



NATIONAL TRANSPORTATION SAFETY BOARD
 OFFICE OF MARINE SAFETY
 WASHINGTON, D.C. 20594

COAST GUARD ERRATA SHEET

Group Chairman's Factual Report Fire and Explosions

CONCEPTION
 DCA19MM047

Page /Line	Original	Correction	Resolution
XX	Squid light omission.	Comment: In the fire and explosion factual there is no mention of the squid light, its operation, location or the electrical power source and location for that appliance. The light was mentioned during several crewmember interviews and it was likely rigged the night of the incident.	No change. This is covered in the operations factual which now contains: <i>They also found the squid light, which appeared to be intact, floating in the water (when the squid light was recovered after the accident, the housing and bulb were found intact).</i>
XX	Omission of any mention of smell of solder and smoke detectors during wiring work which was uncovered	Comment: Are you going to mention the disabling of smoke detectors during solder repairs? The owner mentioned that a captain had encountered an issue where disabling of the smoke detectors was necessary. The following is a relevant excerpt from Mr. Fritzler's interview:	No change. The facts discussed by Mr. Fritzler are mentioned in the engineering and survival factors factuals. The NTSB was prohibited by the AUSA to speak with the captain who had the detailed knowledge of this.

	during Mr. Fritzler's interview.	<p>17 that he just recently had some work performed on the vessel, on</p> <p>18 the AC unit where a guy was soldering and it was setting off the</p> <p>19 alarms, so he had to unplug them, so they could finish the work</p> <p>20 and then he plugged them back in, put fresh batteries in them and</p> <p>21 tested them. And that was within a month</p> <p>Which captain was aboard when the work was performed and the batteries were reinstalled?</p>	
2	captain swam to the stern and re-boarded the vessel.	Comment: Do not believe the captain re-boarded the vessel. Crew did but not the captain.	Corrected. See Operations Factual report. Corrected summary added to all factual reports.
2	returned to the Conception to search for survivors around the burning hull	Returned to the waters around the burning Conception to search for possible survivors	Corrected. See Operations Factual report. Corrected summary added to all factual reports.
2	Unable to open a window at the forward end of the salon and overwhelmed by smoke, the crew jumped overboard	Unable to open a window at the forward end of the salon and overwhelmed by smoke from an out-of-control fire, the crew jumped overboard	Corrected but did not use "out of control". See Operations Factual report. Corrected summary added to all factual reports.
3	seating included cushioning of unknown composition	Comment: Can it be ruled out that settee material was not flammable? Is there a way to determine if it was vinyl or Naugahyde © filled with foam rubber. Or similar to the other Truth Aquatics vessels?	No change. Since we did not see the cushions or their remains the material remains unknown
3	The salon and galley had a main exit at the aft end of the compartment, which led to the open part	The salon and galley had a main exit at the aft end of the compartment, which led to the open part of the aft main deck, there were a set of double doors which were kept open at sea. (figure 8).	Change made.

	of the aft main deck (figure 8).		
3	The third toilet was on the starboard side and accessible from a door at the bottom of the stairway leading down from the upper deck (figure 9).	The third toilet was in a compartment on the starboard side and accessible from an exterior sliding door at the bottom of the stairway leading down from the upper deck. and it was accessible from the main deck. (figure 9).	Change made. Except strike out text.
3	two levels of bunks along two aiseways	two levels of bunks along two aiseways, the bunks along the side were double wide bunks.	Change made
4	The emergency exit hatch led to the aft portion of the salon (figure 14).	The emergency exit hatch led to the aft portion of the salon and there was a wooden cover located above the escape hatch which left the aft end of the egress route clear for exit. Exiting into the main deck from below would lead a person trying to use this exit enter a three-sided box which the top could be pushed clear. (figure 14). Comment: The main deck area where the egress hatch opened into the main deck in the salon would require someone to climb up into a box and then exit the rear of that box with difficulty in grasping the sides of the box to assist in that escape. The wooden walls on three sides and the wooden top would confound the means of escape.	Added to survival factors factual report and reads: <i>The escaping passenger would then enter what was essentially a three-sided plywood box without handholds, assisting hardware or lighting and would have to climb out of it before heading aft within the salon..... The escape exited below an island counter with three sides enclosed by plywood and a 6-inch coaming around the escape hatch About six feet of empty deck space in the salon separated the hatch, which opened underneath a wooden countertop, from the passageway that led to the weather deck. above the main deck of the salon...</i>
4	based on the interviews conducted	based on the initial interviews conducted	Change made

4	After that, the next sound he heard was described as a single scream or yell.	Comment: He did not describe it as a scream or yell rather as some kind of noise. The interviewer told him it was a scream in two questions.	No change. Kohls NTSB interview: Described the “ahh” sound being “definitely a human voice”.
4	The second galley hand then backtracked towards the crew quarters	During which time he began to alert the crew and yelled fire, crew awoke as a result of his, Kohl’s actions	Added yelling “fire”
5	and broke his leg upon landing.	and apparently broke his leg upon landing.	No change. It is a fact that he broke his leg.
5	starboard side by the stairs leading to the main deck.	starboard side by the stairs leading to the main deck. Despite not having his eyeglasses he could see the shape, color and general outline of the fire.	No change
5	the captain jump off the wing station and into the water.	the captain jumped off the starboard wing station and into the water.	Change made
6	was lowering the skiff into the water.	was lowering the skiff into the water. This operation required electrical power indicating at this point there was still electrical power on the vessel.	Electrical power is covered in Engineering factual report. No change made.
6	stairs that lead down to the main deck.	stairs that lead down to the main deck. Despite not having his eyeglasses he could see the shape, color and general outline of the fire.	No change.
7	the toilets were engulfed in flames,	the salon compartments containing the toilets were engulfed in flames,	No change
7	paddling away until they got the engine running.	paddling away until they got the skiff engine running and twice a trailing rope disabled the skiff’s outboard.	No change
11	Another potential source of ignition is the vessel’s electrical system in the salon compartment.	Another potential source of ignition is the vessel’s electrical system in the salon compartment. The vessel’s crew had replaced interior lighting throughout the main salon previous to the accident. Admittedly the crew were not licensed electricians.	No change

11	therefore reasonable to include lithium-ion battery failure as a possible ignition source	therefore reasonable to include lithium-ion battery malfunction or fault as a possible ignition source	No change
11	Damaged wiring insulation, exposed wiring, corroded connections, and overload are some of the electrical system failures modes capable of initiating a fire.	Damaged wiring insulation, exposed wiring, corroded connections, and overload are some of the electrical system failures modes capable of initiating a fire. In addition, the use of electrical 110V power strips or USB power banks and the “daisy” chaining by connecting these devices in series into the vessels power distribution system to charge electrical batteries is indicated in previous voyages.	No change.
12	Lack of a fire watch	Comment: In an operational vessel not doing hot work you would not expect to see a fire watch. Rather a watchman entrusted with all facets of vessel safety such as security of the vessel, passenger safety, anchor or mooring security, weather as well as fire watch.	Changed to “lack of a roving watchman”
13	Diagram Upper Deck	Comment: Recommend indicate wings	Change made.
13	Main Deck Diagram	Comment: Indicate anchor hatch and squid light location and plug for that equipment as well as charging location for batteries	No change made.
13	Main Deck Diagram	Comment: recommend inset drawing somewhere showing the actual configuration of the egress hatch and the surround plywood structure.	No changes made. Pictures of actual egress hatch exist in the SF and operations factual report.
13	Upper Deck Diagram	Comment: Recommend label stairs down to main deck.	No changes made. Figure 9 has a photo of the stairs on the Conception.
13	Main Deck Diagram	Comment: Indicate storage location of skiff	No changes made. Photo exists in SF factual report.

13	Main Deck Diagram	Comment: Recommend indications fire hose stations and port side remote start switch for fire pump system	No changes made. Full LSA and FFE plan is in the SF factual report which includes the port side remote switch and fire hose stations.
13	All decks	Comment: Recommend label to indicate fire extinguishers, heat detector and smoke detectors on all decks.	No changes made. Full LSA and FFE plan is in the SF factual report which includes the recommended locations of these mentioned items.
14	Figure 3	Add: with bow gate in open position.	Change added
16	Figure 6	Add: Some indication of the area where the emergency egress hatch is located	Added to figure 8 instead
18	Figure 8	Add: Notation about the location of the emergency egress hatch	Change made.
19	Figure 11 ... forward part of the salon	Forward starboard (right) side of the salon	Change made.
33	Perforated lash down rail	Comment: these perforated lash down rails for equipment are not visible on other interior photos	No change.
XX	- I didn't really, maybe didn't 22 really realize it when I first woke up, but I could hear like some 23 alarms, but they sounded really quiet, really distant.	The interview with crew member French, Page 21 mentions an alarm. Comment: Some kind of undetermined alarm indicator was heard by Mr. French is considered an important factual element.	This fact is covered in survival factors factual report.
8/Last line	An exemption for this was granted in 2001 by the Coast Guard	Dates appears incorrect, waiver not fully explained, and policy used should probably be included here to better explain OCMI decision. Special Note added on 8/25/2000 in MISLE states, "OCMI WAIVED REQUIREMENTS OF 46 CFR 181.425, GALLEY VENT HOOD AND FIXED	Date corrected. Further detail added to explicitly state the terms of alternative compliance. Heat detector, maintenance program and additional fire extinguisher.

		FIRE EXT REQUIREMENTS IAW G-MSE-4 POLICY LETTER 1-99." In addition, MISLE activity 1439079 dated 8/25/2000, includes, "THE GREASE EXTRACTION HOOD REQUIREMENTS LISTED IN 46 CFR 181.425 ARE WAIVED SUBJECT TO THE REQUIREMENTS LISTED IN G-MSE-4 POLICY LETTER 1-99. THE VESSEL MUST ESTABLISH A MAINTENANCE PROGRAM FOR THE EXISTING HOOD, INSTALL A FIRE DETECTION SYSTEM FOR THE GALLEY, AND ADD ONE ADDITIONAL B-II FIRE EXTINGUISHER TO THE GALLEY.	
9/Line 4	Section 177.15	Subpart 177.15, not section, and the regulation is 177.15-1 Requirements	Change made.
9/Line s 4-5	Section 177.500	Subpart E-Escape Requirements and regulation 177.500 Means of Escape. Not section.	Change made.
9/Line 7	the forward most sliding window on the port,	The sliding window was an acceptable means of escape for Old T but would not be for new T because CONCEPTION is over 65 feet in length (was not retroactive). See 177.15-1(a) and 177.500(n).	Thank you for the clarification.
9/Line s 9-10	he placed emergency escape window stickers on the above-mentioned sliding windows, which was not required by the Coast Guard	The owner was required to mark emergency escapes unless specifically waived by the OCMI. All escape hatches and emergency exits are required to be marked by Old T and New T unless waived by the OCMI. See 46 CFR 185.30-15 in Old and 46 CFR 185.606 in New.	Sentence regarding stickers removed.
9/Line 23	two smoke detector units as required	was not required by regulation to have two smoke detectors, but rather an "independent modular smoke detecting and alarm unit in compliance with 181.450"	Change made.

9/Line 23	181.410(e).	Should be 46 CFR 181.400 (e) in New T which was moved to 181.405 (c) in 2016. 181.410 (e) is for fixed gas fire extinguishing pressure relief.	Change made.
9/Line s 28- 32	Both the Old-T (section 177.30-7 (d)) and the New-T (section 177.405 (f)) regulations do not allow for these types of trash cans to be used and instead require them to be constructed of non-combustible materials. Throughout the inspection history of the Conception and the other two vessels in the fleet (the Vision and Truth), there were no remarks or deficiencies related to the waste receptacles on board.	Old T requires covered metal trash containers in lounge areas but per 177.30-7 (a), these requirements apply below the main deck. All of the described trashcans were located on the main deck meaning that the old T regulation does not apply to them unless they had been changed out after the New T regulations were promulgated as required in New T 46 CFR part 177.115 (b). Thus, CG deficiencies for the CONCEPTION trashcans located in the main deck accommodations space would only be written and expected in instances where the CG inspector determined that they had been renewed with the improper variety.	Clarification added to indicate the difference between Old-T and New-T regulation regarding trashcans and when the New-T regulation would apply to a vessel built under Old-T. Lack of sited deficiency remains to make the point that there is not a readily available means for an inspector to determine the age of a trashcan.
9/Line s 33- 34	Except for mattresses in the passenger bunkrooms, there are no flammability standards for the interior furnishings of vessels in both	This statement is not true as written. See new T 46 CFR 177.410(c)(5) which brings in furnishing structural fire protection requirements in Subchapter K. This did not apply to CONCEPTION because the vessel was considered a wood vessel; however, the blanket statement made in the factual report is inaccurate.	Change made. Specified “applicable to the Conception”

	the Old-T and New-T regulations.		
11/ Lines 22-25	Another potential source of ignition is the vessel's electrical system in the salon compartment. Although examination of the Conception's electrical system was not possible, the examination of the Vision and the similarity of the two vessels would suggest similar electrical installations and condition.	Recommend noting the CONCEPTION electrical work that was completed by untrained crew to replace lights in salon and galley with LED lights in close proximity to the accident voyage. The replacements were not "in kind" and not overseen by the Coast Guard.	Comment added in section discussing electrical system as potential ignition source.