

NOTICE OF SAFETY BULLETIN 97-1 - Locomotive emergency MU fuel line cut-off devices located where device may be activated unintentionally.

On January 30, 1997, FRA published Notice of Safety Bulletin 97-1 in the Federal Register (Vol. 62, No. 20, page 4569), addressing recommended safety practices for certain locomotives equipped with emergency MU fuel line cut-off devices located inside the locomotive control compartment at a location which enables the cut-off device to be activated unintentionally.

Background: Preliminary investigatory findings following the derailment of a run-away Union Pacific Railroad (UP) freight train on January 12, 1997, at Hayden, California, indicate that the emergency multiple-unit (MU) fuel line cut-off device (cut-off device) located inside the locomotive control compartment was unintentionally activated by the locomotive engineer. The engineer was apparently unaware of the activation. Activation of the cut-off device shuts down all MU'ed locomotives within a number of seconds. In this case, all three locomotives in the train were shut down. As a result, the engineer lost all of the dynamic brake retarding effect being used to control the speed of the train down a 2.2 percent grade. The engineer initiated an emergency application of the train's air brakes, but the train continued out of control and derailed at a siding turnout.

The cut-off device on this locomotive is located below waist level on the face of the control stand superstructure on the engineer's left side. Although the plastic guard surrounding the cut-off device was found broken, a test conducted on a similar locomotive indicated that even with the guard in place it was possible to operate the cut-off device simply by brushing it with a person's knee. The locomotive's manufacturer, General Motor's Corporation, Electro-Motive Division (EMD), indicates that at least 365 SD-60M series locomotives manufactured for UP are equipped with cut-off devices similarly located. Information available to FRA indicates that these locomotives are identified as UP6000 thru UP6365. There may be other locomotives with similar designs on other railroads.

Recommendation: In light of the potential dangers involved in loss of dynamic braking due to inadvertent activation of the emergency MU fuel-line cut-off device on some locomotives, FRA strongly recommends that the following safety precautions be taken:

1. All railroads must inspect all locomotives to determine if the emergency MU fuel line cut-off device is located in such a position in the locomotive cab that it can be inadvertently activated by the engineer. If the device is located in such a position, the corrective action in accordance with paragraphs 2 and 3 must be initiated.
2. Relocate the cut-off device to a location where the device can not be unintentionally activated, or protect the cut-off device in a housing that prevents unintentional activation.
3. Until the improvements listed above are made, these locomotives must not be operated in the controlling or lead position.

FRA recognizes that there may be operational conditions under which these locomotives, while in the trailing position, must be occupied by employees. Under these circumstances, the engineer's seat must remain unoccupied to the greatest extent possible. If such trailing locomotive is to be occupied, the conductor must brief all occupants as to the location of the cut-off device and the need to avoid all contact with it.

Issued in Washington, DC on January 17, 1997. Bruce Fine, Associate Administrator for Safety.