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## NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: July 31, 1978

Forwarded to:

Honorable John M. Sullivan Administrator Federal Railroad Administration 400 Seventh Street, S.W. Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

R-78-43 through 47

About 6:06 p.m. on November 9, 1977, 2 SD-45 locomotive units and 35 cars of Louisville & Nashville freight train No. 407 derailed when entering a 6°04' curve at Pensacola, Florida. The adjacent tank heads of the 18th and 19th cars were punctured during the derailment by a loose wheel and axle assembly; this released anhydrous ammonia into the atmosphere. Two persons died and 46 were injured as a result of the derailment, release of anhydrous ammonia, and evacuation of about 1,000 persons. Property damage was estimated to be  $$724,000.\ 1/$ 

Investigation disclosed that a lightly loaded long car and an empty short car were coupled together behind 6-axle locomotive units in a large tonnage train; this is a questionable train makeup characteristic. An examination of the track also disclosed the train was operating in an area of track with less than standard gage where tipping of the outside rail in a curve and widening of track gage occurred, causing the derailment. This track, even with the less than standard gage, complied with the standards for Class 3 track.

Therefore, the National Transportation Safety Board recommends that the Federal Railroad Administration:

Include in its review of the current FRA track safety standards, investigation and testing to determine if the 4-foot 8-inch minimum gage allowed in curved track according to 49 CFR 213.53 is appropriate for 6-axle locomotive units and cars. (Class II, Priority Action) (R-78-43)

I/ For more detailed information on this accident, read "Railroad Accident Report-Louisville & Nashville Railroad Company Freight Train Derailment and Puncture of Anhydrous Ammonia Tank Cars at Pensacola, Florida, November 9, 1977," (NTSB-RAR-78-4).

Promulgate regulations to require locomotives used in trains on main tracks outside of yard limits to be equipped with operating event recorders. (Class II, Priority Action) . (R-78-44)

Investigate and test to determine the adequacy of the total uncontrolled lateral motion allowed in 49 CFR 230.220 when related to lateral forces developed on rails by 6-axle locomotive units or by 6-axle cars in curves of more than 2°. (Class II, Priority Action) (R-78-45)

Promulgate regulations to require railroads to limit the length and tonnage of trains carrying hazardous materials to train makeup principles developed under the track train dynamic program. (Class II, Priority Action) (R-78-46)

Promulgate regulations to require railroads to provide pertinent hazardous materials emergency information on waybills and to make this information available to public emergency personnel. (Class II, Priority Action) (R-78-47)

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

James B. King