

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: April 22, 1981

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Forwarded to:  
Admiral John B. Hayes  
Commandant  
U.S. Coast Guard  
Washington, D. C. 20593  
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SAFETY RECOMMENDATION(S)  
M-81-27 through -29

About 0430 on August 21, 1980, the United States tankship S/S TEXACO NORTH DAKOTA collided with Eugene Island 361-A, a partially constructed artificial island used in oil production operations, located in the Gulf of Mexico about 100 nautical miles south of Morgan City, Louisiana. The TEXACO NORTH DAKOTA was partially loaded with several petroleum products, one of which was unblended gasoline. The vessel struck the island head on and the vessel's forward cargo tanks were ruptured, resulting in a fire that destroyed the forward part of the cargo tank area and the midships house. The fire burned for several days before it was extinguished by a professional firefighting team. The crew abandoned the vessel without any loss of life. The salvaged vessel was later surveyed and declared a constructive total loss. 1/

The private aids section of the Aids to Navigation Branch, Eighth Coast Guard District, received a telephone message on July 1, 1980, from Chevron U.S.A., Inc., that work was to begin on an artificial island in Eugene Island Block 361 on July 2, 1980. A confirming letter to the Coast Guard from Chevron was mailed the same day. The following day, a written application requesting approval to establish and maintain private aids to navigation (nav-aids) was submitted to the Coast Guard for approval. On July 14, 1980, the application was approved and returned to Chevron with a letter of instruction that notification be made to the private aids section of the Aids to Navigation Branch, Eighth Coast Guard District, when the nav-aids were in operation. This notification "is essential for the Coast Guard to make timely notice to mariners." 2/

On July 21, 1980, a contractor completed its work on the partially constructed structure and left the location with its construction equipment after establishing some nav-aids. Two additional nav-aids were placed in operation on July 24, 1980. On July 30, 1980, Eighth Coast Guard District Local Notice to Mariners No. 32-80 was compiled, and under the section titled "Structures and Aids Established, Changed, or Discontinued" appeared the following: "Chevron 192-3 in position 28-07-04 N, 91-39-25 W has been established displaying four quick flashing white lights. Sign: CH-EI-361-A. Chart: 11340." The printed local notice was delivered to the U.S. Postal Service on Friday, August 1, 1980, for distribution through the regular mail.

1/ For more detailed information read "Marine Accident Report--TEXACO NORTH DAKOTA Collision with Artificial Island EI-361-A, Explosion and Fire, Gulf of Mexico, August 21, 1980" (NTSB-MAR-81-4).

2/ Letter from Chief, Private Aids Section, Eighth Coast Guard District, to Chevron dated July 14, 1980.

The investigation revealed that neither Texaco's marine department at Port Arthur, Texas, the TEXACO NORTH DAKOTA, nor the master or any of the deck officers on the vessel were on the Eighth Coast Guard District's mailing list for Local Notices to Mariners. However, even if they had been, it is doubtful that the notice concerning the presence of EI-361-A would have been delivered to the vessel by the time it sailed from Port Neches, Texas, about 15 miles from Port Arthur, on August 4, 1980. Masters of vessels that frequently transit the area of offshore structures should pay particular attention to the Local Notices to Mariners for more timely information. Texaco did not arrange to have the master or his representative secure all the latest information available for the anticipated voyage prior to sailing. The duties of officers regarding marine information, as stated in 46 CFR 97.05-1, require that licensed deck officers acquaint themselves with the latest information published by the Coast Guard and the U.S. Navy regarding aids to navigation. The master and licensed deck officers aboard the TEXACO NORTH DAKOTA apparently acquainted themselves with this information only if it arrived onboard with the regular mail.

There is no evidence that the master or any other deck officer made any special effort to secure current navigational information as required by 46 CFR 97.05-1, received adequate logistical support from Texaco to provide the latest mail delivery, or visited the local Coast Guard office to obtain the information prior to sailing. The Safety Board concludes that the master of the TEXACO NORTH DAKOTA did not place sufficient priority on Local Notices to Mariners to ensure that the latest available notices were aboard prior to sailing.

Presently, the Coast Guard does not issue any navigational information when construction is first started at an offshore site. Although a letter was sent to the private aids section of the Eighth Coast Guard District that a contractor would begin construction of EI-361-A on July 2, 1980, it was not until the nav-aids were actually placed in operation on July 21, 1980, that an official notice was issued. At no time did a notice appear that an offshore structure was being constructed in Block 361. The Eighth Coast Guard District should make every effort to provide local mariners with information about obstructions to navigation as soon as possible. When notification is received about the start of construction of a permanent structure on the continental shelf, this vital information should be promptly distributed through the system. The availability of marine information such as this should not be delayed until the nav-aids are actually in operation. The existence of EI-361-A would have been known 19 days earlier if the Coast Guard had made use of the information it had already received.

The offshore structure that was struck by the TEXACO NORTH DAKOTA was not discernible to the watch officer on the vessel's radar. The reflective qualities of various types of targets are extremely dependent on their shapes. When viewed by radar from a perpendicular aspect, a cylindrical shape such as the tubular steel structure of EI-361-A presented has only one-fourth the echoing strength of a plane or corner reflector. A passive-type radar reflector, installed as a nav-aid, would present a better radar target on unattended, low-profiled structures under construction. The Safety Board concludes that 33 CFR Part 67, Aids to Navigation on Artificial Islands and Fixed Structures, should be amended to include a requirement that radar reflectors be included in the aids to navigation requirements for offshore structures during the periods of construction when attending vessels are not present and the structure presents a low profile.

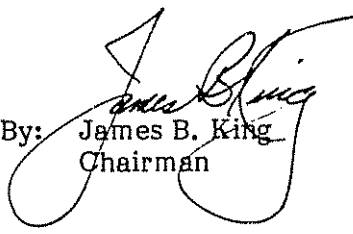
Therefore, the National Transportation Safety Board recommends that the U.S. Coast Guard:

Include in Local Notices to Mariners information about when construction of an offshore structure is first started, before its aids to navigation are placed in operation, so that mariners are made aware of an obstruction to navigation as early as possible. (Class II, Priority Action) (M-81-27)

Amend 46 CFR 97.05, Notice to Mariners and Aids to Navigation, to include a requirement that masters of vessels ensure that Local Notices to Mariners are obtained from the appropriate Coast Guard District Office in their trading areas and are given the same priority as Weekly Notices to Mariners in the requirement for licensed deck officers to acquaint themselves with the latest marine information available to correct charts and publications promptly. (Class II, Priority Action) (M-81-28)

Amend 33 CFR Part 67, Aids to Navigation on Artificial Islands and Fixed Structures, to include a requirement that radar reflectors be included in the aids to navigation requirements for offshore structures during the periods of construction when the structure presents a low profile and attending vessels are not present. (Class II, Priority Action) (M-81-29)

KING, Chairman, and McADAMS and GOLDMAN, Members, concurred in these recommendations. DRIVER, Vice Chairman, and BURSLEY, Member, did not participate.

By:   
James B. King  
Chairman