



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Log H-542^C

Date: January 9, 1990

In reply refer to: H-89-75

Mr. Daniel Rosenblatt
Executive Director
International Association of
Chiefs of Police, Inc.
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On August 17, 1988, at about 1:00 a.m. e.d.t., an 85-foot-section of the 275-foot-long S.R. 675 Bascule¹ Bridge over the Pocomoke River, near Pocomoke City, Maryland, fell about 30 feet into the river after two pile bents² supporting the bridge collapsed. Witness reports indicated that the bridge may have been sagging before the collapse and no vehicles were involved in the collapse sequence. The weather was clear and dry, and water conditions were reported to be calm.³

About 7:30 a.m. on August 15, 1988, 2 days before the collapse, a motorist traveling west to east across the bridge observed a dip in the bridge deck. He stated that the pedestrian crosswalk railing along the first and second spans on the west end of the bridge appeared to be bowed downward 3 to 4 inches, with the maximum deflection midway between the spans. The same motorist again crossed the bridge traveling west to east at about 7:30 p.m. on August 16, 1988, and observed that the dip was more severe, about 12 to 14 inches in depth midway between the spans, with the railing no longer attached to the roadway. He assumed the bridge tenders were aware of the dip in the bridge and he did not feel it was necessary to advise anyone. The manager of the market on the west shore at the bridge site stated that during the morning of August 15, 1988, he observed a crack on the south side

¹ A bascule bridge consists of single or dual leaves which are mechanically rotated and lifted to provide an opening for marine navigation.

² A pile bent is a transverse structural framework composed of piles and a pile cap.

³ For more detailed information, read Highway Accident Report--"Collapse of the S.R. 675 Bridge Spans Over the Pocomoke River Near Pocomoke City, Maryland, August 17, 1988" (NTSB/HAR-89/04).

vertical face of the bridge between the first and second west side spans, and about a 2-inch dip in the bridge at this location. On the morning of August 16, 1988, he again observed the bridge and stated that at the same location, the bridge appeared to have sunk even further to about 10 inches. He did not advise any of the local authorities.

About 11:00 a.m. on August 16, 1988, the day before the collapse, another motorist was traveling westbound across the bridge. He observed a "v" shaped depression about 10 to 12 inches deep and about 20 feet long, extending across the width of the bridge deck at the first west side span. After driving across the bridge, he observed a crack on the south side vertical face of the bridge that coincided with the depression in the deck. Following these observations, the motorist immediately drove to the Pocomoke City Police Department and reported the condition of the bridge to the police dispatcher. However, the dispatcher did not notify the officers on duty at the time, or record the complaint in the police log. Later that afternoon, at about 4:30 p.m., another motorist advised the Pocomoke City Police Chief of a low spot on the bridge. In response to the complaint, the Chief went to the bridge at about 5:00 p.m. and inspected the east side spans. The Chief stated that he observed a pothole at the east abutment, but he did not inspect the bridge's west side spans. He made no further observations of the bridge prior to the collapse.

Neither complaint received by the Pocomoke City Police Department was thoroughly explored, nor was the Maryland State Highway Administration (SHA) advised of the witness observations. One complaint was overlooked by the police dispatcher, and although the Police Chief inspected the east side spans of the bridge in response to the second complaint, he erroneously concluded that a pavement defect at the east abutment was the cause of the complaint, and he never inspected the west side bridge spans. Consequently, motorists were allowed uninterrupted use of the bridge as it was slowly collapsing. Even if police personnel had inspected the entire bridge, it is uncertain that they would have recognized the depression in the bridge deck as a potential hazard.

However, if the Police Department had notified the SHA District Office of the complaints, the SHA indicated they would have sent bridge inspectors to inspect the bridge. It is likely that they would have recognized the seriousness of the bridge deck depression, and they would have subsequently closed the bridge. Although this would not have prevented the collapse, it would have eliminated the potential hazard to motorists. Inherently, police personnel are not trained to identify or determine the seriousness of bridge defects, nor does the Safety Board believe that they should be. However, municipal governments should be encouraged to have their personnel notify State highway officials when any complaint is received concerning the condition of a bridge. In response, the State highway officials should have inspectors who are familiar with the bridge conduct an immediate review of the complaints. In this way an accurate assessment of the bridge condition can be made.

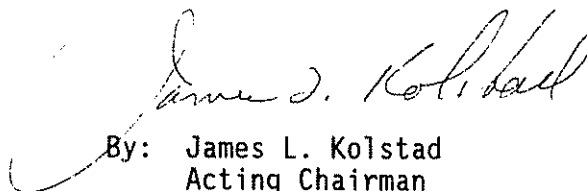
Therefore, the National Transportation Safety Board recommends that the International Association of Chiefs of Police, Inc.:

Advise your members of the circumstances of the S.R. 675 (Pocomoke City) bridge collapse, and urge them to notify state transportation officials when a complaint is received concerning a bridge. (Class II, Priority Action)(H-89-75)

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 H-89-75 in your reply.

Also, as a result of its investigation, the Safety Board issued Safety Recommendations H-89-56 through -64 to the Maryland State Highway Administration, H-89-65 through -68 to the Federal Highway Administration, and H-89-69 through H-89-74 to the American Association of State Highway and Transportation Officials.

KOLSTAD, Acting Chairman, and BURNETT, LAUBER, NALL, and DICKINSON, Members, concurred in the recommendation.



By: James L. Kolstad
Acting Chairman