



MARINE SAFETY ALERT

Inspections and Compliance Directorate

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Washington, DC

Safety Alert 01-97

THERMAL PROTECTIVE AIDS

In January of 1995 a 106 foot commercial crabbing vessel abruptly capsized and sank in the Bering Sea with the loss of all six crew members on board. Weather conditions at the time were severe; an air temperature of 28 degrees F, 40 knot winds, a wind chill of -15 degrees F, sea water temperature of 38 degrees F, and 15-foot swells with 3-foot seas. Approximately three and a half hours after a cryptic MAYDAY call was heard responding fishing vessel in the area recovered two liferafts. One of the rafts contained two unconscious, lightly dressed crewmen from the stricken vessel. All attempts to revive the victims were futile and the autopsies revealed they died of hypothermia.

The crew on the rescue vessel noted that the liferafts contained loose emergency equipment including the Thermal Protective Aids (TPAs). TPAs are plastic garments that a person can wear in order to slow the effects of hypothermia. Although not as effective as an immersion suit, it's compact enough to store in a life raft and, if donned, can cut down a person's heat loss from radiation, convection and, to a lesser degree, conduction. All SOLAS liferafts are required to carry enough TPAs for 10% of the rated crew capacity of the liferaft, or at least two per liferaft. Federally documented commercial fishing industry vessels that operate in cold waters beyond 20 miles from the shore or all Federally documented commercial fishing industry vessels that operate beyond 50 miles from shore are required to carry SOLAS life rafts.

The investigation into this accident revealed that the TPA's in the recovered liferafts had not been removed from their packages. More significantly, most of the fishermen interviewed in this case were unaware of what a TPA was and the fact that they're standard equipment on all SOLAS liferafts!

It was miraculous that the fishermen in this case made it into a life raft at all due to the apparent hasty vessel abandonment as was indicated by the brief MAYDAY call and the victim's light clothing. Had they been able to don the TPAs they may have had a better chance to survive.

MARINERS PLEASE NOTE:

1. TPAs can save lives and are standard equipment found in SOLAS liferafts which are required for documented commercial fishing vessels operating more than 50 miles offshore or more that 20 miles offshore in cold water.
2. Coast Guard-approved training in survival and vessel abandonment now emphasizes the existence, benefits, and use of all emergency equipment, especially TPAs, stowed in liferafts.
3. Examining a liferaft's survival kit is a great training opportunity for all. Familiarization with these contents in the light of day, under good conditions, will make survival kit contents easier to find and use in emergencies; especially in severe conditions!

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