



U.S. Department
of Transportation
**Federal Aviation
Administration**

SAFO

Safety Alert for Operators

SAFO 11003
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Flight Standards Service
Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo

A SAFO contains important safety information and may include recommended action. SAFO content should be especially valuable to air carriers in meeting their statutory duty to provide service with the highest possible degree of safety in the public interest. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO.

Subject: Embraer ERJ-190 Series Thrust Reverser Cowling Safety

Purpose: This SAFO notifies maintenance personnel of a potentially hazardous situation which can cause serious injury while working on or around the EMB 190 thrust reversers.

Background: During a visit to Embraer Aircraft Maintenance Service (EAMS), a Maintenance Repair Organization (MRO), technicians reported that instances have occurred where the thrust reverser power door opening (PDO) actuator failed. Also, during high wind conditions, with the thrust reverser cowl open, the cowling can flex sufficiently enough to displace the locking feature of the PDO actuator. The failure of the PDO actuator can cause the thrust reverser cowl-door to come down on personnel, causing serious injury. As a precautionary safety means, and an interim option, EAMS installed the trust reverser hold-open-jib which is part of the engine-change boot-strap-kit. The jib is utilized to provide additional support to the PDO thrust reverser cowling-door in the event of a PDO failure. Embraer is evaluating the development of a tool to support the thrust reverser cowling while opened. However, until this tool is available, extreme caution is recommended during maintenance of the thrust reverser.

Recommended Action: It is recommended that air carriers who operate this type of equipment, immediately alert maintenance to exercise extreme caution working around the area with the thrust reverser cowling opened, especially during high wind conditions. In addition, it is recommended that maintenance personnel utilize the thrust reverser hold-open-jib which is part of the engine change boot-strap-kit, to secure the door. The jib is utilized to provide additional support to the PDO thrust reverser cowling door in the event of a PDO failure.

Contact: Questions or comments regarding this SAFO should be directed to the Aircraft Maintenance Division, AFS-300, at (202) 267-1675.