

# NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C. 20594



## Safety Recommendation

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**Date:** January 21, 1994

**In Reply Refer To:** M-93-49

Captain John Sparks  
President  
American Pilots' Association  
1025 Thomas Jefferson Street  
Washington, D.C. 20007

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On December 21, 1992, the St. Vincent and the Grenadines-registered containership JURAJ DALMATINAC collided with the tank barge DUVAL 2, which was being pushed by the U.S. towboat FREMONT, in the Houston Ship Channel (HSC), Galveston Bay. The bow of the JURAJ DALMATINAC penetrated the side and bottom hull of the barge, which buckled and sank. Both cargo tanks were breached, and the barge's cargo of molten sulphur spilled into the waterway.<sup>1</sup>

The National Transportation Safety Board determines that the probable cause of the collision between the JURAJ DALMATINAC and the FREMONT tow was the failure by the ship's pilots and master to effectively use all available equipment and personnel to evaluate the developing situation so that they could take timely action to avoid the collision. Contributing to the cause of the collision was the FREMONT's lack of a compass, which could have afforded the tow operator the capability to maintain his tow on station outside the navigation channel.

The Safety Board believes that if the bridge watch of the JURAJ DALMATINAC had used the ARPA tracking feature of the radar in this accident, the lead pilot would have realized that he not only had less time to take action to avoid a stationary tow, but also that the vessel he was approaching could not maneuver out of the way. The Safety Board is aware of arguments that the ARPA radar is not really well suited for navigation in restricted waters, such as a narrow channel, because of the system's proximity alarm feature, which sounds an alarm

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<sup>1</sup>For more detailed information, read Marine Accident Report-- Collision of the Towboat FREMONT and Tow with the St. Vincent and the Grenadines-Registered Containership JURAJ DALMATINAC, Houston Ship Channel, December 21, 1992 (NTSB/MAR-93/02).

on the navigation bridge whenever the radar detects any contact, including navigational aids, within a preset distance of the ship. The Safety Board notes that this feature can easily be turned off without affecting the operation of other ARPA features.

In current Federal regulations, the Coast Guard recognizes the ARPA as a time and labor saving device that can contribute positively to protecting the environment, particularly in waters in which geographic or other conditions do not force vessels to make repeated course changes. Current regulations do not require that any crewmember know how to use the ARPA radar. In this case, the JURAJ DALMATINAC's master stated that he knew how to use the ARPA radar; both pilots in this accident said that they did not know how to use it.

The Safety Board finds it incredible that regulations require that vessels be equipped with a proven, effective piece of collision-avoidance equipment yet do not require that anyone know how to use it. The Safety Board believes that navigation officers, including pilots, should know how to use state-of-the-art navigation equipment, especially the equipment on vessels that they may be required to navigate.


Therefore, the National Transportation Safety Board recommends that the American Pilots' Association:

Encourage member pilot associations to recommend that their members become knowledgeable in the operation of Automatic Radar Plotting Aids. (Class II, Priority Action) (M-93-49)

Also, the Safety Board issued Safety Recommendations M-93-41 through -44 to the U.S. Coast Guard; M-93-45 to the Gantt Marine Services, Inc.; M-93-46 to the American Waterway Operators, Inc.; and M-93-47 and -48 to the Harris County Board of Pilot Commissioners. If you need additional information, you may call (202) 382-6860.

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 recommendations" (Public Law 93-633). The Safety Board is vitally interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation M-93-49 in your reply.

Chairman, VOGT, Vice Chairman, COUGHLIN, Members, LAUBER, HAMMERSCHMIDT and HALL concurred in this recommendation.

  
By: Carl W. Vogt  
Chairman