National Transportation Safety Board

Washington, D. C. 20594

Safety Recommendation

Log M-343A

Date: July 25, 1988

In reply refer to : M-88-49 through -51

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At 0201 local time on September 19, 1987, the captain of the 127-foot-long U.S. fishing vessel NORDFJORD broadcasted a distress message via single-side-band radio which was received by U.S. Coast Guard Radio Station, Kodiak, Alaska. However, the distress message did not state the position of the vessel or other details concerning the distress.

About 0430, the Coast Guard learned from the vessel owner that the NORDFJORD was on a voyage from Seattle, Washington, to Unimak Pass, Alaska, and was somewhere in the middle of the Gulf of Alaska at the time of the distress message. Despite an 8-day search covering over 176,000 square miles by Coast Guard and Canadian Coast Guard aircraft, neither the vessel nor any debris that could be identified as coming from the NORDFJORD was found. Neither the captain nor any of the four crewmembers were ever seen or heard from again. 1/

The lack of any position information in the NORDFJORD distress message and the lack of any known emergency position indicating radio beacon (EPIRB) distress signal from the NORDFJORD's two manually-activated EPIRBs emphasizes the need for float-free, automatically-activated EPIRBs on fishing vessels. The National Transportation Safety Board believes that the NORDFJORD sank shortly after the distress message at 0201 on September 19. It is probable that the reason that no EPIRB signal was received by aircraft or a COSPAS-Search and Rescue Satellite-Aided Tracking (SARSAT) satellite was that the vessel sank before the crew could activate either of the vessel's two manually-activated EPIRBs. A float-free, automatically-activated EPIRB would have required no action on the part of the crew and its signal probably would have been detected by a COSPAS-SARSAT satellite. Had an EPIRB signal been received, the U.S. Coast Guard would then

1/ For more detailed information, read Marine Accident Report--*Disappearance of the U.S. Fishing Vessel NORDFJORD in Gulf of Alaska, September 19, 1987* (NTSB/MAR-88/07).

have known the general location of the NORDFJORD and probably would have been able to launch search and rescue aircraft immediately.

Presently, there are no Coast Guard requirements for the carriage of EPIRBs on most fishing vessels. Since 1980, as a result of its investigation of the sinking of the fishing vessel LOBSTA-1, 2/ the Safety Board has recommended that the Coast Guard require EPIRBs on commercial fishing vessels. However, on September 3, 1987, the Coast Guard published proposed regulations to require the use of Federal Communications Commission (FCC)-type accepted float-free EPIRBs operating on the dedicated satellite frequency of 406 MHz on fishing vessels. The Notice of Proposed Rulemaking (NPRM) would permit the carriage of conventional float-free, automatically-activated EPIRBs operating on the frequencies 121.5 and 243 MHz for a 10-year period, but would not permit manually-activated EPIRBs. On October 19, 1987, the Safety Board commented on the NPRM stating that the Safety Board supports a shorter phase-out period of 6 years for conventional EPIRBs, the prohibition of the carriage of EPIRBs not complying with Federal Aviation Administration Technical Standard Order C91a during the phase-out period, and the prohibition of Class B and Class C EPIRBs during the phase-out period. However, the Coast Guard Navigation and Vessel Inspection Circular (NVIC) 5-86 regarding voluntary safety standards for fishing vessels recommends either the manually-activated EPIRBs or the float-free, automatically-activated EPIRBs, and the NPFVOA *Vessel Safety Manual* makes no recommendation as to the type of EPIRB. The Safety Board believes that the Coast Guard should amend NVIC 5-86 to recommend only float-free, automatically-activated EPIRBs for fishing vessels and that the NPFVOA should also recommend only float-free, automatically-activated EPIRBs.

The Safety Board first addressed the need for scheduled radio communications by fishing vessel captains that include position information in its report of the sinking of the AMAZING GRACE 3/ on November 14, 1984. As a result of its investigation, the Safety Board issued a recommendation to the Coast Guard:

> M-85-71
>
> Urge commercial fishing vessels to schedule frequent radio communications which include a report of their position with shore or other fishing vessels to reduce delays in initiating a response in case of an emergency in which the vessel is unable to communicate.

On January 8, 1986, the Coast Guard stated:

> NVIC 6-85 urges masters to establish regular communication schedules and make position reports whenever possible. It also describes the action an owner or responsible person must take when a vessel fails to communicate or appear, as required by the "Maritime

2/ Marine Accident Report--*Fishing Vessel M/V LOBSTA-1 Capsizing and Sinking in the Atlantic Ocean, Point Judith, Rhode Island, September 23, 1978* (NTSB/MAR-80/06).
3/ Marine Accident Report--*Loss of the U.S. Fishing Vessel AMAZING GRACE about 80 Nautical Miles East of Cape Henlopen, Delaware, about November 14, 1984* (NTSB/MAR- 85/07).

Safety Act of 1984" (PL-498). This information will also be incorporated in the safety guide.

On April 3, 1986, Safety Recommendation M-85-71 was classified "Closed--Acceptable Action."

If the owner and captain had established regular communication schedules which included position reports that stated the vessel's latitude and longitude or loran coordinates, the Coast Guard might have been able to determine the probable position of the NORDFJORD at the time of its distress call and probably would have launched a search aircraft immediately. Although NVIC No. 5-86, which includes the information contained in NVIC 6-85, recommends that fishing vessels report their position every 24 hours, the Safety Board notes that the North Pacific Fishing Vessel Owners' Association (NPFVOA) *Vessel Safety Manual* does not address vessel position reporting. The Safety Board believes that this accident again illustrates the importance of periodic position reporting by commercial fishing vessels and that the *Vessel Safety Manual* should address this important safety procedure.

FCC regulations state, Coast Guard NVIC 5-86 recommends, and the NPFVOA *Vessel Safety Manual* recommends the following standard distress message for mobile marine radio stations:

(1) the distress signal MAYDAY;

(2) the name of the mobile station in distress;

(3) particulars of its position;

(4) the nature of the distress;

(5) the kind of assistance desired; and

(6) any other information which might facilitate rescue, for example, the length, color, and type of vessel, number of persons on board.

However, the captain of the NORDFJORD did not send any information in his distress message other than "Mayday" and the name of his vessel, NORDFJORD. Consequently, the Coast Guard had no information on the position of the vessel or the nature of the distress. The FCC requires the operators of marine radio stations on vessels over 300 gross tons to obtain a marine radio permit that requires an individual to pass an examination covering basic marine radio law and basic marine radio operating practices. However, the operators of marine radio stations on vessels less than 300 gross tons, which includes most commercial fishing vessels, need only certify that they are familiar with applicable treaties, laws, rules, and regulations. No training is required and no examinations are given. The Safety Board believes that there should be training of operators of mobile marine radio stations on all commercial fishing vessels in basic marine radio law and basic radio operating practices.

The distress message from the NORDFJORD was received on 4125 kHz, one of the supplementary distress and safety communications frequencies approved by the FCC. NVIC 5-86 states that single-side-band (SSB) radios should be capable of receiving and transmitting on 4125 kHz, and Coast Guard shoreside radio stations in

Alaska and some Coast Guard vessels in Alaskan waters maintain a listening watch on 4125 kHz because it is a common frequency used by commercial fishing vessels. Also, the National Weather Service in Alaska broadcasts weather information on 4125 kHz. However, the international calling and distress frequency for SSB radios is 2182 kHz, and all vessels over 500 gross tons on an international voyage are required to maintain a listening watch on 2182 kHz. Thus, most vessels, other than fishing vessels, transiting the Gulf of Alaska would probably not have heard the NORDFJORD's distress message on 4125 kHz. The NPFVOA *Vessel Safety Manual* makes no mention of 4125 kHz and recommends sending distress messages on 2182 kHz when using SSB radios. Since 4125 kHz is the common frequency used by fishing vessels in Alaskan waters, the *Vessel Safety Manual* should explain why 2182 kHz should be used for distress messages instead of 4125 kHz and why fishing vessels should be listening on 2182 kHz instead of 4125 kHz. The Safety Board believes that the NPFVOA should amend the *Vessel Safety Manual* to include information on the proper use of the frequency 4125 kHz.

Therefore, the National Transportation Safety Board recommends that the North Pacific Fishing Vessel Owners' Association:

> Revise the *Vessel Safety Manual* to recommend that float-free, automatically-activated emergency position indicating radio beacons be installed on commercial fishing vessels. (Class II, Priority Action) (M-88-49)
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> Revise the *Vessel Safety Manual* to address the need for frequently scheduled radio communications by commercial fishing vessels which include the vessel's position so that there is minimum delay in initiating rescue operations in an emergency. (Class II, Priority Action) (M-88-50)
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> Amend the *Vessel Safety Manual* to include information on the proper use of frequency 4125 kHz which is commonly used for distress messages by commercial fishing vessels in Alaskan waters. (Class II, Priority Action) (M-88-51)

Also as a result of its investigation, the Safety Board issued Safety Recommendations M-88-47 and -48 to the U.S. Coast Guard.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility " . . . to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendations in this letter. Please refer to Safety Recommendations M-88-49 through -51 in your reply.

BURNETT, Chairman, KOLSTAD, Vice Chairman, and LAUBER, NALL, and DICKINSON, Members, concurred in these recommendations.

By: Jim Burnett
Chairman