



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: June 29, 2017

In reply refer to: M-17-8 and -9

Mr. Benjamin Friedman
Acting Administrator and Deputy Under-Secretary of Commerce for Oceans and Atmosphere
National Oceanic and Atmospheric Administration
1401 Constitution Avenue, NW
Washington, DC 20230

On June 20, 2017, the National Transportation Safety Board (NTSB) adopted its safety recommendation report *Tropical Cyclone Information for Mariners*, related to the October 1, 2015, sinking of cargo vessel *El Faro*. Additional information about this accident and the resulting recommendations may be found in the safety recommendation report, which can be accessed at our website, www.nts.gov, under report number NTSB/MSR-17/02.

As a result of this investigation, we issued seven recommendations to the National Weather Service, one recommendation to the US Coast Guard, and the following two recommendations to the National Oceanic and Atmospheric Administration:

M-17-8

Develop and implement a plan specifically designed to emphasize improved model performance in forecasting tropical cyclone track and intensity in moderate-shear environments.

M-17-9

Develop and implement technology that would allow National Weather Service forecasters to quickly sort through large numbers of tropical cyclone forecast model ensembles, identify clusters of solutions among ensemble members, and allow correlation of those clusters against a set of standard parameters.

Acting Chairman SUMWALT and Members HART, WEENER, and DINH-ZARR concurred in these recommendations.

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate receiving a response from you within

90 days detailing the actions you have taken or intend to take to implement them. When replying, please refer to the safety recommendations by number. We encourage you to submit your response electronically to correspondence@ntsb.gov.

[Original Signed]

By: Robert L. Sumwalt, III
Acting Chairman