M-242

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: February 7, 1984

Forwarded to:

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

SAFETY RECOMMENDATION(S)

M-84-13 through -16

On Sunday, October 24, 1982, the charter fishing boat JOAN LA RIE III was returning from a sportfishing trip when it was struck by a big wave about 8.5 nautical miles east of Manasquan Inlet, New Jersey, about 1116. The boat was swamped, and about 1146 it sank. Of the 22 persons on board, both crewmembers and 4 passengers were drowned; 2 passengers are missing and are presumed dead. The property loss was estimated at $20,000. 1/

According to one passenger, when the big wave struck, it initially heeled the JOAN LA RIE III about 75° to port. The impact of the wave, the heeling of the vessel, rapid accumulation of water in the cockpit, or a combination of these, probably dislodged the unsecured wooden hatch covers located over the steering gear accesses in the cockpit. One passenger who swam back to the boat testified that he grabbed onto a hatch coaming and that he was almost sucked onto the hatch because the water was flowing so rapidly into the hull. The water entering through the cockpit hatches quickly filled the hull under the cockpit deck and the engine space up to the watertight (W.T.) bulkhead forward of the engines. Such flooding would have reduced the vessel's port list, but the flooding eventually caused the boat to sink. As the vessel's stern submerged, the flooding progressed into the passenger cabin and into the forward bunk compartment through the open companionway. Consequently, the only remaining unflooded compartment was forward of the collision bulkhead. Therefore, the JOAN LA RIE III floated with only the bow protruding above the water until water seepage into the bow compartment overcame the buoyancy it was providing. The boat floated for about 30 minutes before sinking. This sequence of flooding would conform to the witnesses' observations.

According to 46 CFR 178.35-1(d), the JOAN LA RIE III's cockpit hatch covers were required to be equipped with securing devices to maintain the watertight security of the hull. Had the hatchcovers in the cockpit been fitted and closed with securing devices, the hull flooding through the cockpit hatches would not have occurred. Even though the big wave filled the cockpit and initially trimmed the vessel well down by the stern, the doorway and the 10-inch step up to the cabin deck to some degree restricted water entry into the passenger cabin. Although one passenger who was standing in the cabin doorway was drenched by the wave, there was no evidence that a significant amount of water initially entered the passenger cabin. Any water entering the passenger cabin

1/ For more detailed information, read Marine Accident Report--"Sinking of the Charter Fishing Boat JOAN LA RIE III off of Manasquan Inlet, New Jersey, on October 24, 1982" (NTSB/MAR/84-02).

should have drained aft through the open cabin door because of the boat's stern trim. Certainly, the boat would have retained sufficient buoyancy to remain float for much longer than 30 minutes if the hull's watertight integrity had been maintained.

Postsinking photographs show that the starboard bilge pump discharge line had been disconnected from its through-hull discharge fitting, but the Safety Board could not determine when the fitting was disconnected. If the fitting was disconnected before the capsizing, some water would have entered the bilges in the engine-space as the vessel rolled in the seas. Sea water might also have entered the hull from leakage at the propeller shafts, rudder posts, other through-hull fittings or open hull seams. As noted, water in the bilge would have created free surface and reduced the vessel's stability. Additionally, after the vessel began to sink, flooding would have been accelerated by water entering through the open fitting as the hull submerged.

Entries in the Coast Guard inspector's inspection book showed that the "hatches and securing devices" on the JOAN LA RIE III were checked as satisfactory, and the Coast Guard inspector's recollection is that they were secured with cabinet hatches. However, the boat's alternate operator testified that the hatch covers to the steering gear accesses were "undogged" and could not be secured. Since the hatchcovers were not recovered, the conflicting evidence and testimony could not be resolved. The Safety Board concludes that if the hatches were fitted with securing devices at the time of the Coast Guard inspection, they were inadequate for the purpose intended or were not properly secured when the accident occurred. The Safety Board believes that water entering through the open cockpit hatches caused the flooding and subsequent sinking of the JOAN LA RIE III.

This is not the first accident that the Safety Board has investigated in which inadequate hatch securing devices have caused flooding. On September 17, 1976, the PEARL-C, 2/ a charter fishing boat, turned over on its port side, flooded, and sank while being towed across the Columbia River Bar, near Astoria, Oregon. As the result of its investigation of the accident, the Safety Board recommended that the Coast Guard:

> Require Coast Guard inspectors to strictly enforce the regulations regarding watertightness of weather decks, including the requirements for securing devices and means of attachment. (M-77-28)

In response to the recommendation, on February 22, 1978, the Coast Guard amended its Marine Safety Manual, part 30-6-25A, to include a requirement that:

> The inspector shall ensure that the regulations regarding watertightness and/or weathertightness of the hull, including weather decks, are strictly enforced. Particular attention shall be given to closures, securing devices, gaskets, means of attachment, etc.

As the result of this action, on October 30, 1979, the Safety Board classified Safety Recommendation M-77-28 as "Closed—Acceptable Action."

The Safety Board is concerned that its Safety Recommendation M-77-28 and the subsequent action taken by the Coast Guard do not appear to have achieved the desired safety result. Consequently, the Board believes that a one-time inspection should be

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2/ Marine Accident Report--"Charter Fishing Boat PEARL-C Sinking on the Columbia River Bar, near Astoria, Oregon, September 13, 1976" (NTSB-MAR-77-1).

made of Subchapter T vessels to verify that watertight closures are equipped wi prescribed securing devices, and that boat operators should be made aware of th importance of preserving the watertight integrity of their vessels.

The JOAN LA RIE III had adequate radiotelephone communication equipment wit which to transmit a distress message. The equipment was apparently working properly about the time of the accident since it had been used by the operator to communicate with nearby fishing boat operators. However, there was no evidence that the operator used, or attempted to use, the radiotelephone to send a distress message. The operator may not have seen the big wave forming on the starboard quarter of the JOAN LA RIE III since it is likely that he would have been looking forward while attempting to maneuver the boat as comfortably as possible in the quartering sea. Therefore, when the big wave struck and unexpectedly heeled the JOAN LA RIE III to port, the operator, positioned on the high cabin top bridge deck, was probably thrown to the port side of the bridge in a manner similar to the passengers located in the cabin below. The operator may have been stunned momentarily, or the radio equipment may have been rendered inoperable by the wave impact and heeling of the boat. Nevertheless, if an Emergency Position Indicating Radiobeacon (EPIRB) was aboard the vessel in a position where it could float free, it should have activated and sent a distress message when it became immersed in the sea. However, according to the available evidence, an EPIRB signal was not received, and the unit was not among the items of recovered debris.

Title 46 CFR Subpart 180.40, does not require a coastwise boat, "That carries a VHF radiotelephone that complies with FCC requirements; and...Whose Certificate of Inspection is endorsed for a route which does not extend more than 20 miles from a harbor of safe refuge," to carry an EPIRB. In this accident, the failure or the inability of the operator to initiate a distress message or signal, and the loss of the mate, who may have performed such functions for the operator, placed the lives of the passengers in peril, particularly since they had not been given any safety orientation. The Safety Board believes that all vessels carrying passengers for hire offshore, regardless of the distance, should be equipped with an EPIRB. Had the ITAPE not been in the vicinity at the time of the accident, the availability of an EPIRB onboard the JOAN LA RIE III to attract attention would have been crucial to passenger survival.

Although the rescue response by the ITAPE and the Coast Guard were prompt, the Coast Guard had a recurring problem of determining the number and identities of the persons embarked on the JOAN LA RIE III. During the rescue operation, it took several hours to simply determine the number of persons aboard, and of those missing. Additional time was required to establish the identities of the persons embarked and of those who were missing. These problems could be resolved if vessels carrying passengers for hire were required to leave a list of embarked crew and passengers at a designated office or facility commonly used by vessel operators, or by leaving such a list in a designated lockbox located at the vessel's departure berth. This procedure would reduce the time and expense of unneeded search efforts.

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

> Amend 46 CFR Subpart 180.40 to eliminate the present exception from the requirement to carry an Emergency Position Indicating Radiobeacon (EPIRB) on coastwise vessels carrying passengers for hire that carry radiotelephone communication equipment that complies with Federal Communication Commission requirements. (Class II, Priority Action) (M-84-13)

Require that operators of charter fishing boats making an offshore trip or voyage to prepare a crew and passenger list and deposit the list, or copy thereof, at a suitable location ashore before departure. (Class II, Priority Action) (M-84-14)

Direct inspectors of charter fishing boats to make a one-time verification during their next inspection that watertight hatch closures are equipped with adequate securing devices which are being properly maintained, and to inform the boat operators of the importance of keeping hatch covers secured to preserve the watertight integrity of the hull. (Class II, Priority Action) (M-84-15)

Publicize to charter fishing boat operators and their associations the regulatory requirements for conducting safety orientations so that passengers who are not familiar with the marine environment will be better able to survive in emergencies. (Class II, Priority Action) (M-83-16)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY and ENGEN, Members, concurred in these recommendations. GROSE, Member, did not participate.

By: Jim Burnett
Chairman