



# National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Logm-357E

Date: December 5, 1989

In reply refer to: M-89-151

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Assistant Secretary of Marine Transportation  
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Marine Division  
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The National Transportation Safety Board has been committed to improving the safety of passenger vessels carrying U.S. passengers from U.S. ports. The Safety Board recently completed a study that reviewed safety issues for three broad groups of vessels: domestic passenger vessels, foreign flag passenger vessels operating from U.S. ports and carrying U.S. passengers, and some State-regulated domestic passenger vessels.<sup>1/</sup>

One of the safety issues examined in the study is the role of fatigue in performance degradation of masters and crewmembers responsible for the safety of many passengers on vessels.

The Safety Board has addressed safety issues related to prolonged and unusual work shift schedules and crewmember fatigue in a collision between the U.S. passenger/car ferries CAPE HENLOPEN and NORTH STAR on Long Island Sound, Orient Point, New York, on July 9, 1987.<sup>2/</sup> The Safety Board concluded that "current Coast Guard regulations do not establish limitations to effectively reduce the likelihood of cumulative fatigue and its associated risk to the performance degradation among crewmembers of ferry vessel operations."

<sup>1/</sup> National Transportation Safety Board. 1989. Safety study: Passenger vessels operating from U.S. ports. NTSB/SS-89/01. Washington, DC. 175 p.

<sup>2/</sup> National Transportation Safety Board. 1988. Marine accident report: Collision between U.S. passenger/car ferries M/V NORTHSTAR and M/V CAPE HENLOPEN on Long Island Sound, Orient Point, New York, July 9, 1987. NTSB/MAR-88/06. Washington, DC. 37 p.

As part of its study on passenger vessels, the Safety Board was provided information from a number of masters that operate ferries in the Washington State Ferries system. They indicated that irregular shift schedules were causing increasingly dangerous conditions for masters, first mates, and crewmembers because of interrupted work and sleep patterns, interrupted family and social patterns, and general deterioration of health.

The Safety Board believes that work schedules in ferry and domestic passenger operations should facilitate maximum watchstanding vigilance and optimum operating skills by providing well-rested masters, mates, and crewmembers. Irregular work shifts can only lead to fatigue and an increased risk of degradation of performance by ferry vessel crews. The Safety Board believes that the Washington State Ferries should take actions to minimize the deleterious effects of fatigue on crewmembers on those routes requiring irregular and prolonged duty times.

Therefore, as a result of its study, the National Transportation Safety Board recommends that Washington State Ferries:

Establish work shifts and watches for masters, mates, and crewmembers that minimize mental and physical fatigue. (Class II Priority Action) (M-89-151)

Also, as a result of its study, the National Transportation Safety Board was provided published information and posted station bills for use by ferry passengers in understanding emergency procedures. Although the Safety Board prefers that safety briefings be verbal, Washington State Ferries has established a program including written brochures and station bills that satisfies the intent of the following safety recommendation issued to your organization in May 1982:

M-82-31

Establish a program to inform ferry passengers of the action they should take in various types of emergencies, and make the information readily available by suitable means at ferry terminals and on board ferries.

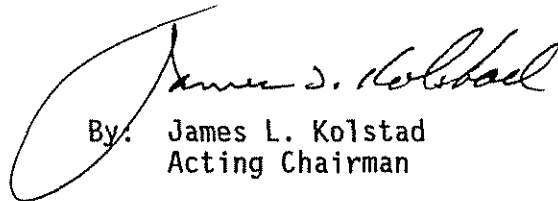
Therefore, the National Transportation Safety Board has classified Safety Recommendation M-82-31 as "Closed--Acceptable Alternate Action."

Also as a result of the safety study, the National Transportation Safety Board issued Safety Recommendations M-89-111 through -145 to the U.S. Coast Guard, M-89-146 to the National Association of Passenger Vessel

Owners, M-89-147 and -148 to the Cruise Lines International Association, M-89-149 to the National Association of State Boating Law Administrators, M-89-150 to cruise vessel owners and operators, and M-89-152 to the Governor and legislative leaders of the State of Washington.

The National Transportation Safety Board is an independent Federal agency with statutory responsibility "...to initiate and conduct special studies and special investigations on matters pertaining to safety in transportation..." (Public Law 93-633). The Safety Board is vitally interested in any actions taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation M-89-151 in your reply.

KOLSTAD, Acting Chairman, BURNETT, LAUBER, NALL, and DICKINSON, Members, concurred in this recommendation.

  
By: James L. Kolstad  
Acting Chairman