

M-126

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: June 9, 1980

Forwarded to:

Captain T. R. Morgan
Presiding Officer
Sabine Pilots
P.O. Box 637
Port Arthur, Texas 77640

SAFETY RECOMMENDATION(S)

M-80-37 through -41

At 0409, on February 25, 1979, the S/T MARINE DUVAL sank after colliding with the S/T MOBIL VIGILANT at a bend in the Neches River near Beaumont, Texas. The total damage to the vessels was estimated at \$6,200,000. No persons were injured. The sunken MARINE DUVAL blocked the river for over 3 days, disrupting deep-draft vessel traffic via the port of Beaumont. 1/

The MOBIL VIGILANT was carrying 41,198 long tons of crude oil cargo at a draft of 36 ft 1 in forward and 36 ft 7 in aft, and was scheduled to arrive at Beaumont between 0430 and 0500 on February 25. It was the first of five scheduled inbound tankers and was under the navigational control of a Sabine Pilots (Association) pilot. Proceeding inbound, the tanker met and passed two outbound vessels and a four-barge tow without difficulty before reaching Smith Bluff. While near Port Neches, the pilot heard by radio that the MARINE DUVAL, originally scheduled to leave the Texasgulf, Inc., sulphur terminal dock at midnight on February 24, had been delayed:

The outbound MARINE DUVAL, carrying 23,866 long tons of molten sulphur cargo at a level trim draft of 33 ft 4 1/2 in, left the Texasgulf sulphur dock at 0345 and was under the navigational control of a Sabine pilot. The pilot said that shortly after 0300 he had initiated a "security call" on VHF-FM radiotelephone channel 13 and received no response; the reason for the lack of response from any vessel in the vicinity is unknown. The Sabine Pilots office at Port Arthur, Texas, had advised the pilot that five tankers were inbound, and the pilot informed the master. The MARINE DUVAL entered the Neches River Channel shortly after 0359.

1/ For more detailed information read "Marine Accident Report--Collision of the S/T MOBIL VIGILANT and the S/T MARINE DUVAL on the Neches River near Beaumont, Texas, February 25, 1979" (NTSB-MAR-80-8).

After entering the Neches River Channel, the MARINE DUVAL's pilot sighted the MOBIL VIGILANT. Radio communication between the vessels was then established and the pilots agreed to a "1-whistle," port-to-port passing. The pilots had expected their vessels to meet in the channel straightaway of the McFadden Bend Cutoff, but the vessels actually met in the river bend above the E.I. du Pont de Nemours & Company (Du Pont) docks where they collided at 0409.

The MARINE DUVAL left the Texasgulf sulphur dock and entered the Neches River Channel without first establishing radio contact with the inbound MOBIL VIGILANT or any of the other inbound vessels. If the MARINE DUVAL's pilot had established radio contact with the MOBIL VIGILANT, he could have been informed that the MOBIL VIGILANT would be abeam of beacon 49 at about 0416. Therefore, a delay of about 31 min leaving the berth would have completely avoided the meeting situation with the MOBIL VIGILANT. Even after leaving its berth, the MARINE DUVAL could have been held clear of the river channel near beacon 49, using available tug assistance, until the MOBIL VIGILANT had passed. Under such circumstances, the entry of the MARINE DUVAL into the Neches River Channel would have been delayed only about 17 min. There is no evidence that when he failed to get a response on radiotelephone channel 13 the MARINE DUVAL's pilot called the pilots' radio station using other available radiotelephone channels in an effort to establish contact with the MOBIL VIGILANT. Despite the lack of response to his broadcast and lack of knowledge about the locations of the inbound tankers, the pilot proceeded outbound with the MARINE DUVAL. Because the pilot was aware of the inbound traffic, the Safety Board concludes that the pilot should have tried to establish communications with the inbound tankers through other available radio channels.

The Safety Board believes that the local communications related to vessel movements need to be clarified and improved and that greater attention should be given to the scheduling of deep-draft vessels on Sabine-Neches Waterways to minimize passing situations. The Safety Board discussed similar problems in its report of an accident on the Houston Ship Channel on February 9, 1979. 2/

Shortly after entering the river channel, the MARINE DUVAL's pilot found himself faced with a meeting situation with the MOBIL VIGILANT, which he sighted only about 1/2 to 3/4 nmi downstream. Neither of the vessels' pilots expressed concern about the meeting situation. The weather was clear and the lights of the vessels were clearly visible. Both pilots expected the vessel meeting to take place in the straightaway of the channel below the Du Pont docks. However, there is no evidence that the pilots or the navigation watchstanders on either vessel employed available radar equipment to determine the closing rate of the vessels or to establish more accurately where the vessels would meet. Navigation Safety Regulation 33 CFR 164.11(f) cautions that the danger of each closing visual or each closing radar contact should be evaluated and that the person directing the movement of the vessel know the results of the evaluation. The Safety Board concludes that pilots should have made more effective use of their vessels' bridgewatches and electronic navigation equipment while performing their piloting duties.

There is no evidence that either of the pilots was fatigued at the time of the accident. The MOBIL VIGILANT's pilot had a rest period before being assigned to the vessel. The MARINE DUVAL's pilot had just completed a 6 1/2-hour piloting assignment

2/ "Marine Accident Report--M/V ANCO SCEPTRE Collision with the Crown Central Petroleum Corporation Pier on the Houston Ship Channel, Houston, Texas, February 9, 1978" (NTSB-MAR-79-8).

and was called by the Sabine Pilots office 35 minutes later to take out the MARINE DUVAL, which he boarded 2 hours after being called. It should be noted that from boarding, at 0245, the MARINE DUVAL's pilot would normally have been aboard the vessel for an estimated 8 hours while proceeding to the Sabine-Neches Waterways exit at the Gulf of Mexico. Therefore, the pilot would have put in about 15 hours piloting time in less than 18 hours on the two consecutive assignments. This would be a long time to be engaged in piloting without rest, taking into consideration the full time and attention which must be given to vessel maneuvering in a congested and restricted waterway. To what extent Sabine pilots are routinely called upon to work such extended hours is not known, but the Safety Board considers this an unsafe work practice.

Therefore, the National Transportation Safety Board recommends that the Sabine Pilots:

Review communications procedures to insure that the movements of vessels on the Sabine-Neches Waterways are closely monitored and coordinated. (Class II, Priority Action) (M-80-37)

Implement a policy that pilots avoid vessel passing in bends, and incorporate a similar provision in the "Voluntary Traffic Control Agreement of the Maritime Industry of the Sabine Waterways." (Class II, Priority Action) (M-80-38)

Advise member pilots to verify the locations of vessels moving on the Sabine-Neches Waterways before getting underway, and to avoid departures or vessel movements which result in passing situations that could be eliminated. (Class II, Priority Action) (M-80-39)

Review pilot rotation policies relative to vessel movements and avoid assigning pilots to two consecutive long trips without adequate rest between such assignments. (Class II, Priority Action) (M-80-40)

Advise member pilots to review the Navigation Safety Regulations at 33 CFR 164 and urge pilots to make greater use of a vessel's bridgeward and electronic equipment in support of its navigational control while piloting. (Class II, Priority Action) (M-80-41)

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


By: James B. King
Chairman