



Log M-340A

# National Transportation Safety Board

Washington, D. C. 20594

## Safety Recommendation

Date: June 1, 1988

In reply refer to: M-88-32 through -35

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Operator  
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About 1202 on April 21, 1987, the USS RICHARD L. PAGE (FFG-5) (PAGE) collided with the fishing vessel CHICKADEE which was being towed by the fishing vessel MARINER. Six feet of the bow of the CHICKADEE was severed, and it immediately started to take on water. All three crewmembers on the CHICKADEE abandoned the vessel just before it capsized and sank. Crewmembers were rescued shortly afterward. No one was injured. The PAGE sustained only minor damage to its port bow lifeline stanchions. As a result of the collision, the CHICKADEE was a total loss. Damage was estimated to be \$112,000. <sup>1/</sup>

The only lifesaving equipment required on uninspected fishing vessels, such as the CHICKADEE, is a life preserver or an exposure suit for each person on board. The two fishing vessels had both life preservers and exposure suits and, therefore, exceeded the requirements of the uninspected vessel regulations.

Two crewmembers, the captain and the deckhand/cook, were able to don exposure suits but were unable to fasten them properly before they abandoned the vessel; consequently, water entered the suits, reducing the protection of the suits. They were cold when rescued but suffered only mild hypothermia. Although the exposure suit is designed to keep a person dry, insulated, and afloat, the hood must be properly in place, and it must be zipped closed before a person enters the water; the high-rider ring must be in place and inflated, and the face spray-shield must be fitted snugly in place. When worn correctly, exposure suits reduce the rate of body cooling, and survival is possible even after a number of hours in the water, depending on the water temperature. However, exposure suits do not provide indefinite protection from hypothermia. Physical condition of the wearer, how well the wearer is suited-up, and the condition of the suit are factors that will prolong or reduce the time before the onset of hypothermia in an exposure suit.

<sup>1/</sup> For more detailed information, read Marine Accident Report--"Collision Between the USS RICHARD L. PAGE (FFG-5) and the U.S. Fishing Vessel CHICKADEE, the Atlantic Ocean, April 21, 1987" (NTSB/MAR-88/04).

The National Search and Rescue Manual (Volume II) survival graph shows that in a 52° F water temperature, 50 percent of persons not wearing an exposure suit will survive for 1 to 4 hours. A person wearing a properly donned exposure suit in 52° F water could be expected to survive from 21 to 37 hours. 2/ Survival time for a person in 52° F shade air temperature, such as might be experienced in a liferaft, would be about 10 days.

The third crewmember, the deckhand/mate, was awakened just before or during the collision. He was unable to function methodically and could not don his exposure suit in the moments after the collision and before abandoning the vessel. His lack of familiarity with the exposure suit could be attributed to his failure to practice donning it. Fortunately, life preservers were available as an alternative when the deckhand/mate could not don the exposure suit. He was able to remain afloat in the 52° F water because he was wearing two life preservers, but they offered little thermal protection.

In times of emergency where there is a possibility that a person may enter the water, the donning of an exposure suit should be a thoroughly familiar task. It should not be a new experience or a learning process. In rapidly occurring emergencies, the crew may not have time to read instructions or may be too nervous to quickly don the suit. Only two of the six fishermen on the two fishing vessels had tried on an exposure suit once, and the others had never tried one on and had not received any training in their use. The Safety Board believes that periodic training in the proper donning of exposure suits is necessary to familiarize a potential user with his equipment. A placard mounted or posted in a conspicuous place on fishing vessels also would be helpful to remind potential wearers how to properly don a suit. The Safety Board also believes that exposure suits should be required on uninspected fishing vessels in addition to, not in lieu of, life preservers.

Had the MARINER been unable to rescue the CHICKADEE crewmembers shortly after they abandoned the vessel, it is doubtful that the crewmember wearing two life preservers would have survived the effects of hypothermia. Although the PAGE was in the area ready to render assistance, it also may not have been able to quickly locate the man soon enough due to the restricted visibility and rescue him before the severe effects of hypothermia were incurred. However, if the CHICKADEE had been equipped with an inflatable liferaft, the crew could have used it to abandon the vessel and the urgency of rescue efforts by the MARINER's crew would not have been as critical to their survival in the cold water.

Although the CHICKADEE and the MARINER were not required to have any radios, they were each equipped with two VHF/FM radios and a citizens band radio. Commercial uninspected fishing vessels should be required to have sufficient radio capability to communicate with the closest land station, other vessels, and rescue units in the event of an emergency, or as a collision avoidance device.

However, having radios on board a vessel is not sufficient. Crewmembers must know how and when to use them. Crewmembers who stand a wheelhouse watch should be given training in the proper use of VHF/FM radios as an item of safety equipment and should be instructed to use them to avoid collisions or to seek assistance. The fishing vessel watchstanders failed to use their VHF/FM radios to warn the PAGE of their presence in the area. Because the PAGE was monitoring channel 16, the collision might have been avoided had the fishing vessel watchstanders broadcast a message (i.e., "High speed vessel

2/ On Scene, The National Maritime SAR Review, 1/1985.

heading southeast about 50 miles off of the coast of Virginia, you are bearing down on two vessels in tow." on channel 16.

Although the operator of the fishing vessels issued verbal instructions to his captains, no written instructions were provided to the crew. This procedure lacks continuity and may lead to some confusion and thus possibly to inadequate performance of his crews. A remedy for this situation would be an operating manual with procedures on the use of radios and radar, watchstanding, navigation operation of the vessel in restricted visibility and adverse weather conditions, use of radar, and requirements for training in lifesaving equipment. The Safety Board believes that an operating manual, prepared in a simple, concise, and well-written manner, could be helpful and informative and could enhance the safety of the fishing vessel crews.

Therefore, the National Transportation Safety Board recommends that The Trawler MARINER, Inc.:

Train your captains in the donning of exposure suits and require that they conduct periodic training exercises with crewmembers in the donning of the suits. (Class II, Priority Action) (M-88-32)

Furnish all vessels with an inflatable liferaft that will accommodate all crewmembers on board. (Class II, Priority Action) (M-88-33)

Require captains to instruct watchstanders in the use of VHF/FM radios in international waters and in the use of whistle signals to warn an approaching vessel so as to avert a close quarters situation. (Class II, Priority Action) (M-88-34)

Develop a company operations manual to provide guidance to captains and crews which includes watchstanding procedures, restricted visibility procedures, VHF/FM radio use, and exposure suit instructions. (Class II, Priority Action) (M-88-35)

The Safety Board also issued Safety Recommendations M-88-30 and -31 to the U.S. Coast Guard and M-88-36 through -38 to the U.S. Navy.

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-88-32 through -35 in your reply.

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

By:   
Chairman