



DATE: December 13, 2019

AD #: 2019-25-55

Emergency Airworthiness Directive (AD) 2019-25-55 is sent to owners and operators of The Boeing Company Model 737-300, -400, and -700 series airplanes, certificated in any category, modified to a Bedek Division Special Freighter (BDSF) by supplemental type certificate (STC) ST01566LA, ST01961SE, or ST02556SE, with a 9G rigid barrier.

Background

This emergency AD was prompted by a review of the manufacturing process for the 9G rigid barrier installed on BDSF conversions that identified a manufacturing non-compliance. It has been found that the surface preparation before bonding was improperly done, which can affect the 9G rigid barrier's strength characteristics. This condition, if not addressed, could result in the potential failure of the 9G rigid barrier under certain emergency landing loads, which could injure occupants.

The Civil Aviation Authority of Israel (CAAI), which is the aviation authority for Israel, has issued Israeli AD ISR-I-53-2019-12-6, dated December 12, 2019 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for The Boeing Company Model 737-300, -400, and -700 series airplanes, modified to a BDSF by STC ST01566LA, ST01961SE, or ST02556SE, with a 9G rigid barrier.

Relevant Service Information

The FAA reviewed Israel Aerospace Industries Service Bulletin 365-00-054, dated December 2019. This service information describes loading restrictions and methods that include reducing the cargo weights for each loading configuration and using additional straps when necessary to address 9G rigid barrier manufacturing non-compliance.

FAA's Determination

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this AD because the agency evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design. Due to the need to correct an urgent safety of flight situation, good cause exists to make this AD effective in less than 30 days.

AD Requirements

This AD requires complying with the loading restrictions and methods specified in the service information described previously, except as discussed under "Differences Between this AD and the Service Information."

Differences Between This AD and the Service Information

Where Israel Aerospace Industries Service Bulletin 365-00-054, dated December 2019, specifies using cargo restraint straps rated at a minimum of 7,500 pounds, this AD requires using technical standard order TSO-C172 cargo restraint straps; that TSO specifies a load rating of 5,000 pounds. This exception corrects the Israel Aerospace Industries service bulletin's reference to a TSO-C172 cargo strap load rating of 7,500 pounds; the cargo strap load capability specified in the TSO is 5,000 pounds.

This AD specifies that the provisions for restraining cargo directly to a pallet or the airplane as provided in the existing airplane flight manual (AFM) (reference section 1-68-XX of the Israel Aerospace Industries Weight and Balance Manual (WBM)) can only be used if that cargo and all cargo aft of that location are restrained to a forward load factor of 9G. This exception corrects an omission in the Israel Aerospace Industries' service bulletin.

Interim Action

The FAA considers this AD interim action.

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.

The FAA is 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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Presentation of the Actual AD

The FAA is issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

2019-25-55 The Boeing Company: Product Identifier 2019-NM-201-AD.

(a) Effective Date

This Emergency Airworthiness Directive (AD) is effective upon receipt.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 737-300, -400, and -700 series airplanes, certificated in any category, modified to a Bedek Division Special Freighter (BDSF) by supplemental type certificate (STC) ST01566LA, ST01961SE, or ST02556SE, with a 9G rigid barrier.

(d) Subject

Air Transport Association (ATA) of America Code 25, Equipment/Furnishings.

(e) Unsafe Condition

This AD was prompted by a review of the manufacturing process for the 9G rigid barrier installed on BDSF conversions that identified a manufacturing non-compliance. It has been found that the surface preparation before bonding was improperly done, which can affect the 9G rigid barrier's strength characteristics. The FAA is issuing this AD to address potential failure of the 9G rigid barrier under certain emergency landing loads, which could injure occupants.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Loading Restrictions and Methods

Before further flight, comply with the loading restrictions and methods specified in the Accomplishment Instructions of Israel Aerospace Industries Service Bulletin 365-00-054, dated December 2019, except as specified in paragraph (h) of this AD. The loading restrictions include reducing the cargo weights for each loading configuration and using additional straps as applicable.

(h) Exceptions to Service Information

(1) Where Israel Aerospace Industries Service Bulletin 365-00-054, dated December 2019, specifies using cargo restraint straps rated at a minimum of 7,500 pounds, for this AD use technical standard order TSO-C172 cargo restraint straps; that TSO specifies a load rating of 5,000 pounds.

(2) The provisions for restraining cargo directly to a pallet or the airplane as provided in the existing airplane flight manual (AFM) can only be used if that cargo and all cargo aft of that location are restrained to a forward load factor of 9G.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j)(2) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Israeli AD ISR-I-53-2019-12-6, dated December 12, 2019, for related information.

(2) For further information about this AD, contact Eric Lin, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3523; email: eric.lin@faa.gov.

(3) For service information referenced in this AD, contact Israel Aerospace Industries, LTD., Ben-Gurion International Airport, 70100 Israel; telephone 972-3-935-3090; email aviation_group@iai.co.il; Internet <https://www.iai.co.il/about/groups/aviation-group>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued in Des Moines, Washington, on December 13, 2019.

Original signed by
Jeffrey E. Duven,
Director,
System Oversight Division,
Aircraft Certification Service.