

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SUBJ: HYDRAULIC POWER SYSTEM, Fatigue Failure of Hydraulic SAIB: 2025-01

Flexible Hoses Date: January 14, 2025

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises owners and operators of **The Boeing Company Model 757 series airplanes** of fatigue failure of the hydraulic flexible hoses in the wheel wells of the main landing gear (MLG) and nose landing gear (NLG) and recommended actions.

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.

Background

There have been multiple events where loss of the left hydraulic system was attributed to fatigue failure of a flexible hydraulic hose, including an accident in Costa Rica on April 7, 2022, where a Boeing Model 757 airplane experienced a runway excursion during landing. Flexible hoses are installed to route hydraulic systems in areas where relative motion will occur, and repetitive cycles of that relative motion can lead to degradation of the hoses and result in fatigue failure. Failure of the flexible hydraulic hoses will result in loss of hydraulic fluid and consequent loss of function of system components powered by that hydraulic system. To address this concern, Boeing issued Service Letter 757-SL-29-058, dated March 11, 2024, which identifies best practices for hydraulic system maintenance. Specifically, the service letter recommends initial replacement of older flexible hydraulic hoses in the wheel wells of the MLG and NLG, and then proactive repetitive replacements to help minimize the likelihood of a flexible hose failure that would result in loss of the left hydraulic system.

Recommendations

The FAA recommends that all owners and operators of the affected airplanes review the information in Boeing Service Letter 757-SL-29-058, dated March 11, 2024, and accomplish the actions included therein at the earliest opportunity.

For Further Information Contact

Katherine Venegas, Aviation Safety Engineer, 3960 Paramount Boulevard, Lakewood, CA 90712; phone: (562) 627-5353; email: Katherine.Venegas@faa.gov.

For Related Service Information Contact

Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; phone: 562-797-1717; https://www.myboeingfleet.com.

¹ Final Report CR-ACC-CO-002-2022, Accidents and Incidents Unit of the Civil Aviation Technical Council (CETAC), Original Edition, September 22, 2023, https://sub.dgac.go.cr/wp-content/uploads/2023/09/Informe-Final-CR-ACC-CO-02-2023-B757-DHL.pdf. An overview of the accident is available in English at https://skybrary.aero/accidents-and-incidents/b752-san-jose-costa-rica-2022.