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Log M-291

**NATIONAL TRANSPORTATION SAFETY BOARD**  
**WASHINGTON, D.C.**

ISSUED: **1 OCT 1985**

Forwarded to:

Mr. Howard Saffer  
Secretary  
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**SAFETY RECOMMENDATION(S)**

**M-85-90**

About 1730 e.s.t. on February 27, 1982, the fishing vessel BONAVENTURE sank in the Gulf of Maine, approximately 40 miles northeast of Gloucester, Massachusetts. Its five crewmembers were rescued. Earlier in the day about 1000, the crew had set its net, and about 1300 began hauling it back in. The master of the vessel later said that there was a considerable strain on the cable and that he heard a sudden loud noise as the net was being hauled back in. According to the master, the heavy strain on the net cables began after the streaming "doors" were put up because of the strong wind. He said that the wind was blowing about 25 knots at that time. After the net had been hauled aboard, the master checked the engineroom through the forward hatch and found everything satisfactory. He then ordered the crew to reset the net. About 1400, the engineer went to the engineroom to start the deck pump to wash down the fish. 1/

The engineer returned to the pilothouse immediately and informed the master that the vessel was taking on water and that he would start a pump to pump the bilges. About a half hour later, the engineer informed the master that the water level was not lowering despite the continued operation of the bilge pump. At that time, the master went to the engineroom to see if he could locate the source of the flooding, but he was not successful. The master said that he ordered the engineer to start all four pumps in an effort to dewater the vessel. He then radioed the Coast Guard and reported that the vessel was taking on water. The master told the Coast Guard that he believed the problem was not a serious one, but he requested additional pumps. Meanwhile, the fishing vessel RACKETEER, which was in the area, proceeded to stand by the BONAVENTURE. The RACKETEER did not have any portable pumps onboard. Shortly thereafter, the engineer checked the engineroom again and found that one pump had failed. He then shifted the suction hose from one pump directly into the bilge, but this action did not improve control of the flooding.

About 1515, the engineer told the master that the flooding was out of control. Consequently, the master notified the Coast Guard that the water level was rising and the vessel was in danger of sinking. The master shut down the BONAVENTURE's main engine and went below to the engineroom to assist the engineer. By this time, another pump had failed, and the master and the engineer tried unsuccessfully to repair and restart the pumps. Meanwhile, the engineroom continued to flood, and the water level was now above

1/ For more detailed information, read **Marine Summary Report--"Fishing Vessel BONAVENTURE, Gulf of Maine, February 27, 1982" (NTSB/MAR-85/02/SUM).**

the engineroom deck. The master concluded that efforts to restart the pumps and dewater the vessel were futile; therefore, he and the engineer left the engineroom. He then ordered his crew to make the rubber liferaft ready for launching. About 1530, the master decided that it was too dangerous to stay aboard the vessel, and he ordered the liferaft launched and the crew to get aboard. He then checked the engineroom again and saw the water level over the engine clutch. He abandoned the vessel and joined his crew in the liferaft. About 1613, all five persons were safely rescued by the RACKETEER. By 1627, a Coast Guard helicopter had arrived onscene and dropped two pumps to the RACKETEER. However, because the BONAVENTURE's stern was awash at this time, the master decided that it was unsafe to reboard and attempt to dewater the vessel. About 1730, the BONAVENTURE sank.

Apparently, the engineer did not believe that the water level in the BONAVENTURE's engineroom bilge posed a serious threat to the safety of the vessel and its crew at the time he detected it. However, after unsuccessful attempts to dewater the bilge and subsequently to repair the bilge pumps that had failed, the flooding did become a serious threat to the safety of the vessel and its crew.

This accident highlights the need for monitoring water levels inside enginerooms and void spaces onboard fishing vessels in order to detect flooding at an early stage. Because commercial fishing vessels such as the BONAVENTURE often operate with a small number of crew and have unmanned enginerooms, it is impractical for crewmembers frequently and periodically to inspect unmanned spaces. Such operational conditions demand that flooding be detected early enough for the installed bilge pumps to be effective in dewatering the flooding space and for the source of flooding to be located and plugged. The Safety Board believes that it would be prudent for fishing vessels that operate with small crews to be equipped with a reliable automatic audible and visual high-water alarm system to provide early notification of flooding in unmanned spaces.

A 1984 study by the Coast Guard showed that, between 1970 and 1982, an average of 185 U.S. fishing vessels were lost each year; an average of 70 were lost because of capsizing. Coast Guard statistics for 1983 show that 250 vessels were lost. The Safety Board has investigated at least six fishing vessel accidents in which the lack of a bilge alarm was a factor which contributed to their sinking.

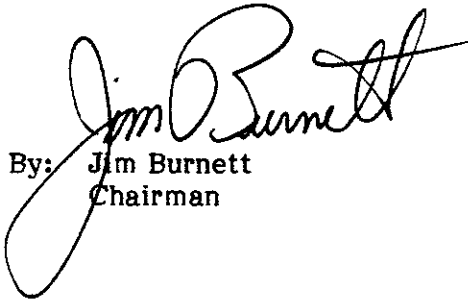
This accident might have been prevented if the BONAVENTURE's master or engineer had been alerted earlier to the above-normal water levels in the engineroom so that the source of flooding could have been located and plugged. The Safety Board believes that a requirement that commercial fishing vessels have an alarm in the pilothouse to indicate flooding in the unmanned spaces would be an important safety contribution.

As a result of its investigation of this accident, the National Transportation Safety Board recommends that the National Association of Marine Surveyors:

- Publicize in its National News Letter the benefits of installing a reliable automatic high-water alarm system to provide early notification in the pilothouse of flooding in unmanned spaces of uninspected commercial fishing vessels. (Class II, Priority Action) (M-85-90)

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 actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter.

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY, Member, concurred in this recommendation.

A large, stylized handwritten signature in black ink, appearing to read "Jim Burnett". The signature is written over the typed name and title.

By: Jim Burnett  
Chairman