

U.S. Department of
Homeland Security

United States
Coast Guard



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16732
26 OCT 2017

MEMORANDUM

From: [REDACTED], CDR [REDACTED]
Chairman, Marine Board of Investigation on

Reply to [REDACTED], CDR
Attn of: [REDACTED]

To: CG MSC-1

Subj: REQUEST FOR POST SINKING STABILITY INVESTIGATIVE ANALYSIS OF
THE F/V DESTINATION, O.N. 632374

1. The Marine Board of Investigation, convened to investigate the sinking of the F/V DESTINATION in the Bering Sea on 11 FEB 2017, respectfully requests the assistance of the Marine Safety Center (MSC) in analyzing the vessel's stability and determining what may have led to its sinking.
2. Broadly speaking, the Marine Board is requesting the MSC provide the following with regard to the to the F/V DESTINATION:
 - a. Identify the stability standards applicable to the vessel.
 - b. Validate the vessel's lightship characteristics.
 - c. Confirm that the information of enclosure (1) met the applicable stability standards, and that enclosure (2) adequately addressed the stability of the vessel following the addition of the bulbous bow.
 - d. Analyze the vessel's stability at the time of the casualty, using the assumed departure loading condition outlined in enclosure (3), and verify if it complied with the applicable stability standards.
 - e. Determine whether the vessel's assumed departure loaded condition outlined in enclosure (3) may have constituted a "substantial alteration" or otherwise "adversely affected" the vessel's stability, as those terms are defined in 46 CFR 28.501 and 28.510 when compared to the provided stability information.
3. Please provide the results of your technical reviews and analyses in the form of a stand-alone MSC report suitable for inclusion as an Appendix to the MBI's Report of Investigation (ROI).

4. To further evaluate the vessel's intact stability, the Marine Board requests the MSC conduct the following analyses:
 - a. Calculate the vessel's required freeing port area in accordance with 46 CFR 28.555 and determine if the nine freeing ports observed on the vessel with an estimated area of 120 square inches each would satisfy this requirement.
 - b. Determine the maximum draft and trim at which the vessel would pass the applicable stability criterion assuming departure loading condition VCG of enclosure (3).
5. To help identify potential casualty scenarios for the vessel assuming the departure loading condition of enclosure (3), the Marine Board request the MSC analyze the following voyage factors:
 - a. Incremental icing loads applied to the vessel and determine when stability standards would be exceeded.
 - b. Incremental seawater load added to the #3 Hold and determine when stability standards would be exceeded.
6. In order to support the requested analysis, enclosures (4) and (5) provide background information. The Marine Board of Investigation has developed this information based on a preliminary review of the testimony and evidence.

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- Enclosures:
- (1) F/V DESTINATION, Trim and Stability Report, Completed by Richard W. Etsell, P.E., dated 27 OCT 1993
 - (2) F/V DESTINATION, Stability Assessment - Post Bulbous Installation, Completed by Gisli Olafsson, P.E, dated 28 JAN 2013
 - (3) Assumed Departure Loading Condition at the Time of Sinking
 - (4) FV DESTINATION, Vessel and Casualty Background Information
 - (5) Marine Board Formal Hearing, Opening Presentation, dated 07 AUG 2017