



# National Transportation Safety Board

Washington, D.C. 20594  
Safety Recommendation

Date: May 23, 1986  
In reply refer to: M-86-38

Admiral James Gracey  
Commandant  
U.S. Coast Guard  
Washington, D.C. 20593

About 0430 on July 23, 1984, the 70.5-foot-long U.S. fishing vessel SANTO ROSARIO, while fishing for calico scallops about 35 nautical miles (nmi) east of New Smyrna Beach, Florida, capsized and sank. Three crewmembers were rescued by a fishing vessel nearby, but the fourth crewmember, sleeping below deck, went down with the vessel and was drowned. The vessel's estimated value was \$250,000. <sup>1/</sup>

At 0448 on July 23, 1984, the U.S. Coast Guard station at Port Canaveral, Florida (Port Canaveral CG), about 37 nmi from the scene, received a message from an unidentified vessel that a trawler had overturned and that the trawler CAPTAIN ED could tell them more. At 0502 the captain of the CAPTAIN ED reported to Port Canaveral CG the details of the sinking and the rescue of three survivors. He gave the time and position of the accident, depth of water in fathoms, the names and addresses of the survivors and the missing deckhand, and a description of the injuries. He also reported that the captain of the SANTO ROSARIO was in shock.

During the passage to the dock, the CAPTAIN ED and Port Canaveral CG were both in radiotelephone communication with Coast Guard Group, Mayport, Florida (Group Mayport), about 102 nmi northwest of the accident site. Port Canaveral CG communicated more often with the CAPTAIN ED as the vessel proceeded to port, whereas Group Mayport kept requesting additional information from the CAPTAIN ED on the injured persons in order to evaluate the need to send a helicopter for an airlift. The captain of the CAPTAIN ED requested a diver and a helicopter. En route to port the captain of the SANTO ROSARIO came out of shock and said, "Cancel the chopper to pick me up. I will ride on in with the crew." The captain of the CAPTAIN ED then called Group Mayport and cancelled the request for the helicopter. He again requested the Coast Guard to get some divers to the scene to check for the deckhand who was still aboard and who he thought may have been air-locked in the boat and alive. Port Canaveral CG replied, "We will check into it." However, no rescue units were sent. The captain of the CAPTAIN ED, as soon as his vessel arrived at Port Canaveral, arranged to have the survivors taken by ambulance to a hospital.

<sup>1/</sup> For more detailed information, read Marine Accident Report--"Sinking of the U.S. Fishing Vessel SANTO ROSARIO about 35 Nautical Miles East of New Smyrna Beach, Florida, July 23, 1984" (NTSB/MAR-86/06).

The nearest available Coast Guard helicopter was located at Clearwater, Florida, about 170 nmi away or about 2 hours flying time from the scene. Group Mayport did not order a helicopter either to airlift the survivors or to search for the missing deckhand. Neither were the nearest Navy divers requested from the U.S. Naval Reserve Training Command at Orlando, Florida, about 75 nmi away.

Although Port Canaveral CG had two 41-foot rescue boats available, Group Mayport did not order one to go to the scene and begin a search. The officer of the day at Port Canaveral CG testified that it would have taken a boat about 2 hours to reach the search area. Another Coast Guard station at Ponce Inlet (Ponce Inlet CG), about 40 nmi northwest of Port Canaveral CG and also under Group Mayport command, had heard the message traffic of the distress. Because the accident site was located in this station's rescue area, a ready rescue boat was prepared to depart, but no orders came from Group Mayport to send it. Group Mayport's decision not to send either a helicopter or rescue boat was based on the information furnished by the captain of the CAPTAIN ED that immediate medical attention was not needed for any of the survivors and that the deckhand asleep aboard had gone down with the SANTO ROSARIO in 150 feet of water.

Assuming that the missing deckhand did, in fact, go down with the vessel, the Coast Guard's decision was appropriate considering the depth and temperature of the water in the accident area and the time needed to assemble and transport qualified divers to the scene. It simply would have taken too long to respond and organize a successful rescue. Therefore, the Safety Board does not believe that the Coast Guard's conduct in the case contributed in any way to the loss of life.

However, in evaluating the safety lessons in this accident, the Safety Board is concerned that the Coast Guard may not have had enough information to assume that the missing deckhand had, in fact, gone down with the vessel. First, the Coast Guard relied on statements from the captain of the SANTO ROSARIO, who was clearly traumatized by the accident and possibly was in shock. Second, the CAPTAIN ED conducted only a brief search of the area while it was still dark. Given this uncertainty, the Coast Guard should have taken additional actions before placing this emergency in the "uncertainty phase." At a minimum, the Coast Guard should have attempted to contact other vessels. In addition, the Coast Guard should have either dispatched a search and rescue unit from Ponce Inlet CG to assist in the search or considered sending a helicopter to pick up the three survivors while the CAPTAIN ED continued to search for the missing deckhand.

In light of the circumstances in the SANTO ROSARIO sinking, the Safety Board is concerned that current Coast Guard policy and procedural guidance in this area is inadequate. Therefore, to provide consistency in initiating searches for personnel in sunken vessels and to increase the capability to save lives, the Board believes that all Coast Guard rescue stations should have specific guidance as to when to initiate a rescue for persons trapped in sunken vessels. The National Search and Rescue Manual provides no such guidance. The Safety Board believes that if guidance were added to the manual, the personnel at the rescue stations could make better decisions on when and under what circumstances to initiate a rescue.

Commerical fishing vessels continue to be operated without adequate stability information, as typified by this case where the captain of the SANTO ROSARIO was unaware of the effects on stability of the vessel's modifications and of loading calico

scallops on the main deck. The Safety Board continues to believe that the high number of stability-related fishing vessel accidents shows that voluntary standards are ineffective and that statutory requirements are necessary. Therefore, the Board reiterates Safety Recommendation M-86-11, which it made to the Coast Guard as a result of its investigation of the loss of the U.S. fishing vessels AMERICUS and ALTAIR in 1983. 2/

Seek legislative authority to require that stability tests be conducted and that complete stability information be provided to the captains of commercial fishing vessels.

The SANTO ROSARIO accident illustrates the need for stability standards for the small vessels fishing off the Florida coast for calico scallops. The captain had no guidelines or instructions for keeping his vessel in a safe condition, and had to rely upon experience. He lacked information on such specifics as operating drafts and trim, distribution of liquids on board, and loading of his catch. Without this information he could only guess when to stop loading his vessel and still have sufficient stability to safely reach port. The Safety Board recognizes that fishermen need to know the stability characteristics and proper loading of their fishing vessels, which should be provided by their owners, and that the Coast Guard should continue seakeeping research into stability standards for small vessels like the SANTO ROSARIO.

The SANTO ROSARIO crew received no formal training in their vocation. All their knowledge of fishing and vessel operation was gained only through on-the-job training under guidance of former captains and shipmates. The captain spent 17 years as a deckhand, mate, or operator on many types of vessels before he became the captain of the SANTO ROSARIO. His training in stability of vessels by former captains probably was very limited. To keep the SANTO ROSARIO employed, the captain had agreed to piling the scallop catch on the main deck sufficiently to meet the 1 1/2-hour unloading time at the pier, and he apparently did not know the danger in which he would place his vessel. He had no owner-furnished information on the stability of the SANTO ROSARIO. While operating to meet these requirements on July 23, 1985, his vessel became marginally stable, when he believed that it was properly loaded to meet the time limit. Likewise, the three deckhands probably had little information on vessel stability and depended solely on the captain's judgment for the safe loading of the vessel.

As a result of its investigation of the AMAZING GRACE accident, 3/ in which the Safety Board recognized the need for a mandatory education program for fishermen, the Board issued Safety Recommendation M-85-68 on August 12, 1985, to the Coast Guard:

Seek legislative authority to require the licensing of captains of commercial fishing vessels, including a requirement that they demonstrate minimum qualifications in vessel safety including rules of the road, vessel stability, firefighting, watertight integrity, and the use of lifesaving equipment.

2/ Marine Accident Report--"Capsizing of the U.S. Fishing Vessel AMERICUS and Disappearance of the U.S. Fishing Vessel ALTAIR, Bering Sea North of Dutch Harbor, Alaska, February 14, 1983" (NTSB/MAR-86/01).

3/ Marine Accident Report--"Loss of U.S. Fishing Vessel AMAZING GRACE about 80 Nautical Miles East of Cape Henlopen, Delaware, about November 14, 1984" (NTSB/MAR-85/07).

On January 8, 1986, the Coast Guard replied,

This recommendation is not concurred with. In February 1984, the Coast Guard recommended a Fishing Vessel Safety Initiative to the Secretary of Transportation to reduce the number of casualties in the uninspected commercial fishing fleet. The Secretary endorsed the initiative and program development began in the spring of 1984. The Coast Guard established a Fishing Vessel Safety Task Force to study how best to reduce the number of uninspected commercial fishing vessel casualties. Included in the various alternatives considered to implement the initiative was mandatory licensing of vessel operators. After a review of all alternatives, a two-pronged approach was chosen, a Voluntary Vessel Standards Program and a Safety Awareness/Education Program. . . .

A voluntary approach was chosen after balancing the need for attention based on the fishing industry's safety record, the desire of the fishing industry, the current resources of the Coast Guard, the likelihood of receiving additional resources, the administration's deregulatory policy, and the Coast Guard's belief that a voluntary program will be successful. . . .

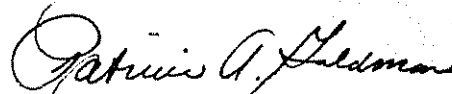
A Safety Awareness/Education program was chosen because it has a strong possibility of being endorsed by the fishing community, especially if they are active participants in its development. . . .

The Safety Board classified Safety Recommendation M-85-68 as "Open--Unacceptable Action," and has asked the Coast Guard to reconsider its position on this subject. Voluntary standards have not been successful in the past, and the Board believes that mandatory licensing would be more effective.

Therefore, in addition to reiterating Safety Recommendations M-85-68 and M-86-11, the National Transportation Safety Board recommends that the U.S. Coast Guard:

Add information to the National Search and Rescue Manual for assisting personnel at Coast Guard stations in determining when and under what circumstances to initiate a rescue of persons who may be trapped in capsized or sunken vessels. (Class II, Priority Action) (M-86-38)

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



By: Patricia A. Goldman  
Acting Chairman