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Our file Notre référence
RDIMS/SGDDI : 15831152
PTS Number Numéro SSP
N/A

Sent via email

2 December 2019

Mr. Arvin Holland
Texas Air Services, Inc.
2602 45th Street
Dickinson, Texas 77539
USA

Subject: Alternative Means of Compliance (AMOC) with Transport Canada (TCCA) Airworthiness Directive (AD) CF-2019-02 applicable to Viking Air Ltd. (formerly de Havilland) model DHC-6 Aeroplane – Main Landing Gear Leg Part Number (PN) C6UM1110 – AMOC No. AARDG 2019/A46

- References:**
1. Texas Air Services (TAS) AMOC application (RDIMS# 15831152)
 2. TCCA AD CF-2019-02, 'Time Limits/Maintenance Checks – Airworthiness Limitations – Implementation', effective 23 January 2019
 3. Viking Air Ltd. Technical Bulletin (TB) V6/00063, 'Inspection, of DHC-6 Main Landing Gear Leg Machining (C6UM1110) HY-TUF Material and Pivot Fittings', Revision NC dated 27 April 2018 (RDIMS# 15832685)
 4. Viking Air Ltd. TB V6/00064, 'Repair of DHC-6 Main Landing Gear Leg Machining (C6UM1110) HY-TUF Material and Pivot Fittings', Revision NC dated 27 April 2018; (RDIMS# 15832690)
 5. TAS Repair Specification TAS-MLG-C6UM, Revision C, dated 22 November 2019; (RDIMS# 15832667)
 6. TAS Form T-100 C, 'DHC-6 MLG Axle Bore Housing Inspection and Repair Sheets', Revision IR dated 24 November 2019; (RDIMS# 15832642)
 7. TAS Form T-100 C-1, 'DHC-6 MLG Bolt and Flange Hole Inspection and Repair Sheets', Revision IR dated 24 November 2019 (RDIMS# 15832648)

Dear Mr. Holland,

This letter is in response to Texas Air Services' request (Ref. 1) for an AMOC with TCCA AD CF-2019-02 (Ref. 2) to allow repair of the MLG axle bore housing, housing

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bolt holes and the brake flange holes by weld build-up and machining to original manufacturing dimensions.

During accomplishment of the overhaul of the MLG gear leg as mandated by AD CF-2019-02, inspection instructions found in Viking Air Ltd. TB V6/00063 (Ref. 3) Section 9.F. for Dimensional Inspections, TAS identified that the instructions call for any part falling outside the minimum/maximum allowable dimensions to be replaced or repaired. However, there is no instruction in Viking Air Ltd. TB V6/0065 (Ref. 4) for the repair of the brake flange attachment holes (Ref. 3 Section 9.F.2.g), the axle housing (Ref. 3 Section 9.F.2.h) or axle bolt holes (Ref. 3 Section 9.F.2.i). There were also no axle housings parts available for replacement.

TAS obtained a Federal Aviation Administration (FAA) approval for a weld build-up process found in Repair Specification TAS-MLG-C6UM (Ref. 5) to restore the MLG axle housing bore, axle bolt holes and the brake flange holes back to the original manufacturing dimensions. TAS also submitted to TCCA Inspection and Repair Sheets, Form T-100 C (Ref. 6) and Form T-100 C-1 (Ref. 7) which provided all the detailed process instructions.

Pursuant to CAR Part VI, Subpart 5, Division III, Section 605.84(4), TCCA has reviewed the request and hereby approves the AMOC No. AARDG 2019/A46 with TCCA AD CF-2019-02, allowing the repair of the MLG axle housing bore, axle bolt holes and the brake flange attachment holes by weld build-up and machining to original manufacturing dimensions using the Ref. 5 FAA approved Repair Specification, subject to the following conditions:

- The inspection measurement record and repair of the MLG axle housing bore is accomplished in accordance with the Ref. 6 TAS Inspection and Repair Sheets;
- The MLG axle housing must be replaced if any measurement of the housing bore exceeds the repair limit mentioned in the Ref. 6 TAS Inspection and Repair Sheets;
- The inspection measurement record and repair of the MLG bolt holes and brake flange holes is accomplished in accordance with the Ref. 7 TAS Inspection and Repair Sheets;
- The MLG axle housing must be replaced if any measurement of the MLG bolt holes or flange holes exceeds the repair limit mentioned in the Ref. 7 TAS Repair Sheets;
- All other requirements of the MLG leg overhaul tasks that are not specifically referenced above remain applicable and must be complied with.

This AMOC No. AARDG 2019/A46 is applicable only to Viking Air Ltd. DHC-6 aeroplanes installed with MLG Leg part number C6UM1110 with MLG axle housing bore, MLG bolt holes or brake flange holes repaired by Texas Air Services, Inc. using the above mentioned FAA approved Repair Specification and Inspection and Repair Sheets. For non-Canadian registered aeroplanes, approval to use this AMOC must be obtained

from the governing regulatory authority of the state of registry if that authority does not automatically accept TCCCA AMOCs.

Should you have any questions on this AMOC, please contact Mr. Philip Tang by phone at 613-465-1095 or via email at philip.tang@tc.gc.ca.

Yours truly,



Rémy Knoerr
Chief, Continuing Airworthiness
National Aircraft Certification

Cc: Ms. Sarah MacLeod, Executive Director, Aeronautical Repair Station Association