

Log M-198A

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: February 28, 1983

Forwarded to:

Mr. Ed McGhee
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Drilling Contractors
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SAFETY RECOMMENDATION(S)

M-83-37

About 0300 on February 15, 1982, the U.S. mobile offshore drilling unit (MODU) OCEAN RANGER capsized and sank during a severe storm about 166 nautical miles east of St. John's, Newfoundland, Canada; 84 persons were aboard. Twenty-two bodies have been recovered, and the remaining 62 persons are missing and presumed dead. The OCEAN RANGER is currently resting on the bottom in an inverted position in about 260 feet of water; its estimated value was \$125 million. 1/

The Safety Board considered a number of factors which may have contributed to the large loss of life: (1) the OCEAN RANGER was operating in 31° F water, and the crew was not provided with exposure suits for protection against the cold temperatures which cause hypothermia; (2) the OCEAN RANGER did not have U.S. Coast Guard (USCG) approved lifesaving equipment; (3) the severe weather conditions made launching of the lifeboats difficult; and (4) the standby boat was not provided with adequate equipment for recovering persons from the water.

Most of the primary lifesaving equipment on the OCEAN RANGER was not USCG approved. The No. 1 and No. 2 Harding lifeboats were similar in design to USCG-approved lifeboats, but the offload type releasing gear required the No. 1 and No. 2 lifeboats to be fully waterborne before they could be released. USCG-approved designs require an onload type releasing gear which permits the boat to be released from the falls while still under load. Under the severe sea conditions that existed on February 15, the No. 2 (Harding) lifeboat could have smashed against the OCEAN RANGER's columns or braces while the boat was being lowered or before it could be released from the falls which would account for the hole reported in the bow of the lifeboat. In the ALEXANDER L. KIELLAND accident, three of its seven lifeboats were smashed against the rig's columns because the lifeboats were equipped with offload type releasing gear requiring them to be fully waterborne before they could be released.

1/ For more detailed information, read Marine Accident Report--"Capsizing and Sinking of the U.S. Mobile Offshore Drilling Unit OCEAN RANGER Off the East Coast of Canada, 166 Nautical Miles East of St. John's, Newfoundland, on February 15, 1982" (NTSB-MAR-83-2).

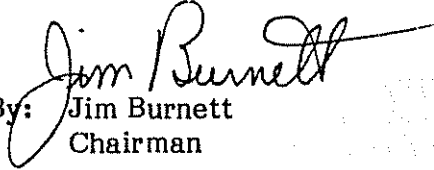
Launching a lifeboat in a normal sea condition, even from relatively small heights, can be difficult. Launching a lifeboat from a height of about 70 feet above the water from the upper deck of a semisubmersible, such as the OCEAN RANGER, into 30-foot seas with 70-knot winds involves great hazards. Both the OCEAN RANGER and the ALEXANDER L. KIELLAND accidents are examples of the difficulty involved in abandoning semisubmersible drilling units and similar structures under severe sea conditions, using existing lifesaving equipment. The Norwegian Maritime Directorate and several other Nordic authorities have long recognized this problem and, as a result of their studies, have developed the free fall launching system which effectively eliminates on-load versus off-load limitations used in conventional systems. The USCG and the U.S. offshore oil industry should thoroughly examine current lifesaving systems and improve the design of such systems.

As a result of its investigation, the National Transportation Safety Board recommends that the International Association of Drilling Contractors:

Recommend that members review the suitability of lifeboat, liferaft, and other launching systems on mobile offshore drilling units under severe weather conditions, and promote the development of improved launching systems if the current systems are found inadequate. (Class II, Priority Action) (M-83-37)

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "... to promote transportation safety by conducting independent accident investigations" (P.L. 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendation. Therefore, we would appreciate a response from you regarding actions taken or contemplated with respect to the recommendation in this letter.

BURNETT, Chairman, GOLDMAN, Vice Chairman, and McADAMS, BURSLEY, and ENGEN, Members, concurred in these recommendations.


By: Jim Burnett
Chairman