

- ~~2. The lack of visibility of the rudder angle indicator and the rudder order indicator from the normal conning positions.~~
- ~~3. The attempt to maneuver the AFRICAN NEPTUNE through the bridge opening without stabilizing the ship on the channel line before passing the point where transit could be safely aborted.~~

~~Contributing to the loss of life was the location of the traffic-control devices on the bridge, which permitted vehicles on the portion of the bridge which could be struck by a ship.~~

LCY 4-37 NOV 994A

RECOMMENDATIONS

thru  
M-74-14-19

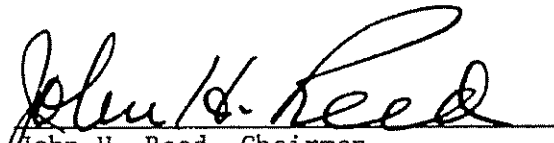
The National Transportation Safety Board recommends that:

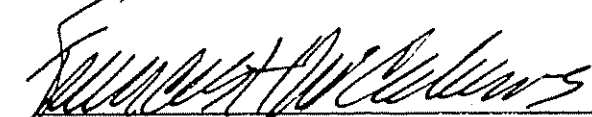
1. The Coast Guard require that ocean-going vessels be aligned with any channel bridge opening before the vessels reach a point equal to the ship's stopping distance from the bridge. (Recommendation No. M-74-14)
2. The Coast Guard require that every master of an ocean-going vessel inform himself of the pilot's plan to maneuver his ship in or out of a harbor and that the master determine, with the pilot's assistance, the critical aspects of the maneuver, including the pilot's plan for emergencies. The master should then be required to instruct his crew to insure that high-risk tasks receive priority. (Recommendation No. M-74-15)
3. The Coast Guard expedite the issuance of regulations requiring that all ocean-going vessels be provided with stopping distances and turning radii for various speeds and loading conditions. (Recommendation No. M-74-16)
4. The Coast Guard, in approving ship designs, require better visibility of the rudder order indicator and rudder angle indicator from all conning positions. (Recommendation No. M-74-17)
5. The Maritime Administration, in developing an advanced "integrated conning system:"
  - a. Display rudder order and rudder angle positions so as to be visible from all conning positions.
  - b. Provide an expanded scale on the course recorder for use during in-port maneuvering.

- c. Upgrade the quality of the audio-recorder and add a time reference trace.
  - d. Provide automatic recording of propeller RPM and ship's speed. (Recommendation No. M-74-18)
6. The Coast Guard, in processing applications for highway, railroad, or pipeline bridge construction, require a safety impact study as well as the environmental impact study. Lift span bridges with narrow openings, supports in relatively deep water, and locations near curved channels should be considered relatively hazardous. (Recommendation No. M-74-19)

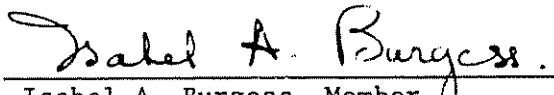
BY THE NATIONAL TRANSPORTATION SAFETY BOARD


Adopted this 22nd day of May 1974:

  
John H. Reed, Chairman

  
Francis H. McAdams, Member

  
Louis M. Thayer, Member

  
Isabel A. Burgess, Member

  
William R. Haley, Member