

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: April 24, 1980

Forwarded to:

Admiral John B. Hayes
Commandant
U.S. Coast Guard
Washington, D.C. 20593

SAFETY RECOMMENDATION(S)

M-80-23 through -29

About 0100 e.d.t., on September 23, 1978, the fishing vessel M/V LOBSTA-I capsized in the Atlantic Ocean about 47 nmi south-southeast of Point Judith, Rhode Island, while en route to its lobster fishing area. The capsized vessel was sighted about 12 hours after the accident by a tankship which notified the Coast Guard. Later, a Coast Guard helicopter sighted the capsized vessel, but it sank before a Coast Guard cutter could reach it. The Coast Guard conducted an extensive search in the area, but they found no survivors. The LOBSTA-I was later located resting upright on the bottom at a 234-foot water depth, and photographs were taken by a shipboard controlled, underwater vehicle. All five crewmen are missing and presumed dead. 1/

Although the Safety Board considered many factors during the investigation, including vessel stability, operating practices, weather forecasting, and collision, it is unable to determine the probable cause of the capsizing of the LOBSTA-I.

The LOBSTA-I's crew probably did not have time to broadcast a distress message. However, if the crew had attempted to broadcast a distress message over their VHF radiotelephone, the Coast Guard probably would not have heard it. The Coast Guard's radio stations are set up for reliable VHF reception from ships and boats up to 40 nmi from the nearest station. The tankship's attempt to contact the Coast Guard over channel 16 VHF was probably an indication of the VHF range limitations. If the LOBSTA-I's distress had been known immediately, the Coast Guard should have had helicopters onscene searching for survivors in the water within 2 hours, and vessels in the area could have been diverted to the scene shortly thereafter. The fishing vessel HUNTRESS was about 18 nmi away from the accident site and two U.S. Navy ships passed near the accident site about 4 hours after the capsizing. The lives of some LOBSTA-I crewmembers may have been saved by the early arrival onscene of helicopters and ships.

Emergency position indicating radio beacons (EPIRB) can automatically signal a vessel's distress in the event of a sinking or capsizing; can be heard by aircraft 200 nmi away; and are available at a reasonable cost. Coast Guard cutters and Navy ships are also equipped to detect EPIRB signals.

1/ For more detailed information read, "Marine Accident Report--Fishing Vessel M/V LOBSTA-I Capsizing and Sinking, in the Atlantic Ocean 47 Nautical Miles Southeast of Point Judith, Rhode Island, September 23, 1978 (NTSB-MAR-80-6).

Because of the large volume of commercial and military aviation traffic within 200 nmi of the accident site, there was a high probability that an EPIRB signal from that location would have been detected shortly after activation. Therefore, the Safety Board concludes that lives may have been saved if the LOBSTA-I had carried an EPIRB.

In addition to their lifesaving potential, EPIRBs might greatly reduce the Coast Guard resources expended in search and rescue. Unsuccessful searches for fishing vessels operating out of New England have caused the Coast Guard to commit its ships and aircraft at great cost.

There are about 25,000 U.S. flag documented fishing vessels which are not required to be inspected by the U.S. Coast Guard. From 1972 to 1977, 819 fishing vessels reported casualties involving flooding, foundering, and capsizing in which 238 lives were lost. Nevertheless, it is unlikely that the Coast Guard will be given authority to inspect these vessels in the near future. Therefore, efforts to reduce the loss of life in fishing vessel accidents should be directed more toward improvements in distress notification, survival after an accident, and locating persons in the water including accidents which occur during darkness. The use of EPIRBs can provide automatic distress notification which should assure a reasonably fast rescue response. However, survival for even short periods of time in cold water requires suitable thermal protection. Additionally, the rescue of survivors in the water during darkness is greatly dependent upon the visibility of the survivors by means such as the use of lights attached to their personal flotation devices or survival suits. In addition to vessels being equipped with EPIRBs, fishing vessel crews must be made aware of how to improve their chances of survival while awaiting rescue after an accident.

While it remains afloat, a capsized vessel will usually contain a large volume of air which can support life. Generally, the Coast Guard encounters situations requiring rescue of persons trapped inside a large vessel so infrequently and the circumstances vary so much with each incident that it has not developed a general response plan. Unless the hull of a capsized vessel can be supported by external buoyancy or lifting provisions, divers entering the hull could be trapped inside if the vessel sank. Divers could disturb openings which could cause additional flooding and sinking, or their air bubbles could disturb a delicate balance and cause additional flooding. Coast Guard cutters normally do not carry divers, and the cutters do not have the lifting capability to prevent a large capsized vessel from sinking. Further, Coast Guard helicopters do not carry divers and are greatly limited in their capability to carry equipment suitable for rescue of persons entrapped in capsized vessels. However, Coast Guard cutters could inject additional air into a capsized hull to keep it afloat and to extend life support, and Coast Guard helicopter crews could deliver and sometimes attach emergency flotation bags to keep the vessel afloat longer. Then, the Coast Guard could bring in its own, U.S. Navy, or civilian divers and floating cranes or flotation of adequate capacity to support a rescue.

Location, time, and weather, as well as vessel arrangement — factors over which the Coast Guard has no control — will determine the proper rescue response. However, with increased use of EPIRBs, the Coast Guard might be faced with the extraction of survivors entrapped in capsized vessels more frequently. The Safety Board believes that the Coast Guard should determine the most effective methods of extending survival time and effecting rescue from inside capsized vessels which require minimal increases in their resources.

In circumstances where the Coast Guard is notified shortly after a vessel capsizing or sinking, a fast response is critical to saving lives. To provide a fast response, the Coast Guard's policy is to have a helicopter airborne within 30 minutes after a decision is made to launch a helicopter. In the case of the LOBSTA-I, an HH-3 helicopter was airborne about 30 minutes after the RCC duty officer in the Third Coast Guard District requested that the First District provide a helicopter. However, that request was not made until 49 minutes after the Third District was notified of the wreck by the radio operator at Portsmouth. It appears that many of the rescue coordination actions were not made in a timely manner. A request for helicopter support from the Air National Guard at Suffolk was not made until 8 minutes after the Third District was notified. Nine minutes later, the duty officer called the commanding officer, who was not at home. Apparently, no action was taken until the commanding officer returned the call 23 minutes later. The duty officer then determined that two HH-52 helicopters would have to be flown from Brooklyn and that a request for an HH-3 helicopter from the First District should be made. These actions suggest that the rescue coordination was not well organized and that personnel on duty may have lacked the experience and instruction needed to process the search and rescue operation in the timely manner necessary to save lives. As a result, it took 1 hour 25 minutes to get a helicopter airborne. Had there been survivors in the water, this protracted response could have been critical to their rescue. The Safety Board concludes that the Coast Guard's search and rescue response was too slow for a lifesaving mission even though in this accident it did not contribute to the loss of life.

The helicopter pilot's report that the LOBSTA-I was a 20-ft raft suggests that he lacked familiarity with fishing vessels and other small vessels which operated in the offshore New England area. To attach the DMB, the helicopter had to come very close to the capsized hull. Such a closeup examination should have indicated that it was a vessel considerably larger than a 20-ft raft. The fact that a more accurate description of the capsized hull was elicited from the pilot about 9 hours after he saw the wreck suggests that he was able to examine the vessel sufficiently but lacked the necessary familiarity to make an accurate report. This erroneous report delayed the formulation of a search plan for several hours. Again, this delay could have been critical if the initial accident notification had been earlier when survivors might have been expected.

There were other fishing vessels in the area which might have been able to assist the Coast Guard in their search and rescue. Some of these vessels could have arrived onscene earlier than a Coast Guard cutter and could have provided professional advice and assistance to the Coast Guard. Had there been survivors, this early response and assistance could have been important to saving lives.

In its analysis of this accident, the Safety Board noted some unsafe practices, such as leaving the bridge unattended to make engineroom checks and vessel arrangements, such as allowing the lobster tank to flood without the crew's knowledge. It is also possible that the crew may have relied on their VHF radiotelephone to broadcast distress when they were too far away for reliable communications with shore receiving stations. The Safety Board believes that a list of such unsafe practices and vessel arrangements would be useful to fishing vessel operators and insurers.

The DMB which the helicopter pilot attached to the LOBSTA-I contained a radio beacon and a strobe light. As long as it remained above the water surface, it could be relocated. Once the DMB sank with the LOBSTA-I, the Coast Guard had to conduct a time-consuming and very costly search to relocate the vessel. Acoustic beacons are

available and are routinely used to aid relocation of submerged objects. The attachment of an acoustic beacon to the LOBSTA-I would have speeded its relocation and would have resulted in considerable savings.

Therefore, as a result of its investigation, the National Transportation Safety Board recommends that the U.S. Coast Guard:

Seek authority to require the carriage of emergency position indicating radio beacons (EPIRB) on documented U.S. fishing vessels and, in the interim period, pursue all available means to encourage their use. (Class II, Priority Action) (M-80-23)

Advise fishing vessel operators of actions which they should take to improve their chances of survival and rescue from accidents occurring in cold water and in darkness. (Class II, Priority Action) (M-80-24)

Determine the most effective means to utilize onscene Coast Guard resources to rescue persons trapped within a capsized vessel and determine how these resources can be augmented, adapted, or trained for more effective use in such rescues. (Class II, Priority Action) (M-80-25)

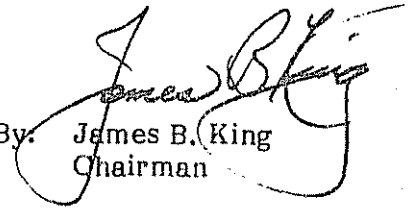
Review the Coast Guard's rescue coordination for this accident and improve the rescue coordination procedures to provide a more timely response. Include provisions for more effective coordination with local fishing vessel operators who may assist in search and rescue efforts. (Class II, Priority Action) (M-80-26)

Develop a list of unsafe practices and vessel arrangements - such as leaving the bridge unattended in a seaway which affects the vessel's navigation and overboard discharges which allow tanks to flood without crew knowledge - found on the U.S. fishing vessels. (Class II, Priority Action) (M-80-27)

Advise fishing vessel operators and insurers of these unsafe practices and arrangements, and urge them to correct any unsafe practices and arrangements found on their vessels. (Class II, Priority Action) (M-80-28)

Provide cutters and helicopters with acoustic beacons for attachment to vessels in danger of sinking to aid in their relocation. (Class II, Priority Action) (M-80-29)

KING, Chairman, DRIVER, Vice Chairman, and McADAMS, Member, concurred in these recommendations. GOLDMAN and BURSLEY, Members, did not participate.

By.  James B. King
Chairman