

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: June 1, 1978

Forwarded to:

Mr. Richard A. Frank
Administrator
National Oceanic and Atmospheric
Administration
Department of Commerce
Rockville, Maryland 20852

SAFETY RECOMMENDATION(S)

M-78-33 and -34

About 1915, e.s.t, on November 10, 1975, the Great Lakes bulk cargo vessel SS EDMUND FITZGERALD, with 29 crewmen and fully loaded with taconite pellets, sank in eastern Lake Superior at 46°59.9' N, 85°06.6' W, approximately 17 miles from the entrance to Whitefish Bay, Michigan. The ship was en route from Superior, Wisconsin, to Detroit, Michigan, and was proceeding at a reduced speed in a severe storm. No distress call was heard and no survivors or bodies were located, although the vessel's two inflatable liferafts, several personal flotation devices, and other debris were found. 1/

As part of the investigation into the cause of the sinking of the FITZGERALD, the Canadian Hydrographic Service performed a hydrographic survey of the waters between Michipicoten Island and Caribou Island in Lake Superior in 1976. Since this area is navigated by Great Lakes bulk cargo vessels, the updated hydrographic information determined by this survey should be included on the National Oceanic and Atmospheric Administration's Lake Survey Chart No. 9, and consideration should be given to indicating the extent of the shoal area north of Caribou Island, known as North Bank, where depths are between 5 to 10 fathoms.

Testimony given during the investigation indicated that although the National Weather Service accurately predicted the direction and velocity of the wind expected over the eastern end of Lake Superior on November 10, 1975, the predicted wave heights were significantly less than those observed by vessels in the area.

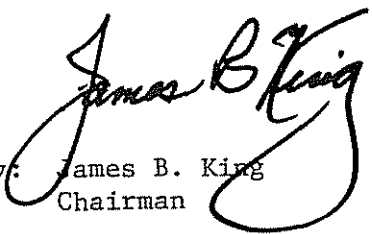
1/ For more detailed information about this accident, read "Marine Accident Report - SS EDMUND FITZGERALD Sinking in Lake Superior, November 10, 1975," (NTSB-MAR-78-3)

Therefore, the National Transportation Safety Board recommends that
The National Oceanic and Atmospheric Administration:

Revise Lake Survey Chart No. 9 showing the areas
between Michipicoten Island and Caribou Island in
Lake Superior to reflect the findings of the survey
performed by the Canadian Hydrographic Service.
(Class II, Priority Action) (M-78-33)

Evaluate the current methods of forecasting wave heights
on the Great Lakes to determine if these methods
accurately predict actual wave heights.
(Class II, Priority Action) (M-78-34)

KING, Chairman, McADAMS, HOGUE, and DRIVER, Members, concurred
in the above recommendations.

By:  James B. King
Chairman