



# National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation *I-96C*

Date: March 23, 1990

In reply refer to: I-90-13 through -15

Mr. Max A. Hasse, Jr.  
Chairman  
Collier County Board of Commissioners  
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About 11:30 a.m., on November 30, 1988, a tractor-flatbed semitrailer operated by Hy Yield Bromine Company overturned at the intersection of two farm roads in a sparsely populated area of Collier County, Florida. The semitrailer was loaded with 32 cylinders of a poisonous and toxic by inhalation mixture, 98 percent methyl bromide and 2 percent chloropicrin. Eleven of the cylinders were full, each containing about 1,500 pounds of the poisonous mixture, and the remainder of the cylinders were partially full or empty except for residue. The driver had completed the second of four scheduled stops when the accident occurred.<sup>1</sup>

As the vehicle overturned onto its left side, the front of the tractor struck a tree and some of the cylinders and sidepanels on the semitrailer were ejected from the vehicle. Several cylinders struck trees in the wooded area adjacent to the accident site and one cylinder was punctured. Several emergency response personnel reported symptoms associated with exposure to methyl bromide and chloropicrin as a result of their activities on and near the accident scene, and were provided medical treatment.

The Collier County 911 dispatcher received timely notification that methyl bromide was involved in the accident and promptly warned all responding county deputies, fire and rescue personnel, and emergency medical services (EMS) personnel about dangers involved with the cargo. Consequently, these response personnel approached the accident site with caution and stayed clear of the accident vehicle until equipped with self-contained breathing apparatus.

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<sup>1</sup>For more detailed information, read Hazardous Materials Accident Report--"Puncture of a Cylinder Containing a Mixture of Methyl Bromide and Chloropicrin Following the Overturn of a Tractor/Semitrailer, Collier County, Florida, November 30, 1988" (NTSB/HZM-90/01).

However, emergency response personnel reported difficulties communicating with each other during the hazardous materials incident because of the lack of a dedicated "tactical" channel, accessible to all emergency responders.

The Collier County communications system consists of three channels for the Sheriff's Office, and one (common) channel for ten different fire departments, emergency medical services, the county helicopter, and emergency management operations personnel. The Sheriff's Office uses two channels for communications between the dispatcher and cars, and one channel for communications car to car. The single channel for fire departments, EMS, county helicopter, and emergency management operations must be used for routine dispatch as well as the communications necessary when working a fire or hazardous materials incident.

Responders using the single channel for fire departments and EMS cannot communicate directly, vehicle to vehicle, with Sheriff's deputies. Instead, when a fire responder needs to communicate with a Sheriff's deputy, he must contact his county dispatcher, who must then contact another county dispatcher who can communicate with the deputy.

Furthermore, the fire and rescue responders and the Sheriff's deputies could not communicate directly (vehicle to vehicle) with the Florida Highway Patrol (FHP) troopers. To contact a trooper, the fire and rescue responders and the Sheriff's deputies had to contact their own dispatchers, who then, by telephone, had to ask the FHP dispatcher to relay a message. There are no single radio channels, such as tactical channels, available for common use by all agencies responding to a particular incident.

Access to the accident scene was adequately controlled, and appropriate evacuations were made. However, because of the lack of a radio channel dedicated to specific incident communications, the incident commander had to use a radio channel shared by 10 fire and rescue departments, emergency medical service, and county emergency management agencies, conducting routine operations. The incident commander had no capability to communicate directly with deputies who were evacuating and securing the area because they were on different radio channels from the incident commander.

Because of the threats posed to public safety and emergency responders when accidents involve hazardous materials, and the potential for worsening or rapidly changing conditions, it is important for responders to be able to clearly and quickly communicate important information. Such communications could be accomplished by establishing separate common radio channels, accessible to all emergency responders, local and state, and dedicated for the use of emergency communications throughout a major incident. Therefore, the Safety Board believes that Collier County should establish additional radio channels dedicated for specific incident communications that is accessible to all emergency responders.

Additionally, while the incident commander had no difficulties communicating with the dispatcher from the accident site, he expressed concern that at some locations within the county the emergency responders

cannot communicate with dispatchers because they are out of reach of the communication tower. In the event of a major transportation accident at such a location, the lack of adequate radio communications could directly affect the ability of emergency response personnel to facilitate appropriate actions. Therefore, the Safety Board believes that Collier County should determine locations within the county in which emergency response personnel are unable to communicate with county dispatchers by radio and correct communication deficiencies identified to provide emergency response personnel adequate communications.

A Six L's Farm supervisor from the Golden Gate Estates farm site saw a fire engine travelling in the direction of the farm and he followed it. He was stopped at 10th Ave., S.E., was told about the accident, and was given a description of the truck. He said that he told a female paramedic (whom he later identified when her picture appeared in the newspaper) that the truck was transporting methyl bromide, and that he could offer technical assistance on dealing with the product. He said that she told him "we know all about it." (The paramedic, who at the time was in in-service emergency medical technician training, denied that she spoke to the farm supervisor; however, the incident commander, who interviewed the paramedic after the incident, told Safety Board investigators that he believes the conversation occurred.)

The Safety Board believes that a valuable resource to the incident commander was lost when an emergency medical technician turned down an offer by the Six L's Farm manager to provide technical assistance. Not only could the farm manager have provided technical assistance on the characteristics of the product, but he could also have assisted the incident commander in his efforts to contact the shipper. Therefore, the Safety Board believes that Collier County should review emergency medical services training and, as necessary, modify instructions to require that persons offering information about a hazardous materials incident be referred to the incident commander.

Therefore, the National Transportation Safety Board recommends that Collier County, Florida:

Establish radio channels dedicated for specific incident communications that are accessible to all emergency responders. (Class III, Longer Term Action) (I-90-13)

Determine locations within the county in which emergency response personnel are unable to communicate with county dispatchers by radio, and correct communication deficiencies identified to provide adequate emergency response communications. (Class III, Longer Term Action) (I-90-14)

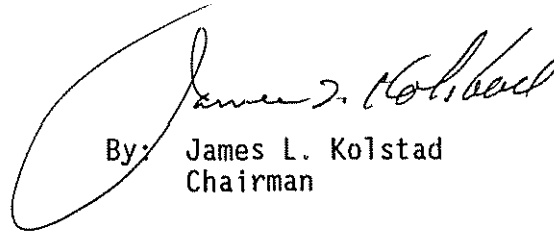
Review emergency medical services training and, as necessary, modify instructions to refer persons offering information about a hazardous materials incident to the incident commander. (Class II, Priority Action) (I-90-15)

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 recommendations in this letter. Please refer to Safety Recommendations I-90-13 through -15 in your reply.

Also, the Safety Board issued Safety Recommendations H-90-8 and -9 and I-90-1 to the Hy Yield Bromine Company; I-90-2 through -4 to Manchester Tank and Equipment Company, Inc.; I-90-5 through -12 to the Research and Special Programs Administration of the U.S. Department of Transportation; and I-90-16 and -17 to the Florida Highway Patrol.

KOLSTAD, Chairman, COUGHLIN, Acting Vice Chairman, and LAUBER and BURNETT, Members, concurred in these recommendations.

  
By: James L. Kolstad  
Chairman