/cg# M-330B Sp-20



National Transportation Safety Board

Washington, D.C. 20594
Safety Recommendation

Date: September 22, 1987

In reply refer to: M-87-68 and -69

Mr. James Costakes President National Council on Fishing Vessel Safety and Insurance 2000 M Street, N.W., Suite 5800 Washington, D.C. 22206

Commercial fishermen are involved in one of the highest risk industries in the world. The fishing industry in the United States has the poorest safety record of all U.S. industries. National statistics provided by the Coast Guard in testimony before the U.S. Congress 1/ indicate the following:

- o There are 33,000 documented U.S. commercial fishing vessels.
- o Annual losses of documented fishing vessels of more than 5 net tons averaged nearly 250 between 1981 and 1984. During the previous 10 years, losses had ranged between 150 and 200 each year.
- o The number of large (more than 100 gross ton) fishing vessels lost is five to seven times greater than the loss rate for U.S. oceangoing ships.
- o The death rate for fishermen is seven times the national average for all industry groups. Between 1981 and 1984, an average of 75 lives per year were lost in fishing vessel casualties.

In an agenda item dated February 19, 1987, prepared for upcoming meetings of the Maritime Safety Committee, International Maritime Organization, the Coast Guard noted that the average number of lives lost annually from U.S. fishing vessel casualties over the past several years has increased to 84. 2/

1/ Statement of Captain John E. DeCarteret, Chief, Marine Safety Division, District Thirteen, United States Coast Guard, before the House Committee on Merchant Marine and Fisheries, Subcommittee on Coast Guard and Navigation and the Subcommittee on Fisheries, and Wildlife Conservation and the Environment, July 27, 1985.

2/ Submitted by the United States, Agenda Item 8, "U.S. Coast Guard Fishing Vessel Safety Initiatives," to the Maritime Safety Committee, International Maritime Organization, February 19, 1987.

This problem is not limited to the United States. Norway 3/ has documented the number of deaths per 10,000 person-years due to accidents in fishing and other occupations:

0	fishing	13.7
0	mining	10.0
0	shipping	10.0
0	supply vessels	3,6
0	construction/civil engineering	2.5
0	industry on land	1.5

The National Transportation Safety Board has reported on more than 203 fishing vessel accidents. From 1978 to 1986, the Safety Board reported on an average of 20 fishing vessel accidents annually. These were catastrophic, and they often involved fatalities and/or injuries. Further, these accidents met the definition of a "major marine casualty," defined in 49 CFR Part 850 as involving:

- (1) the loss of six or more lives;
- (2) the loss of a mechanically propelled vessel of 100 or more gross tons;
- (3) property damage initially estimated as \$500,000 or more; or
- (4) serious threat, as determined by the Commandant (Coast Guard) and concurred in by the Chairman (Safety Board), to life, property, or the environment by hazardous materials. 4/

Because of the continuing and increasing problem of serious and catastrophic losses, the Safety Board undertook a study to examine current actions undertaken by responsible agencies and organizations and, more importantly, to address future corrective actions to minimize and reduce the number of fishing vessel losses. 5/

As part of this study, the Safety Board has reviewed the results of its investigation activities over the past 18 years, all Safety Recommendations issued by the Safety Board, and the responses of the organizations to whom the recommendations were made. Additionally, the Safety Board interviewed more than 100 persons directly involved in the commercial fishing vessel industry, including fishermen, marine surveyors, insurance brokers and underwriters, heads of fishing vessel associations, marine educators, Federal and State officials, naval architects, and others. The organizations and persons interviewed were a balanced segment of the commercial fishing vessel industry and a large number of those actively addressing the safety issues.

The Safety Board also reviewed applicable Coast Guard safety regulations for commercial fishing vessels as well as the voluntary Coast Guard safety programs designed to address safety concerns. Further, information on a variety of safety initiatives by fishing vessel associations, some foreign countries, marine surveyors, and others were reviewed and documented for the study.

^{3/} Agenda Item 8, "Safety of Fishing Vessels, Including Possible Revision of the Torremolinos Convention for the Safety of Fishing Vessels, 1977," submitted by Norway, to the Maritime Safety Committee, International Maritime Organization, January 14, 1987.

^{4/} Title 49 CFR Part 850, "Coast Guard-National Transportation Safety Board Marine Casualty Investigations."

 $[\]frac{5}{V}$ For more detailed information, read Safety Study--"Uninspected Commercial Fishing Vessel Safety" (NTSB/SS-87/02).

The Safety Board's data on fishing vessel casualties indicate:

- o From 1978 to mid-1987, 203 accidents, involving 207 vessels and resulting in 147 deaths and 30 injuries, were investigated or caused to be investigated by the Safety Board. Property damage was estimated at \$165 million.
- o The 203 casualties occurred on the following waterways:

Atlantic Ocean — 68 (33.5%)
Pacific Ocean — 41 (20.2%)
Gulf of Alaska — 37 (18.2%)
Bering Sea — 26 (12.8%)
Harbors — 23 (11.3%)
Gulf of Mexico — 7 (3.5%)
Rivers — 1 (0.5%)

- o Losses due to foundering, flooding, or capsizing accounted for 132 of the accidents (65 percent).
- o Losses due to fires and explosions accounted for 38 accidents (19 percent).
- o Losses due to grounding accounted for 21 accidents (10 percent). 6/

The Coast Guard reviewed its data sources and, based on vessel sinkings and fatal incidents involving the Coast Guard search and rescue and investigation activities, has indicated the general areas of safety concern from its perspective. The greatest contributor to losses, according to the Coast Guard, are foundering, flooding, and capsizing. Casualty data collected by the Coast Guard, which include a larger number of accidents than the Safety Board statistics, show that these events contributed to 43 percent of the vessel losses.

The Coast Guard has stated that some losses due to capsizing can be attributed to the way the fishing vessel was operated; for example, in some cases, the captain neglected to load or operate the vessel in accordance with recommended stability criteria. Some capsizings, however, were caused by safety equipment deficiencies. For example, had a bilge alarm had been installed in certain cases, it would have alerted the crew early to flooding of the vessel.

There is a definite need for stability tests and understandable stability information to be uniformly provided to captains of uninspected commercial fishing vessels. The Coast Guard recognizes this need in its voluntary Navigation Circular NVIC 5-86, which devotes considerable attention to stability. However, NVIC 5-86 provides only voluntary guidance and, therefore, cannot effectively address the stability issue.

In order to address stability in any meaningful fashion, stability testing for all uninspected commercial fishing vessels must be required. Additionally, any time a fishing vessel undergoes major structural alterations that shift the vessel's center of gravity, such tests should be required. Further, stability characteristics and guidance on proper loading of an uninspected commercial fishing vessel must be provided to captains in a form they understand, and stability information must be kept on the vessel where the captain can easily find it.

^{6/} The other 6 percent were of unknown or miscellaneous causes.

Therefore, as a result of its investigation, the National Transportation Safety Board recommended to the National Council on Fishing Vessel Safety and Insurance:

Report to your member organizations the results of data collected by the Commercial Fishing Claims Register on major marine accidents and the causes assigned to those accidents to inform them of the continued need for safety improvement. (Class II, Priority Action) (M-87-68)

Provide written policy direction to your membership that the voluntary standards and training requirements promoted by the U.S. Coast Guard should be viewed as minimum safety requirements for uninspected commercial fishing vessels until mandatory requirements can be promulgated by the Coast Guard. (Class II, Priority Action) (M-87-69)

Also, as a result of this Safety Study, the Safety Board reiterated Safety Recommendations M-85-68 and M-86-11 and issued Safety Recommendations M-87-51 through 66 to the U.S. Coast Guard and M-87-67 to the National Oceanic and Atmospheric Administration.

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 recommendation". The Safety Board is vitally interested in any actions taken as a result of its safety recommendation and 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-87-68 and -69 in your reply.

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

By: Jim Burnet Chairman