EMERGENCY AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC

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

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ISSUE DATE: August 25, 2007
AD 2007-18-51; Docket No. FAA-2007-29089; Directorate Identifier 2007-NM-214-AD

Emergency airworthiness directive (AD) 2007-18-51 is sent to all owners and operators of Boeing Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes.

Background

We have received reports of parts of the main slat track downstop assembly coming off the main slat track. In one case, a nut fell into the slat track housing (referred to as "slat can") and, during a subsequent slat retraction, the track made contact with the nut, pushing it into the wall of the can and puncturing it. That operator reported finding fuel leaking from the drain hole in the slat track housing at the No. 5 slat track position. In another case, an initial investigation revealed that following retraction of the slats after landing on a Model 737-800 airplane, loose parts of the main slat track downstop assembly punctured the slat can, which resulted in a fuel leak and a fire that ultimately destroyed the airplane.

Loose or missing parts from the main slat track downstop assemblies, if not detected and corrected, could result in a fuel leak and consequent fire.

FAA's Determination and Requirements of this AD

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other airplanes of this same type design. Therefore, we are issuing this AD to detect and correct hardware from coming loose from the slats and puncturing the slat track can, which could result in a fuel leak and consequent fire. This AD requires repetitive detailed inspections of the slat track downstop assembly to verify that proper hardware is installed, one-time torquing of the nut and bolt, and corrective actions if necessary. Corrective actions include installing a new or serviceable part; and doing a detailed inspection of the inside of the slat can for foreign object debris (FOD) and damage, and removing any FOD and repairing damage that is found.

Interim Action

We consider this AD interim action. If final action is later identified, we might consider further rulemaking then.

Examining the Docket

You may examine the contents of this AD docket on the Internet at http://dms.dot.gov (on the next business day after we have issued the AD), or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590; the directorate identifier for this docket is 2007-NM-214-AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Determination of Rule's Effective Date

This emergency AD is issued under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator, and is effective immediately upon receipt.

2007-18-51 BOEING: Docket No. FAA-2007-29089; Directorate Docket No. 2007-NM-214-AD.

Effective Date

(a) Emergency airworthiness directive (AD) 2007-18-51, issued on August 25, 2007, is effective immediately upon receipt.

Affected ADs

(b) None.

Applicability

(c) This AD applies to all Boeing Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category.

Unsafe Condition

(d) This AD results from reports of the main slat track downstop hardware coming off the retaining bolts for the main slat track downstops. The Federal Aviation Administration is issuing this AD to detect and correct loose or missing parts from the main slat track downstop assemblies, which could result in a fuel leak and consequent fire.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

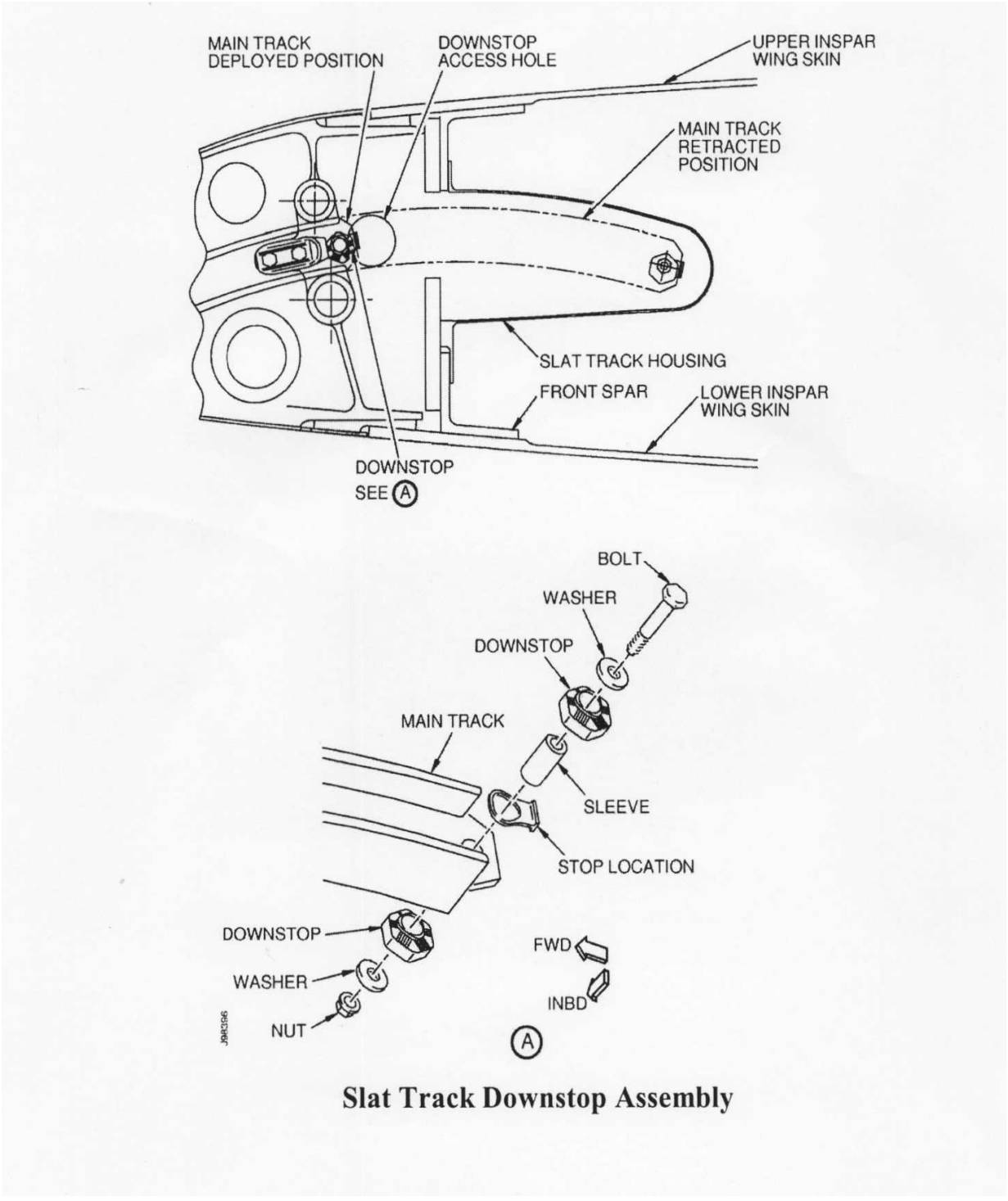
Repetitive Detailed Inspections and One-Time Torquing

(f) Within 24 days after receipt of this AD: Do the actions required by paragraphs (f)(1) and (f)(2) of this AD.

(1) Do a detailed inspection of each main slat track downstop assembly to verify proper installation of the slat track hardware (the bolt, washers, downstops, sleeve, stop location, and nut shown in Figure 1 of Boeing Service Letter 737-SL-57-084-B, dated July 10, 2007, and in this AD). If any part is missing or is installed improperly, before further flight, install a new or serviceable part using a method approved in accordance with the procedures specified in paragraph (g) of this AD; and do a detailed inspection of the inside of the slat can for foreign object debris (FOD) and damage. Before further flight, remove any FOD found and repair any damage found using a method approved in accordance with the procedures specified in paragraph (g) of this AD. Using Boeing Correspondence (Multi-Operator Message) Service Request ID 1-523812011, issued August 25, 2007, is one approved method for verifying proper installation; installing a new or serviceable part; and inspecting for damage and FOD, and removing FOD and repairing damage. Repeat the actions required by paragraph (f)(1) of this AD thereafter at intervals not to exceed 3,000 flight cycles:

(2) Apply a torque between 50 to 80 inch-pounds to the nut. The bolt head must be held with the torque applied to the nut.

Note 1: For the purposes of this AD, a detailed inspection is: "An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required."



Slat Track Downstop Assembly

Figure 1

Alternative Methods of Compliance (AMOCs)

(g)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD, if it is approved by an Authorized Representative for the Boeing Commercial Airplanes Delegation Option Authorization Organization who has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

Contact Information

(h) For technical information about this AD, contact: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 917-6440; fax (425) 917-6590.

Issued in Renton, Washington, on August 25, 2007.

Original signed by:
Ali Bahrami,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.