AIRWORTHINESS DIRECTIVE

This Airworthiness Directive (AD) is issued pursuant to Canadian Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) with ADs.

Number:

CF-2020-45R1

Effective Date:

30 April 2021

ATA:

27

Type Certificate:

A-82

Subject:

Flight Controls – Loose Rudder Pedal Torque Tube Quadrant Riveted Connection

Revision:

Supersedes AD CF-2020-45, issued 3 November 2020.

Applicability:

Viking Air Ltd. (formerly de Havilland) model DHC-6 series 1, DHC-6 series 100, DHC-6 series 110, DHC-6 series 200, DHC-6 series 210, DHC-6 series 300, DHC-6 series 310, DHC-6 series 320 and DHC-6 series 400 aeroplanes, serial numbers 001 through 987.

Compliance:

As indicated below, unless already accomplished.

Background:

There have been in-service reports of loose quadrants on the rudder pedal torque tube and signs of loose rivets or rivet joint wear, such as dark areas or streaks around the rivet heads and quadrant to torque tube interface. Viking Air Ltd. has determined that inadequate manufacturing tolerances may result in this condition. This defect, if not detected and corrected, could result in the affected parts deteriorating until the rivets fail, leading to loss of control of the rudder and possible loss of control of the aeroplane.

To detect and correct this condition, AD CF-2020-45 mandated a one-time detailed inspection of the rudder pedal torque tube quadrant assembly, and rectification, as required, of the affected parts.

Viking Air Ltd. had published Service Bulletin (SB) V6/0067, Revision NC, dated 16 July 2020, providing Accomplishment Instructions for the one-time detailed inspection for looseness of the affected parts. Since AD CF-2020-45 was issued, Viking Air Ltd. has introduced a new rudder pedal torque tube assembly in production that is not subject to the unsafe condition of this AD. As a result, Viking Air Ltd. has revised the SB V6/0067 at Revision A, dated 26 January 2021 (referred to as “the SB” in this AD) to update the aeroplane serial number applicability.

This AD revision, CF-2020-45R1, is issued to modify the aeroplane serial number applicability in accordance with the SB.

Corrective Actions:

A. Within three months from the effective date of AD CF-2020-45, 17 November 2020, inspect the rudder pedal torque tube quadrant assembly riveted connection in accordance with the Accomplishment Instructions of the SB.

B. If any looseness of the rudder pedal torque tube quadrant assembly or loose rivets or rivet joint wear/smoking rivets is detected, as defined in the SB, before further flight, repair or replace the affected parts in accordance with the Accomplishment Instructions of the SB.

The inspection, repair and parts replacement carried out in accordance with SB V6/0067, Revision NC, dated 16 July 2020, prior to the effective date of this AD also meet the requirements of this AD.

The use of later revisions of the SB that are approved by the Chief, Continuing Airworthiness, Transport Canada, is acceptable for compliance to the requirements of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 16 April 2021

Contact:

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