R-345E

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: February 11, 1981

Forwarded to:

Mr. Robert W. Grant President National Fire Protection Association 470 Atlantic Avenue Boston, Massachusetts 02210

SAFETY RECOMMENDATION(S)

R-81-28

On July 29, 1980, the National Transportation Safety Board concluded a 2-day national hearing on rail rapid transit safety. The hearing was prompted by an increasing concern over safety oversight responsibility for rail rapid transit systems, particularly fire safety issues and emergency evacuation of rail rapid transit passengers from underground or underwater tunnel locations. Twenty-five witnesses from transit industry management and labor, local fire departments, State and Federal agencies, and national fire safety organizations, including the National Fire Protection Association (NFPA), testified at the hearing. NFPA's participation in this public hearing was of invaluable assistance to the Safety Board in our examination of rail rapid transit safety. 1/

The safety problems identified as a result of this hearing and other Safety Board investigatory work indicate that the involvement of NFPA is appropriate and necessary to address fire safety equipment needs for rail rapid transit systems. During peak hours, a single rail rapid transit train can carry a "crushload" of 1,500 to 2,000 passengers. Under such conditions, the loss of life in an accident, fire, or other emergency could well be catastrophic. That such an accident with enormous risk to passengers, fire and emergency service personnel, and transit employees can occur has been amply demonstrated by the train fire in the Transbay Tube of the Bay Area Rapid Transit District on January 17, 1979; 2/ the train fire in a tunnel and station of the Southeastern Pennsylvania Transportation Authority on September 6, 1979; and the three separate train fires in the tunnels of the New York City Transit Authority on June 25, 1980, and December 10 and 11, 1980.

The Safety Board's evaluation of rail rapid transit safety revealed that fire safety equipment for rail rapid transit systems was one safety area that needed review by the Urban Mass Transportation Administration (UMTA), the Federal agency accountable for transit safety. We have recommended that UMTA conduct such a review to determine

^{1/} For more detailed information, read "Safety Effectiveness Evaluation of Rail Rapid Transit Safety" (NTSB-SEE-81-1).

^{2/} For more detailed information, read "Railroad Accident Report--Bay Area Rapid Transit District Fire on Train No. 117 and Evacuation of Passengers While in the Transbay Tube, San Francisco, California, January 17, 1979" (NTSB-RAR-79-5).

minimum fire safety equipment needs of rail rapid transit systems. The Safety Board believes that NFPA's experience in fire standards and fire safety equipment requirements would provide to UMTA an additional source of expertise upon which to call for an independent assessment of fire safety equipment needs.

Therefore, the National Transportation Safety Board recommends that the National Fire Protection Association:

Offer to assist and cooperate with the Urban Mass Transportation Administration in its determination of minimum fire safety equipment needs of rail rapid transit systems. (Class II, Priority Action) (R-81-28)

KING, Chairman, DRIVER, Vice Chairman, McADAMS and BURSLEY, Members, concurred in this recommendation. GOLDMAN, Member, dissented in this recommendation.

James B. Ki Chairman