfect. And for major conversions, is that like structural
25 modifications of the vessel normally?

1 A. So I will refer to the definition for a major conversion. So
2 major conversion are defined in Title 46 U.S. Code, Section 2101,
3 a major conversion is a conversion that either one of the
4 following four points: (a) substantially changes the dimensions
5 or carrying capacity of the vessel; changes the type of the
6 vessel; substantially prolongs the life of the vessel; or
7 otherwise so changes the vessel that it is essentially a new
8 vessel.

9 Q. And so when you've encountered that type of review, have you
10 had any issues with getting ahold of the old plans?

11 A. Sometimes, however, usually we're able to request sufficient
12 information from the submitter in order to determine what is being
13 modified in order to ascertain how significant the changes are
14 between the old vessel and the new vessel, in order to make that
15 determination.

16 Q. Okay. So you can typically do the review without the old
17 plans. Is that correct?

18 A. I'd say having the old plans is preferable, but if they are
19 not able to do it, they can usually provide us with sufficient
20 description, photos, prior to the work, et cetera, to help to
21 provide an understanding of what the pre-modification status of
22 the vessel was.

23 Q. And then getting back to some of the policies that you use,
24 do you ever use *Marine Safety Manual* Volume 2 in your review?

25 A. Not typically. We use Volume 4 a significant amount. I'm

1 not as familiar with the contents of Volume 2.

2 Q. Okay. And then for the interpretations that we were
3 discussing, when you make an interpretation between offices, do
4 you capture those in technical notes? Is that what those are for?

5 A. Yes, sometimes those will be captured in technical notes,
6 Marine Safety Center technical notes or MTNs.

7 Q. And are MTNs available to the public?

8 A. They are publicly available, yes.

9 Q. Is that one home port?

10 A. They are on our website which I can provide.

11 Q. Okay.

12 A. Dco.uscg.mil/msc, under the references page provides all of
13 our publicly available plan review guides and MTNs.

14 Q. Okay. Those are all I have. Thank you.

15 MR. BARNUM: LT [REDACTED], do you have any questions before we
16 conclude?

17 LT [REDACTED]: No, Captain. Thank you.

18 MR. BARNUM: I got promoted. Okay.

19 MR. TUCKER: I've got one more.

20 MR. BARNUM: You've got one. All right, Mr. Tucker.

21 BY MR. TUCKER:

22 Q. Curiosity question. Again, you mentioned stability and I
23 understand you're not -- oh, you guys -- you do stability.

24 A. Yes, we do.

25 Q. Okay. So we know the *Conception* was a small passenger

1 vessel.

2 A. Yes.

3 Q. That's the OCMI and everything. But unique to these live
4 aboard dive vessels is divers who carry a lot of weight with them.

5 A. Yes.

6 Q. Any special names within the Coast Guard or stability
7 categorization that there's also in addition to small passenger
8 vessel? Like small passenger dive recreation vessel or something
9 or --

10 A. In terms of the stability --

11 Q. Yeah.

12 A. -- specifically? If there is a vessel for which the Marine
13 Safety Center is writing a stability letter, that is going to
14 regularly carry dive equipment, we will -- that additional weight
15 will be included in the stability review and specified on the
16 stability letter if the Marine Safety Center is conducting that
17 review.

18 Q. Okay.

19 A. I'm not sure when that practice may or may not have gone into
20 effect.

21 Q. Okay. And if you don't know, it's fine, off the top of your
22 head though, is there a certain weight for a person in addition to
23 their normal body weight that you factor in for those dive
24 vessels?

25 A. The assumed average weight per person is 185 pounds. I do

1 not recall off the top of my head what the typical weight to be
2 considered for dive equipment per person is. I do not believe
3 that would be a regulatory defined number.

4 Q. Okay. I guess the last one that I always ask or somebody
5 asks is, is there anything that we or I have not asked you that
6 you may feel is important for us to kind of gather the information
7 and put all this together related to the accident that took place
8 on the *Conception*?

9 A. There's nothing else that I can think of in terms of
10 questions. I think we did a good job of clearly specifying when
11 we were discussing old Subchapter T and new Subchapter T and the
12 regulations. I just wanted to make sure it was clear when I was
13 making discussions which applicable regulations I was referring
14 to.

15 Q. No, it's been -- you've helped me personally in understanding
16 that. So thank you very much.

17 A. You're welcome.

18 MR. BARNUM: Great, Andrew. Thank you. It is 14:22. This
19 concludes the interview. I'm stopping the recorder.

20 (Whereupon, 2:22 p.m., the interview was concluded.)
21
22
23
24
25

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

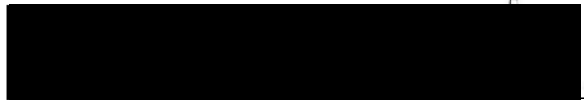
IN THE MATTER OF: FIRE AND SINKING OF THE *CONCEPTION*
WITH LOSS OF LIFE NEAR
SANTA CRUZ ISLAND, CALIFORNIA
SEPTEMBER 2, 2019
Interview of Andrew Lachtman

ACCIDENT NO.: DCA19MM047

PLACE:

DATE: December 4, 2019

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.


Kathryn A. Mirfin
Transcriber

Errata

Interview of Mr. Andrew Lachtman

<u>Page & Line</u>	<u>Correction</u>
P. 1:	Accident No. does not match that of the PDF title of the transcript or P. 48. NTSB website concurs with Accident No. DCA19MM047.
P. 2:	Adam Tucker was "in person", not via telephone.
P. 2:	LT [REDACTED], should be on behalf of "Mr. Lachtman," not LT [REDACTED]
P. 5, Line 1,	change "LT Lachtman" to "Mr. Lachtman"
P. 6, Lines 16-21	MSC has five divisions, not four as stated. Inadvertently omitted the Tank Vessel/Offshore Division
P. 7, Line 11,	change "It's in the Marine Safety Center" to "In the Marine Safety Center it's"
P. 20, Line 10 Line 11 Line 16 Line 18	Misstated the acronym and office: "MSO" should be "MMT" "MSO" should be "MMT" and "Marine Safety Offices" should be "Merchant Mariner Technical Branch" "MSO" should be "MMT" "MSO" should be "MMT"
P. 21, Line 1 Line 4 Line 7 Line 12 Line 14	"MSO" should be "MMT" "MSO" should be "MMT" "MSO" should be "MMT" "MSO" should be "MMT" "MSO" should be "MMT"
P. 23, Line 21:	Change "with him" to "within"
P. 23, Line 22:	Change "A." to "Q."
P. 23, Line 23:	Change "Q." to "A."
P. 24, Line 22:	Change "crews" to "cruise"
P. 32, Line 2:	Change "your town" to "Yorktown"
P. 36, Line 3:	Change "oppose" to "opposite"
P. 38, Line 12:	Change "solace" to "SOLAS"

P. 41, Line 5:	Change "CDNG" to "CG-ENG"
P. 41, Line 8:	Change "CDNG" to "CG-ENG"
P. 45, Line 9:	Change "one" to "on"