

NOTICE OF SAFETY ADVISORY 2001-03 In-service failures of railroad airbrake system trainline angle cocks manufactured by Ellcon-National.

FRA is issuing Safety Advisory 2001-03 addressing the in-service failures of railroad airbrake system trainline angle cocks manufactured by Ellcon-National. The manufacturer notified the Association of American Railroads (AAR) of failures of Model 7000 Thread-to-Thread and Model 7270 Thread-to-Flange Angle Cocks. To date, no derailments, collisions, or injuries have resulted from these failures; however, closed angle cocks occurring en route may lead to insufficient braking and in the worst case could result in runaway trains on grades. FRA recommends that all railroads and private car owners obtain a copy of AAR's Early Warning EW-177 (C-9296) issued on March 29, 2001, and review the document's extensive listing of cars which had the subject angle cocks installed as original equipment. FRA also recommends that cars found with the original angle cocks still installed have the angle cocks replaced, at both ends, or be retrofitted with a handle assemble torque kit in accordance with AAR's guidance. AAR has applied Severity Code "MG" which means "See Early Warning Letter for Instructions."

Recently, FRA was informed by the Association of American Railroads (AAR) of several in-service failures of Ellcon-National angle cocks, Model 7000 Thread-to-Thread, and Model 7270 Thread-to-Flange. No injuries or fatalities resulted from these incidents which involved several car types, but some of the subject angle cocks have been found to have rotated partially or completely closed due to en route vibrations of the train. This undesired rotation of the angle cock has been identified by crew members in several instances on trains while operating en route and in one case, necessitated the need to activate an emergency brake application from the two-way end-of-train (EOT) device.

The AAR issued Maintenance Advisory MA-65 on September 13, 2000, regarding these angle cocks, and then upgraded their concern by issuing Early Warning EW-177 on March 29, 2001. The AAR's Braking Systems and Equipment Engineering Committees have determined that the angle cocks without the latest friction disc, which is a 1/4" thick stop plate and handle assembly, must be either replaced or have the handle assembly retrofitted on non-register version. A number of conditions have been found on samples of the subject angle cocks which cause concern such as roll pins protruding from the handles, worn leger lock tangs, bent lock tangs, and bent or distorted handle assemblies.

The subject angle cocks were applied to new cars and furnished as replacement stock beginning in January of 1993. The AAR recommended that the first priority would be to replace or retrofit those angle cocks manufactured between 1993 and 1996, as those are without friction discs and modified handle assemblies. Ellcon-National has accounted for approximately 16,700 angle cocks applied during this period as original equipment on new freight cars. However, Ellcon-National notified the AAR that there were approximately 97,000 angle cocks applied to cars between January 1993 and March 2000 that have a potential for failure.

Ellcon-National is offering handle assembly torque kits upon request, as well as field service support. For more information, contact Mr. Brian Driggers or Inside Sales Department personnel at Ellcon-National at 864-277-5000 or E-mail: sales@ellcon-national.com. The AAR requests that each removed part be tagged with the car's initials and number, and that Ellcon-National be contacted to arrange for disposition or return of accumulated angle cocks or handle assemblies.

Action Recommended by FRA:

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- ! FRA also recommends that cars found with the original angle cocks still installed have the angle cocks replaced, at both ends, or be retrofitted with a handle assemble torque kit in accordance with AAR's guidance. AAR has applied Severity Code "MG" which means "See Early Warning Letter for Instructions."

It should be noted that the AAR in conjunction with railroads, private car owners, and Ellcon-National has also developed an action plan to focus on and accelerate the angle cock modifications on the cars equipped with the above noted angle cocks. For more information, FRA recommends that railroads and private car owners contact Mr. Patrick T. Ameen, Assistant Vice President Technical Services, Association of American Railroads, 50 F street, NW, Washington, D.C. 20001-1564, (202) 639-2141.

FRA may modify Safety Advisory 2001-03, issue additional safety advisories, or take other appropriate action to ensure the highest level of safety on the Nation's railroads.

FOR FURTHER INFORMATION CONTACT: Gary Fairbanks, Mechanical Engineer, Motive Power & Equipment Division, Office of Safety Assurance & Compliance, FRA, 400 Seventh Street, SW, RRS-14, Mail Stop 25, Washington, D.C. 20590 (Telephone 202-493-6322/ Fax 202-493-6230).

Issued in Washington, D.C. by George A. Gavalla, Associate Administrator for Safety.