

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: 2025-02

Date: February 21, 2025

SUBJ: DOORS, Main Deck Cargo Door

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin advises owners and operators of **Boeing Model** 757-200 series airplanes, converted from passenger to freighter configuration in accordance with Precision Conversions, LLC, Supplemental Type Certificate (STC) No. ST01529SE, of an airworthiness concern regarding in-flight opening of the main deck cargo door and recommended actions to mitigate such an event.

At this time, the airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action under title 14 of the Code of Federal Regulations (14 CFR) part 39. However, the investigation is ongoing, and depending on the investigation results, the FAA may consider rulemaking in the future.

Background

On February 13, 2021, a Boeing Model 757-236 Passenger Converted Freighter (PCF) airplane¹ experienced an in-flight opening of the main deck cargo door.² The incident occurred during the initial climb, as the airplane was ascending to its assigned cruising altitude. The flightcrew observed a sudden cabin pressure anomaly, but there was no instrument indication that the main deck cargo door malfunctioned or opened. Recognizing the critical nature of the situation, the flightcrew declared an emergency and initiated an immediate return to the departure airport where the airplane landed safely. No injuries to the flightcrew or further damage to the airplane were reported.

The affected airplanes are equipped with a hydraulically operated main deck cargo door (MDCD) system, which incorporates mechanical latches and locking hooks to ensure the cargo door remains securely closed during flight. Proximity sensors within the system provide signals to confirm the cargo door's locked and latched positions, and the cargo door warning system alerts the flightcrew to any potential anomalies.

Ensuring the reliable engagement of locking mechanisms and accurate operation of proximity sensors is essential to prevent similar incidents, as a cargo door opening in-flight can compromise cabin pressurization, jeopardize structural integrity, and pose a significant safety hazard.

Precision Conversions LLC B757-200PCF Supplemental Operations Manual PC-0118-02, Revision AC, dated December 18, 2024, supplements the Boeing 757 Operation Manual by providing operational procedures specific to the affected airplanes, including procedures for opening and closing the MDCD. Precision Conversions LLC B757-200PCF Supplemental Maintenance Manual PC-0118-06, Revision Y, dated December 15, 2024, supplements the Boeing 757 Aircraft Maintenance Manual by providing maintenance procedures specific to the affected airplanes,

¹ The Boeing Model 757-236 PCF airplane is a Model 737-200 airplane converted from a passenger to freighter configuration in accordance with Precision Conversions, LLC, STC No. ST01529SE.

²German Federal Bureau of Aircraft Accident Investigation (BFU) Interim Report BFU21-0052- EX, February 13, 2021, https://www.bfu-web.de/EN/Publications/InterimReports/IR2021/IR1_21-0052 B757F Leipzig.pdf? blob=publicationFile&v=3.

including testing of the MDCD to verify it opens, closes, and latches as designed, cleaning of the MDCD view port mirrors and windows, and painting of the MDCD latches and lock pins.

Recommendations

The FAA recommends that all owners and operators of the affected airplanes perform the following actions at the applicable intervals specified in the Maintenance Planning Document (MPD) Items identified below:

- Perform the "Test Door Open" procedure in accordance with Precision Conversions LLC B757-200PCF Supplemental Maintenance Manual PC-0118-06, section 52-30-00. This test is required every 5,000 flight cycles by the B757-200PCF/PCC Maintenance Planning Document Supplement PC-0118-05-9, MPD Item Number PC-52-30-00-5A.
- Perform the "Test Door Closed" procedure in accordance with Precision Conversions LLC B757-200PCF Supplemental Maintenance Manual PC-0118-06, section 52-30-00. This test is required every 5,000 flight cycles by the B757-200PCF/PCC Maintenance Planning Document Supplement PC-0118-05-9, MPD Item Number PC-52-30-00-5B.
- Perform the "Test Door Closed, Latched, and Locked Indication" procedure in accordance with Precision Conversions LLC B757-200PCF Supplemental Maintenance Manual PC-0118-06, section 52-30-00. This test is required every 5,000 flight hours by the B757-200PCF/PCC Maintenance Planning Document Supplement PC-0118-05-9, MPD Item Number PC-52-30-00-5F.
- Perform the "Test Door Closed Verification" procedure in accordance with Precision Conversions LLC B757-200PCF Supplemental Maintenance Manual PC-0118-06, section 52-30-00. This test is required every 5,000 flight cycles by the B757-200PCF/PCC B757-200PCF/PCC Maintenance Planning Document Supplement PC-0118-05-9, MPD Item Number PC-52-30-00-5G.
- Inspect the MDCD view port mirrors and view port windows for smudges, debris, and other contaminants, and inspect the MDCD latches and lock pins for paint defects. As needed, perform the "Main Cargo Door Collective Locking System Cleaning and Painting" procedures in accordance with Precision Conversions LLC B757-200PCF Supplemental Maintenance Manual PC-0118-06, section 52-30-00 (including "General," "Cleaning the View Port Mirrors," "Cleaning the View Port Windows," and "Painting the Latches and Lock Pins" procedures).
- Ensure the ground crew and flightcrew follow the appropriate procedures for operation of the main deck cargo door in accordance with Precision Conversions LLC B757-200PCF Supplemental Operations Manual PC-0118-02, Doors, pages 1.50.8 and 1.50.9.
- Ensure the ground crew and flightcrew follow the appropriate procedures in cold weather operations, including removal of ice, snow, or frost accumulation on and around the cargo door and its mechanisms.
- Evaluate the need for additional inspections of cargo door mechanisms and sensors after exposure to freezing fog or icing conditions.
- Report any main deck cargo door malfunction to the FAA contact provided below. Under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the OMB has approved

the information collection contained in this SAIB and assigned OMB Control Number 2120-0731.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0731. Public reporting for this collection of information is estimated to take approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are voluntary. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

For Further Information Contact

Tony Koung, Aviation Safety Engineer, 2200 S 216th Street, Des Moines, WA 98198; phone: (206) 231-3985; email: Tony.Koung@faa.gov.

For Related Service Information Contact

Precision Conversions, LLC, 9800 SW Nimbus Avenue, Beaverton, OR 97008; phone: (503) 601-3001, email: support@precisionaircraft.com, website: https://support.precisionaircraft.com/.