

## **NOTICE OF SAFETY ADVISORY 97-3 - Train movements past stop indications of absolute signals.**

On September 18, 1997, FRA published a Notice of Safety Advisory 97-3 in the Federal Register (Vol. 62, No. 181, page 49047), addressing safety practices to reduce the risk of accidents arising from the authorization of train movements past stop indications of absolute signals. It reads as follows:

A fatal head-on collision between a Union Pacific Railroad Company (UP) freight train and an unattended, runaway UP locomotive consist near Fort Worth, Texas, on August 20, 1997, has caused FRA to focus on railroad operating rules and procedures pertaining to protection against conflicting train movements when train dispatchers and control operators authorize movements past a stop indication of an absolute signal.

FRA and the National Transportation Safety Board (NTSB) are investigating the accident. FRA has also initiated an in-depth and comprehensive analysis of train dispatcher procedures employed by UP. FRA inspection teams are on UP's property to conduct safety assurance reviews on all aspects of the issue. The facts and findings developed in the investigations will be published when the individual investigations are complete.

The collision occurred in single track, centralized traffic control (CTC) territory. Preliminary FRA findings indicate that an unoccupied UP locomotive consist unintentionally rolled out of a controlled siding eastward onto a main track. A UP dispatcher noticed on his computer screen that the siding switch was out of correspondence, and that the main track segment beyond the switch was occupied. At least three times, the dispatcher radioed the runaway light locomotive consist, in an attempt to contact a crewmember. Not getting a response, the dispatcher then contacted a signal maintainer. Meanwhile, a UP control operator at Fort Worth, authorized a westbound freight train to pass a stop indication of an absolute signal at the west end of Centennial Yard in Fort Worth, and proceed onto the main track at restricted speed. Subsequently, the runaway light locomotive consist struck the westbound freight train at a speed of approximately 60 miles per hour. The UP engineer and engineer pilot were killed, and the UP conductor was seriously injured.

**Operating Practices:** FRA rules require each railroad to periodically instruct its employees on the meaning and application of the railroad's operating rules (49 CFR 217.11), and also require each railroad to periodically conduct operational tests and inspections to determine the extent of compliance with its code of operating rules, timetables, and timetable special instructions (49 CFR 217.9).

UP train dispatcher rule 20.6 pertains to movements in adjoining territories and requires that, "Train dispatchers must not issue track warrants, track bulletins, or instructions or take any action that may affect safe train operation on another train dispatcher's territory unless the dispatchers reach an understanding." Rule 9.12.1 of the General Code of Operating Rules pertains to CTC Territory and requires that, "At a signal displaying a Stop indication, if no conflicting movement is evident, the train will be governed as follows: Before authorizing the train to proceed, the control operator must know

that the route is properly lined and no conflicting movement is occupying or authorized to enter the track between that signal and the next absolute signal governing movement or the end of CTC where applicable.”

Initial findings of the FRA investigation of the collision indicate, in part, that the train dispatcher and control operator did not communicate with each other as to the cause of the stop indication on the absolute signal at the west end of Centennial Yard. It appears that the train dispatcher did not contact the control operator of the adjoining territory and inform him of the track occupancy. Likewise, it appears that the control operator did not verify the cause of the stop indication by determining whether a conflicting movement was occupying the track segment between that signal and the next absolute signal governing movement, before authorizing the westbound train to pass the stop indication.

**Recommended Action:** FRA believes that the likelihood of further accidents, such as the one that occurred on the UP on August 20, 1997, would be greatly reduced by the inclusion of certain additional measures into the railroads’ operating procedures. Therefore, FRA recommends that:

1. As soon as possible, but preferably within seven calendar days of the date of publication of this Safety Advisory in the Federal Register, each railroad should:
  - (a) Ensure that a railroad operating supervisor personally contacts each train dispatcher and control operator responsible for controlling train movements, and in a face-to-face meeting:
    - (i) Informs them of the circumstances surrounding the UP accident described above;
    - (ii) Reemphasizes the importance of complying with existing operating rules and procedures pertaining to the authorization of train or engine movements past a stop indication; and
    - (iii) Reemphasizes rules and procedures that ensure that train dispatchers and control operators, dispatchers and other dispatchers, or control operators and other control operators are communicating with each other and with enough specificity to prevent conflicting movements. FRA recommends that such one-time face-to-face meetings be held in addition to the periodic instruction required by 49 CFR 217.11.
  - (b) Review train dispatcher and control operator procedures in order to determine if any gaps exist, particularly as they relate to necessary communication with adjoining territories.
  - (c) Revise operating rules and train dispatcher procedures as needed to assure that gaps do not exist.
2. As part of the tests and inspections required by 49 CFR 217.9, each railroad should conduct operational tests and inspections to ensure compliance with operating rules and train dispatcher/control operator procedures pertaining to authorization to pass a stop indication and dispatcher/control operator communication.

FRA may modify Safety Advisory 97-3, issue additional safety advisories, or take other appropriate necessary action to ensure the highest level of safety on the Nation's railroads.

Issued in Washington, DC, on September 15, 1997. Edward R. English, Director, Office of Safety Assurance and Compliance.

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