

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: September 28, 1978

Forwarded to:  
Mr. Alan A. Baker  
Vice President of Domestic Operations  
Halliburton Services  
Duncan, Oklahoma 73533

SAFETY RECOMMENDATION(S)  
M-78-70 through 72

On February 4, 1978, the industrial vessel HALLIBURTON 207 exploded while attempting to plug an offshore oil well in the Garden Island Bay section of the Mississippi River Delta. The explosion raised the forward section of the vessel's main deck approximately 4 feet, distorted internal bulkheads and strength members, and breached the hull. The vessel flooded slowly and sank. The explosion killed one person and injured two others. 1/

The accident occurred when natural gas from the oil well entered the vessel's interior as a result of a piping failure, and was ignited by the arcing contacts of an electric motor controller. Petroleum drilling operations are always considered to be hazardous. However, the repeated failures to rectify the loss of drilling fluid circulation and to control the gas pressure indicate that the well was in a critical condition. Continued collapse of the strata surrounding the well could have caused the gas to vent uncontrollably to the surface, creating a "blowout." In addition, any interruption of the plugging operation could have allowed gas from the well to flow back through the drill string and enter the HALLIBURTON 207's discharge piping. Because of their considerable experience, the Halliburton field supervisor and the cementer should have been aware of the hazard involved with servicing this well.

1/ For more detailed information, read "Marine Accident Report: M/V HALLIBURTON 207 Explosion and Sinking, Garden Island Bay, Mississippi River Delta, February 4, 1978," (NTSB-MAR-78-8). Copies of the report will be available after October 15, 1978.

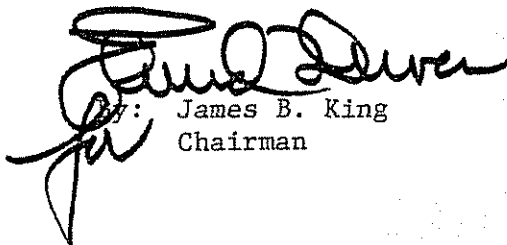
Therefore, the National Transportation Safety Board recommends that the Halliburton Services:

Alter the cement discharge piping of all Halliburton Services cementing vessels by installing a device at the outlet end of the piping to prevent flow from the well back into the vessel, and by providing a means to release entrapped pressure downstream of the device. (Class II, Priority Action) (M-78-70)

Establish instructions requiring the hydrostatic testing of both the cement discharge lines and the mixing discharge lines before servicing petroleum wells. (Class II, Priority Action) (M-78-71)

Establish instructions requiring Halliburton Services employees who supervise petroleum well servicing operations to formulate contingency plans with the person in charge of the well, before commencing service operations. Such plans should include, but not be limited to, the manning of key valves. (Class II, Priority Action) (M-78-72)

KING, Chairman, McADAMS, HOGUE, and DRIVER, Members, concurred in the above recommendations.

  
By: James B. King  
Chairman