



National Transportation Safety Board

Washington, D.C. 20594

October 11, 2017

CAPT Jason Neubauer
U.S. Coast Guard Headquarters
Chief, Office of Investigations and
Casualty Analysis (CG-INV)
2703 Martin Luther King Jr Ave SE
Washington, DC 20593-7501

Re: Tech review of the Nautical Operations Group Factual Report

CAPT Neubauer:

The NTSB investigative team has reviewed all factual comments submitted by the parties as part of the technical review and has decided on a disposition for each one, as reflected below.

All editorial suggestions have been considered and will be incorporated as appropriate.

Best Regards,
Brian Young
Investigator in Charge
National Transportation Safety Board
490 L'Enfant Plaza, S.W.
Washington, DC 20594

NTSB Draft Factual Report for Tech. Review

Page/Line	U.S. COAST GUARD COMMENTS	NTSB – Disposition of Party Comments
Pgs ii and iii, Table of contents, Section 12	Section 12.2 is listed twice, once immediately before 12.3, and once immediately after 12.3. This redundancy is apparently a simple formatting error.	AGREE, revised.
Pg 9, Lines 17-19	The sentence regarding the chief mate deviating from regular at-sea watch schedule seems to imply that the crew would normally keep the same watch schedule while in port. According to MBI Exhibit 283, pg 5 as well as witness testimony, the second and third mates shift to a 6-hour watch rotation while in port, and the chief mate’s schedule is listed as 12 hours (0600-1800).	AGREE, revised to “shifted”
Pg 14, Line 16	The word in the OMV regarding list is “uncorrected” and “uncorrectable”, not “uncontrollable”.	AGREE, revised to “uncorrected”
Pg 15, Lines 8-10	Recommend citing a source and/or rewording the sentence regarding testimony about some of the vessels using “a system that tracked a vessel’s position against that of nearby weather.” The witness identified in the footnotes is the manager of safety and operations, and we haven’t found testimony supporting that particular sentence.	AGREE. Will revise to state he “confirmed” vice “stated”
Pg 16, Line 7	TOTE Maritime Puerto Rico is not a subsidiary of TOTE Services, so it is technically not correct to have Section 7.1.3. (TMPR) as a subsection of Section 7.1 (TSI). Recommend making TMPR its own section for clarity.	AGREE. Revised.
Pg 18, Line 17	Recommend rewording the phrase “... was loaded, stowed, and secured in accordance with...”. While the cargo <i>should have been</i> secured in accordance with the approved cargo securing manual, evidence suggests that not all cargo actually was secured in accordance with that document.	AGREE. Revised.

Technical Review of Draft Factual Reports: USCG

Party Comments by email/letter dated: 25 July 2017

Page/Line	U.S. COAST GUARD COMMENTS	NTSB – Disposition of Party Comments
Pg 20, Line 6	Recommend replacing “refrigerators” with “refrigerated containers” for clarity.	AGREE. Revised.
Pg 20, Line 17	The first part of this sentence is not correct. The port and starboard sides (hull) of the ship is not watertight on the second deck, but rather on the third and fourth decks. The second deck is a weather deck.	NOTED. The second deck, the actual plating, is part of the WT boundary. To avoid confusion, though, will remove the word “on” before the words “the second deck.”
Pg 20, Footnote 36	The Captain and crew often referred to Hold D as “three hold” so it is not completely true that shipboard and terminal personnel always used the alphanumeric system.	NOTED. To avoid confusion will add the word “often” before the word “used.”
Pg 22, Footnote 38	The statement that CargoMax was not approved by ABS or the Coast Guard is technically correct but does not provide the full story. ABS reviewed CargoMax for stability aspects and provided a plan review letter. See also MBI Exhibit 254 (although that exhibit is titled “CargoMax ABS Approval Letter”, it would more accurately be described as a stability review letter).	No changes made based on this comment because there was no specific request. Nonetheless, the footnote has been amended based on comments/requests from other parties.
Pg 23, Line 3	The comment “(mainly the chief mate)” may not be entirely accurate. Although the chief mate is responsible for cargo securing, the longshoremen often worked directly with the mate on cargo watch (i.e. the second mate and third mate).	NOTED. But we see no specific cite to the contrary. Also, wording added referencing other mates.
Pg 26, Footnote 42	This statement conflicts with pg 19, lines 7-9 with	AGREED - One is testimony, the other is what is depicted in the CSM (pictorially.) Removed 40ft for consistency.
Pg 35, Lines 18- 19	We believe this sentence contradicts the testimony of past crewmembers, who testified that rounds were conducted to verify lashing tightness.	AGREE. Changed to “unlicensed” as it applies to the at sea “routine”

Technical Review of Draft Factual Reports: USCG

Party Comments by email/letter dated: 25 July 2017

Page/Line	U.S. COAST GUARD COMMENTS	NTSB – Disposition of Party Comments
Pg 37, Line 7	This line says “70 lashing rods” whereas the table below indicates 170 lashing rods in the “amount required” column. This appears to be a typo on line 7.	AGREE. Revised.
Page 41, Line 8	It is unclear what is meant by the phrase “the book treated...”	NOTED. Changed to “addressed.”
Page 46, Line 7	TOTE did eventually provide a bridge electronics inventory for the EL FARO. See MBI Exhibit 301.	NOTED. Revised accordingly.
Page 46, Lines 11 & 12	Although the body of the ABS Record of Approved Cargo Ship Safety Equipment (Exhibit 071, pg 6) indicates that both the 3 cm and the 10 cm radars were manufactured by Raytheon, pg 3 of that document (which is a record of alterations and additions) indicates that the 10 cm radar was manufactured by Furuno. Additionally, pg 29 of that document indicates that the ARPA was manufactured by Furuno.	AGREE. Revised.
Page 53, Line 15	SSAS is strictly for security purposes. While security could be considered under the general umbrella of safety, it is not accurate to say that SSAS is placed aboard to warn the company and flag state of a security “or safety” emergency.	AGREE. Revised.
Page 58, Line 2	Recommend clarifying which sources are being referenced by the statement “All sources indicated...”. This statement appears to contradict the prior paragraph which states “It is unclear from the records provided if the repairs were completed.”	NOTED. Sources are named in the preceding sentences of this section. As to purported contradiction, documents state repairs were started but not that they were completed.

Party Comments by email/letter dated: 25 July 2017

Page/Line	U.S. COAST GUARD COMMENTS	NTSB – Disposition of Party Comments
Page 58, Line 10	It is unclear from testimony whether broken or damaged lashing equipment was “immediately taken out of service and placed in a receptacle for sending ashore.” Testimony indicates they were to be marked, but testimony eludes to the possibility that damaged equipment could possibly accidentally be placed back in service if not removed promptly. On the accident voyage, comments are captured on the VDR indicating that the crew found some damaged and unusable equipment, raising question as to the effectiveness of the process in place for removing damaged equipment from service.	AGREE. Revised by adding “were to be” before the word “immediately.”
Pg 64, Line 1	46 CFR 78.17-3 is in Subchapter H (Passenger Vessels) and does not apply to the EL FARO. 46 CFR Part 97 does apply to the EL FARO, but that Part doesn’t include requirements to log weekly inspection of watertight doors.	AGREE. Removed paragraph.
Page 64, Line 3	Recommend rewording the phrase “As noted above...” The sentence following that phrase describes something noted later in the report (in section 12.5.2.) as opposed to “above” which would denote previously in the report.	SEE comment immediately above.
Page 67, Lines 7-9	As drafted, this sentence wouldn’t appear to apply to the EL FARO because of how it paraphrases the applicable regulation. However, 33 CFR 96.210 applies not only to “bulk freight vessels” but also to “freight vessels” such as the EL FARO. Recommend rewording for clarity.	AGREE. Added “freight vessels.”
Page 70, Line 17	According to NOAA Chart 11013, the correct language is Old Bahama Channel, not Old Bahamas Channel (i.e. no “s” after “Bahama”).	AGREE. Revised.
Page 72, Line 8	Recommend replacing “heavy-weather contingency plan” with the correct name of the reference, which is “Port Heavy Weather Plan.”	AGREE. Revised.

Technical Review of Draft Factual Reports: USCG

Party Comments by email/letter dated: 25 July 2017

Page/Line	U.S. COAST GUARD COMMENTS	NTSB – Disposition of Party Comments
Page 72, Lines 11- 12	Recommend replacing the sentence beginning with “If a master decided...” with the following direct quote from the Plan: “Vessels desiring to remain in port during a tropical cyclone must request and receive permission from the [U.S. Coast Guard] Captain of the Port.”	AGREE Changed to “if a vessel master desired to remain....”