



U.S. Department
of Transportation

**Federal Railroad
Administration**

Memorandum

Date: June 15, 1998

Reply to Att. of: MP&E 98-11

Subject: Testing of Handbrakes on Locomotives Equipped with an Air Release Valve

From: Edward R. English
Director, Office of Safety Assurance and Compliance

To: Regional Administrators, Deputy Regional Administrators,
Motive Power & Equipment Specialists and Inspectors

On some locomotives, the application of the handbrake actuates an air release valve to the brake cylinder on the side of the truck where the handbrake functions. This system is necessary because the brake cylinder body has to be moved by the application of the handbrake and if the piston is extended, the cylinder body cannot be moved. When the release valve is functioning properly, it will relieve the pressure and allow the piston to retract so that the application of the handbrake will force the cylinder body toward the wheel.

If the release valve does not function as intended and the handbrake is applied with the piston extended, the locomotive will not have any holding brakes when the air leaks off.

The Federal Railroad Administration (FRA) has been advised that there have been incidents of rollaway locomotives because of the failure of this release valve. In many cases, employees have applied the handbrake and shut locomotives, only to discover later that the handbrake was not applied after the air leaked off.

All FRA inspectors are reminded that they are not to involve themselves in the manipulation of any apparatus that may in any way cause or allow an adverse condition. Testing for the above described condition must be done only by carrier personnel.

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