



National Transportation Safety Board

Washington, D.C. 20594

December 5, 2016

K. L. Peterson
Director of Operations
TOTE Maritime Puerto Rico
5250 William Mills Street
Jacksonville, FL 32256

Re: Tech review of the Engineering Group Factual Report

Mr. Peterson:

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. The deadline for providing party submissions pursuant to 49 CFR 831.14 is March 17, 2017.

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

| Page/Line | COMMENTS OF TOTE, INC. | NTSB – Disposition of Party Comments |
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| 2/chart 2 | Jim Fisker-Andersen’s correct title is: Director of Ship Management | Concur. Corrected in factual report |
| 3/5 | The report states that the Master “reported that the ship was experiencing flooding.” The Master’s message did not use the word flooding. The Master reported “that a scuttle popped open on two deck and we have free communication of water into three hold.” This language is more precise and factually accurate. | Concur. Corrected in factual. New Sentence reads: Just minutes before the distress alerts were received, the <i>El Faro</i> master had called TOTE’s designated person ashore and reported that a scuttle had popped open on two deck and there was free communication of water into three hold. |
| 3/11 | We are aware of only one damaged liferaft being recovered. | <p>According to the survival factual report: “A partially inflated liferaft was discovered during the SAR operation on October 4 at 23°29.2’ N, 073°35.3’ W. The liferaft was searched by a Coast Guard rescue swimmer for survivors or remains. None was found. The liferaft was confirmed to be from <i>El Faro</i> and was sunk to prevent being rediscovered by the crew of the cutter <i>Northland</i>. A second liferaft was reported at position 23°24.7’ N, 073°54.9’ W but could not be relocated. None of the five <i>El Faro</i> liferafts were recovered and none are located in the stowed positions on the wreckage.”</p> <p>Sentence updated to read: On Sunday, October 4, a damaged lifeboat and two damaged liferafts were located.</p> |

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| 3/11-12 | The report states that “a deceased crewmember wearing an immersion suit w[as] found.” Additional information should be added regarding the Coast Guard’s actions and why the body was not ultimately recovered from the water, i.e., the Coast Guard diver tagged the body in an effort to attempt rescue of other reported signs of life | Concur. Updated in factual report. New sentence reads: The same day, a deceased crewmember wearing an immersion suit was found by the Coast Guard. A Coast Guard rescue swimmer tagged the body in an effort to attempt rescue of other reported signs of life, but was unable to relocate the deceased crewmember. |
| 4/7 | Change “spring of 2015” to “spring of 2016”. | Concur. Corrected in factual report. New sentence reads: Coast Guard officers were interviewed in Washington, DC, in the spring of 2016. |
| 4/11 | The report states that the vessel was purchased by Saltchuk Resources in 1991. While we are not certain this level of clarification is needed, TOTE’s information indicates that the vessel was purchased (or added to the fleet) in 1993 by Totem Ocean Trailer Express. | Concur. Corrected in factual report. New sentence reads: In 1993, the ship was purchased by Totem Ocean Trailer Express and renamed <i>Northern Lights</i> . The vessel sailed frequently between Tacoma, Washington, and Anchorage, Alaska. |
| 4/16 | Add “to Ro-Lo configuration after “Ro/Ro modification”. | Concur. Corrected in factual report. New bullet reads: Ro/Con modification to Ro-Lo configuration: 2006. |
| 4/fn2 | Replace “numbering” with “which includes”. | Concur. Corrected in factual report. Removed footnote, since Saltchuck was omitted and replaced with Totem Ocean Trailer Express. |
| 5/3 | Delete “lengthened and” – the ship was not lengthened in 2006. | Concur. Corrected in factual report. New sentence reads: In 2006, the ship was converted from a Ro/Ro cargo ship to a roll-on/container (Ro/Con) vessel and renamed <i>El Faro</i> . |

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| 9/1-3 | “The upper half could be removed to access the journal bearings and thrust bearing” is an incorrect statement. The bearings could be accessed without removing the upper case. | Concur. Corrected in factual report. New sentence reads: The journal bearings and thrust bearings could be accessed without removing the upper case. |
| 11/5 | Change “propeller” to “propeller shaft”. | Concur. Corrected in factual report. New sentence reads: It was essentially an intermediate shaft, constructed of rolled steel, that connected the stern tube shaft to the propeller shaft. |
| 11/6 | The MATSONIA lost the torque tube, <u>not</u> the propeller. This was not due to a failure of the overspeed protection device, but brought to light that the speed limiting governor needed cleaning to ensure proper response. | Concur. Corrected in factual report. New sentence reads: Another <i>Ponce</i> -class vessel, the <i>Matsonia</i> , had experienced a failure of the torque tube. ¹ It appeared to be an isolated incident and brought to light that the speed limiting governor needed cleaning to ensure proper response. |
| 15/5 | Change “The floors of the tubes” to “The floor tubes”. | Concur. Corrected in factual report. New sentence reads: The floor tubes were covered by about 5 inches of refractory (heat-resistant material). |
| 18/6 - 19/12 | The factual report states that the test procedure NTSB received from the EL YUNQUE “was not filled out with results”. TOTE provided the NTSB blank forms for the procedure, as we thought that was what NTSB requested. The testimony concerning the EL FARO was that “the periodic safety test procedure was completed during the off-duty second assistant engineer’s last trip, which ended about 9 weeks before the accident. He signed off the vessel on August 10, 2015.” (Lines 12-14). If this sentence is retained, we request this | Concur. Corrected in factual report. Removed reference to generic form received, as page 18/6 indicates that El Yunque’s test procedure was received. |

¹ Interviews: off-duty chief engineer, TOTE director of marine services.

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| 20/8 | The original right angle gear driven pump was replaced with a pump mounted on the end of the gear case and directly driven by the low speed gear shaft. | New info, New sentence reads: The turbogenerators were initially designed with positive-displacement, gear-type lube oil pumps that were submerged into the sump to ensure flooding of oil. The pump was driven from the free end of the low-speed shaft through a right-angle gear and vertical extension shaft. According to TOTE, the original right angle gear driven pump was replaced with a pump mounted on the end of the gear case and directly driven by the low speed gear shaft. |
| 22/15 | Total fuel capacity for the EL FARO is listed as 11,522 bbl. | Concur. Corrected in factual report. New sentence reads: <i>El Faro</i> had a capacity of 11,552 bbl of fuel. ² |
| 23/1-3 | Delete the three bullets and replace with the following: <ul style="list-style-type: none"> • DB No. 2A Inboard, Port and Starboard: (Approximately 2,202 bbl each) • DB No. 3 Inboard, Port and Starboard: (Approximately 2,673 bbl each) <p>The source used for the above is the file El Faro Vessel Information Booklet Rev-1.pdf in Accellion under Folders ABS Files/ABS CargoMax.</p> | Concur. Corrected in factual report. New bullet reads: No. 2A DB inboard port and starboard (approximately 2,202 bbl each) No. 3 DB inboard port and starboard (approximately 2,673 bbl each) ³ Undated footnote to El Faro Vessel Information |
| 28/3-9 | These numbers may not be accurate. The drawings used to | Concur. Corrected in factual report. New sentence |

³ El Faro Vessel Information Booklet Rev-1.

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| | <p>these measurements are not precisely to scale. The investigators used an estimation of distance from the bell mouth to the tank top using the drawing referenced. The 73 inch distance from the tank top to the pump was from a measurement made by CMDR Odem during the most recent visit to the <u>EL YUNQUE</u>. If that is the source of the distance, then that should be stated. We believe further measurements may be made when</p> | <p>A measurement taken aboard <i>El Yunque</i> in October, 2016 indicated that the pump suction was located 73 inches above the tank top. Using the diagrammatic arrangement of the lubricating system, investigators estimated a height of 90” between the bell mouth to the tank top inside the lube oil sump. Further measurements were to be made aboard <i>El Yunque</i> at the next opportunity.</p> |
| 30/2 | <p>An Alfa Laval purifier was piped into the system to remove water and contaminants from the lubricating oil for the propulsion turbine/reduction gear and the Ships Service Turbine Generators. The Stern Tube Bearing and Strut Bearing were each served by individual filter systems to remove contaminants and water. Incidentally, and relevant only if the original language is retained, a</p> | <p>Concur. Corrected in factual report. New sentence reads: Two Alfa-Laval purifiers, were piped into the system to remove water and contaminants from the lubricating oil for the propulsion turbine/reduction gear and the ship’s service turbogenerators. Updated footnote to indicate MMA sea project, AMOS.</p> |
| 30/4-10 | <p>This fact appears to suggest the operating standards for the lube oil sump levels have changed over the life of the vessel, and the natural question is why and whether that has an adverse consequence. In reviewing the drawing, in reality, the “changes made to the original design” - alt 2 - were made to the drawing/design in 1972 - years before the keel was laid on the EL FARO. In brief, there was no change to the</p> | <p>Concur. Corrected in factual report. New sentence reads: According to the alteration section of the diagrammatic arrangement of the lubricating system for hulls 662, 663, and 664, there were changes made to the original design specifications for the operating levels of the lube oil sump in 1972 before the keel of <i>El Faro</i> was laid.</p> |
| 35/8 | <p>Change “also contained an overspeed governor pump, located in the forward bearing bracket” to “also contained overspeed governor pumps, with one located in each of the forward bearing brackets”.</p> | <p>Concur. Corrected in factual report. New sentence reads: The lube oil system also contained an overspeed governor pumps, with one located in each of the forward bearing brackets of each turbine</p> |
| 39/footnote 78 | <p>Interview: TOTE Director of Ship Management.</p> | <p>Concur. Corrected in factual report. New footnote reads: Interview: TOTE director of ship management-commercial.</p> |

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| 40/15-16 | <p>The draft report describes the arrangement on the EL YUNQUE. It says the fire pump arrangement was on the “tank top level,” while some witnesses say that the arrangement on the EL FARO was different (pump and various piping were purportedly on a raised platform). If relevant to the NTSB’s later analysis, we believe it would be useful for the NTSB to develop this information and include it in this report. We likewise</p> | <p>Photo from MMA cadet added to report showing location and protection by pump. Added new sentences: As seen in the photo below, the fire pump was protected by a vertical guard pipe located forward of the pump. According to a diagram supplied by TOTE, a platform was located above the pump and vertical ladder was installed in proximity to the pump.⁴ While aboard <i>El Yunque</i>, investigators located the emergency fire pump in 3 hold on the tank top in a similar location to <i>El Faro</i>’s emergency fire pump. The pump aboard <i>El Yunque</i> had vertical pipes welded to the deck and framing as protection. There was no protection around the suction pipe and valve. Added pix and diagram</p> |
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⁴ General Arrangement AutoCad drawing

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| | recommend that the factual record be developed and additional language be added that the unit was protected by the ladder, platform, and a | |
| 41/9-13 | The report asserts that there was no company requirement that management review AMOS to identify overdue items or outstanding purchase requests. The report should likewise reflect that interviews indicated that the port engineer was reviewing AMOS as part of his duties. See interview of Fisker-Anderson, dated October 13, 2015. | <p>Concur. Updated in factual report. New sentences read:</p> <p>The <i>El Faro</i> port engineer stated in an interview that he did not check on the status of the work orders to check completion status, and was unaware if there were any outstanding work orders. ⁵ In an interview, the director of marine commercial indicated that he didn't monitor the activity in Amos on a daily, weekly, or monthly schedule, but when an issue was indicated to him in a communication. Furthermore, director stated that completion of planned maintenance was verified through internal audits.</p> |
| 42/8 | Replace the word "deficiencies" with "required maintenance". | <p>Concur. Corrected in factual report. New bullet reads:</p> <p>The fireside of the starboard boiler was inspected by the Walashek boiler repair company (Jacksonville) on September 11, 2015, to identify required maintenance to be addressed during the upcoming shipyard repair period (scheduled for February 2016).</p> |

⁵ Interview: port engineer.

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| 42/7 – 43/2 | <p>Clarification regarding the planned yard periods and boiler work is needed at this point in the report.</p> <p>(1) The draft factual report states that the repairs recommended by Walashek were to be performed in an “upcoming shipyard repair period” and suggests a February 2016 time frame. This should read “November 2015.” On September 27, 2015, Mr. Fisker Andersen filed an application for inspection with the U.S. Coast Guard, for the Grand Bahamas Shipyard, which set forth dates for the drydock to be November 6-19, 2015. TOTE intended to perform certain repairs during that drydock period. See MBI 131. See also MBI Transcript testimony for Jim Fisker-Andresen, at pages 40-41.”</p> <p>(2) In referring to the estimate prepared by Walashek, dated September 24, 2015, the draft factual report states that “[t]he list in the estimate did not include tube repair or replacement.” This language incorrectly suggests that TOTE did not intend to perform other boiler repairs recommended by Walashek, but the evidence indicates otherwise. In this regard, we note that the estimate for those initial repairs recommended by Walashek was for approximately \$70K, yet TOTE had budgeted for at least \$240K for</p> | <p>(1) Concur. Corrected in factual report. New sentence reads The fireside of the starboard boiler was inspected by the Walashek boiler repair company (Jacksonville) on September 11, 2015, to identify required maintenance to be addressed during the upcoming shipyard repair period (scheduled for November 2015).</p> <p>(2) Received budget estimate from Tote, added sentence: TOTE provided the estimated budget for the 2015 shipyard period that included anticipated costs for “economizer replacement/upgrade – port and starboard boilers” under a category referred to as “life extension items.”</p> |
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| | no intentions of performing additional boiler work, in line with Walashek's recommendations, because that is not the case. | |
| 42/10-15 | This language clearly implies that the recommended repairs on the boiler should have been done immediately. The testimony of the Walashek representative was clearly otherwise in the MBI Hearing, and should at least be quoted to provide proper balance in this report on this issue. | Concur. Updated in factual report. New sentences read: The boiler inspector did not recommend a time frame for the repairs and stated in an interview that in his professional opinion, the repairs could have lapsed a couple of months from the inspection date. |

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| <p>42/18-19</p> | <p>This wording leaves the impression no one had inspected the port boiler to assess the need for work in the shipyard. The port boiler was inspected by the ship’s crew a few months earlier (on 7/11/2015) and found to be in similar condition as the starboard boiler (inspected on 7/25/2015). See R. Pusatere email dated 7/29/2016. The crew’s inspection should be noted, too. That is perhaps one reason why Walashek did not inspect the interior of the port boiler on the 8/28 trip.</p> | <p>Concur, updated by adding paragraph. New paragraph reads: According to AMOS entries and an email sent by the chief engineer on July 29, 2015, the port boiler had been inspected and cleaned by the crew on July 11, 2015. The chief engineer advised the port engineers that the brickwork was getting worse, and the front water wall tubes were bowing out “even further.” The starboard boiler had been cleaned and inspected by the crew on July 25, 2015 and was reported that the front wall brick work was starting to fail, and the front water wall tubes were bowing out. As a result of these inspections, the chief engineer recommended that Walashek complete a boiler survey to determine the scope of work that was to be completed in the shipyard, and that the boilers needed the front wall brick work repaired/replaced, burner throats renewed, floor brick replaced, and all fire stops repaired. The port engineer responded to the email the following day stating that he had been in contact with Walashek to set up inspections, and that he wanted to start on this as soon as logistically possible.</p> |
| <p>43/2-5</p> | <p>The report asserts that the Walashek representative conducting the boiler inspection had not been trained by the boiler manufacturer. We think this implies that he was not competent. His history and background revealed in the Coast Guard Marine Board of Inquiry Hearing indicates otherwise and should somehow be reflected in this report. A fairer representation</p> | <p>Added additional info: According to statements at the Coast Guard MBI, he did not have any certification that authorized or qualified him to conduct boiler inspections, but had worked for Walashek for 14 years, started as a boiler maker, and worked up to lead man, and superintendent. He had worked on repairs and multiple projects, working his way up in the trade.</p> |

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| 44/15 – 45/2 | Regarding 8/15 economizer repairs by Jacksonville Machinery & Repair, the report states the service report was requested, “but Tote advised that a service report had not been completed” and neither the logbook nor AMOS contained an entry regarding this work. Jacksonville Machinery & Repair does not issue any “report” beyond the invoice | Updated to read: Investigators requested the service report, but TOTE advised that a service report had not been provided, as Jacksonville Machinery and Repair issues “invoice descriptions.” |
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| <p>45/5-7</p> | <p>The draft report states that all critical systems received acceptable results “except for oil in stern tube and strut bearing systems, which had been in an alarm state for previous 2 years.” We do not believe the time period was for two years or that that the results were consistently in an “alarm state.” The vessel was returned to regular service in May of 2014.</p> | <p>Updated to read: The lubricating oil in critical machinery systems was periodically sampled and sent to a Chevron LubeWatch laboratory for analysis. Investigators examined the last 2 years of results. All critical systems received acceptable results, except for the oil in the stern tube and strut bearing systems. The strut tube bearing oil was tested at the Kemel laboratory and rated in as “normal” after being tested on July 3, 2014. It was in the “alert” state from analyses dated January 3, 2015, April 14, 2015, and July 21, 2015 and in the “caution” rating on June 6, 2015.⁶ The stern tube bearing was reported by Chevron LubeWatch in the “caution” range on May 19, 2010, “normal” on October 20, 2010, “severe” on January , 2014, and “abnormal” on May 7, 2015.⁷</p> <p>Stern Tube System and Strut Bearing Analysis</p> <p>In May 2015, Chevron LubeWatch results indicated that all wear rates were normal in the stern tube system. Water content was acceptable, the total acid number was above the recommended limit, and viscosity was within the specified operating range. Actions required were to sample at a reduced service interval to monitor further. Previously, in January, 2014, the oil was reported as “severe” with elevated lead, tin, aluminum, and silicon in the oil.</p> |
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⁶ Kemel test results.

⁷ Chevron LubeWatch UINC95A

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| 46/17 | Replace the word “convert” with “refit”. | Concur. Updated in factual report. New sentence reads: They were working to refit the ship back to the Alaska trade by reinstalling winches, cables, and piping systems. |
| 49/15-17 | This section should more accurately say that: “ACP oversight | |

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| | <p>examinations of vessels conducted by the Coast Guard, in an effort to oversee ABS's work, are similar to...." The Coast Guard should be consulted on this point. The language implies that ACP vessels are subject to less stringent regulations/inspection regime than vessels inspected directly by the USCG; they are not. The inspection regimes are designed to be equivalent, and this factual report should say so.</p> | <p>Updated: According to Coast Guard inspectors interviewed after the accident, the Coast Guard's oversight of an ACP vessel may include inspections which are less stringent than what would be required of a vessel not enrolled in the ACP program, since the ABS is conducting surveys on their behalf.</p> |
| <p>54/1&8</p> | <p>Change line 1 "San Juan" to "Jacksonville". Change line 8 "Jacksonville" to "San Juan".</p> | <p>Concur. Corrected in factual report. New sentences read: The surveyor in Jacksonville held a third assistant engineer's credential and had graduated from Massachusetts Maritime Academy. The San Juan surveyor graduated from the US Merchant Marine Academy in 2004 and sailed as an assistant engineer until 2008, when he joined ABS.</p> |

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| <p>56/9-12</p> | <p>The economizer test pressure is listed as having been 800 psi, as reported by the ABS Surveyor. Chief Engineer Jim Robinson was on the vessel (as a supernumerary in addition to Chief Engineer Pusatere) at the time of the repair and recalls Chief Engineer Pusatere telling him that they successfully tested the economizer at over 1000 psi. This is more in line with the normal practice at the time as opposed to the reported 800 psi, which is below normal operating pressure. Mr. Robinson’s prior testimony will be supplemented.</p> | <p>Updated to read: According to the ABS surveyor, the repairs were tested to 800 psi on September 8, 2015, about a week after the repairs were done.⁸ An off-duty chief engineer was employed aboard the vessel as a supernumerary at the time of the repair, and recalled that the chief engineer stated that the economizer had been successfully tested at over 1,000 psi. Investigators requested the service report, but TOTE advised that a service report had not been provided, because Jacksonville Machinery and Repair issues “invoice descriptions.” Neither the engine logbook nor AMOS contained any entries regarding the repairs or testing.⁹</p> |
| <p>57/15-17</p> | <p>This sentence makes a statement about EL FARO “senior” engineering team members that selectively chooses that category and thus gives a misleading perspective. Several EL FARO engineering crew were trained on the new engines with a plan to rotate them onto the new LNG-fueled container ships. There were a total of 4 engineers on the EL FARO’s last voyage who were slated to be on the Marlin class vessels. All had completed main engine training at the MAN facility.</p> <p>Rich Pusatere, To be a First Engineer on a Marlin Class vessel Keith Griffin, to Second Engineer Mitchell Kuflik, to Third Engineer Mike Holland,</p> | <p>Updated to read: According to documents provided by TOTE, none of the engineering officers aboard the <i>El Faro</i> at the time of the accident had been selected to initially crew TOTE’s new liquid natural gas-fueled container ships, the <i>Isla Bella</i> and the <i>Perla Del Caribe</i>.¹⁰ TOTE stated that the chief engineer, first assistant engineer, and two third assistant engineers had been sent for training at the engine manufacturer’s facility in preparation to rotate them onto the new LNG-fueled ships.</p> |

⁸ Interview: ABS surveyor.

⁹ Interviews: off-duty *El Faro* chief engineer and first assistant engineer, Jackson Machinery and Repair representative.

¹⁰ Crewing lists for *Isla Bella* and *Perla Del Caribe*.

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| 57/16 | “liquid natural gas carriers” should be changed to “liquid natural gas-fueled container ships.” | Concur. Updated in factual report. New sentence reads: ...at the time of the accident had been selected to crew TOTE’s new liquid natural gas-fueled container ships, the <i>Isla Bella</i> and the <i>Perla Del Caribe</i> |
| 58/6 | Change “poor, very good, good, fair, and poor” to “poor, fair, good, very | Concur. Updated in factual report. New sentence reads: The evaluation sheet used a scale of “poor, fair, good, very good, and excellent” to evaluate the officers. |

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| | good and exceptional”. | |
| 59/2 | Change “stated that he was ‘hard working and knowledgeable first’ to “stated that he was a ‘hard working and knowledgeable First”. [Add “a” before “hard” and make “First” a proper noun. | Concur. Updated in factual report. New sentence reads: An evaluation as first assistant engineer while aboard <i>El Morro</i> on January 5, 2012, stated that he was a “hard working and knowledgeable first (assistant engineer) working his way to becoming a chief,” and that he is “able to work through difficult times.” |
| 60/5-9 | In discussing the first assistant engineer (Keith Griffin) evaluation of January 2015, the discussion states that the results were “fair” and “good” and omits the “very good” rating for knowledge of TSI Policy & Procedure. The report also omits the fact that for this evaluation, it was Griffin’s “first trip as First Assistant Engineer” and that “a learning curve is expected.” | Updated to read: After his first trip as a first assistant engineer aboard the <i>El Faro</i> , an evaluation was completed by the chief engineer in January 2015. The majority of the results were “fair” and “good,” and the chief engineer remarked that he needed “to work on his communication skills,” that he “often acted without thinking in order to complete the job,” and that “his work ethic was lacking in certain areas.” The evaluator also stated: “Greater attention to detail was needed.” The first assistant engineer received one “very good” result in the “knowledge of TSI policy and procedures” category. A previous evaluation in January of 2015 as second assistant engineer from the same evaluator indicated ‘excellent’ results in each of the categories, and in the remarks section, it was stated that the first assistant engineer “has shown he is ready and capable to sail at a higher position and take on more responsibility.” |

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| 61/10-15 | <p>In discussing third assistant engineer (Michael Holland), only the negative comments and reviews are discussed. This section should include the positive reviews from the prior two evaluations (10-17-14 and 11-14-14) and the evaluation quoted (11-21-14). These include Holland having “done a very good job as 3rd [A/E]”, learning the job “quickly” and consistent recommendations for re-assignment to vessel by his superiors.</p> | <p>Updated to read: In an evaluation in November 2014, the evaluator remarked that he “shows up on time” and “has done everything I asked him to do.” Also, the evaluator stated that he needed to “pay attention to detail” and “become more familiar with ship’s equipment and automation.” In a previous evaluation dated November 14, 2014 after serving aboard <i>El Yunque</i> as a third assistant engineer, the evaluation indicated that he had done a “very good job as 3rd (assistant engineer)” and he was a “good shipmate and learned the job quickly.” The evaluator stated that he needed to “take on more responsibility and start thinking on his own”, and “be more proactive in his job.” He had made two trips aboard <i>El Yunque</i> and one trip aboard <i>El Faro</i> before the accident.</p> |
| 64/12-13 | <p>The report reads, “A familiarization booklet was referred to by crewmembers. NTSB investigators requested the booklet and received a generic guide for contractors.” Not mentioned is the fact that such a familiarization booklet would be vessel-specific and would have thus been on the EL FARO at the time of the loss. TOTE requests that this point be added.</p> | <p>Disagree: Tote supplied follow-up email that vessel did not have vessel-specific familiarization booklet.</p> |
| 65/3-8 | <p>In discussing the weather routing section in the OMV, this section leaves out the second part of section 10.8.4 which briefly discusses Applied Weather Tec – Bon Voyage service which the EL FARO did have.</p> | <p>Removed weather routing section of OMV – to be included in weather group/nautical group.</p> |
| 65/10-11 | <p>The draft report reads that in port, the master was directed to "assess the situation and confer with the HQ office who will clear the vessel's actions (when necessary)." The actual EPMV wording (not included in the report) continues to read: "... will clear the vessel's</p> | <p>Removed weather section of EPMV – to be included in weather group/nautical group.</p> |

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| 65/13 | EPMV 5.12.1 should read EPMV 5.12.2. | Removed weather section of EPMV – to be included in weather group/nautical group. |
| 66/6-8 | This entry states that the company “provided only one set of turnover notes from the chief engineer, submitted on August 26, 2014.” TOTE has provided additional sets: 08-11-15/08-18-15 from James Robinson to Sean Holmes and Richard Pusatere. These were produced to the Coast Guard MBI, and it is our understanding that NTSB has access to them; however, TOTE has now provided them directly to the IIC. | Concur. Updated in factual report. New sentence reads: The operating company provided turnover notes from the chief engineer, submitted on August 26, 2014, August 11, 2015, and August 18, 2015. ¹¹ |
| 66/12-13 | This section states that “Investigators requested evaluations of the chief engineer that had been completed by the company, but none were provided.” This appears to be inaccurate as the entire personnel file, including past evaluations, for both chief engineers on the vessel (Pusatere and Mathias) were provided to the NTSB, as was done for the rest of the crew. In addition, in response to these comments, TOTE has located the uncompleted evaluation for Pusatere that had not reached the personnel file, and has now provided that document to the NTSB. | Updated to read: Investigators requested evaluations of the chief engineer that had been completed by the company. One evaluation of the chief engineer was provided, and it was not fully completed. Several shipboard evaluations were received. |

¹¹ Chief engineer turnover notes, chief engineer interview, port engineer interview.

**Technical Review of Draft Factual Reports: TOTE,
Party Comments by email/letter dated: November 17,**