Civil Aviation Authority

AIRWORTHINESS DIRECTIVE

Number: G-2013-0001

Issue date: 09 September 2013

This Airworthiness Directive (AD) is issued by the UK CAA as the National Aviation Authority ICAO Annex 8 Authority of State of Registry for the affected product(s). **In accordance with Article 19 (1) of Air Navigation Order 2009, the following action required by this AD is mandatory for applicable aircraft registered in the United Kingdom. No person may operate an aircraft to which an AD applies except in accordance with the requirements of that AD unless otherwise agreed with the Authority of the State of Registry.**	
Type Approval Holder's Name: 1. Boeing 2. Autair 3. Hawker Siddeley Canada Limited	**Type/Model Designation(s):** Harvard all variants
TCDS:	1. FAA Aircraft Specification No. A-2-575 previously held by NORTH AMERICAN and recently purchased by BOEING 2. FAA Aircraft Specification No. AR-11 previously held by NOORDUYN AVIATION LTD.) 3. Transport Canada Type Approval Data Sheet A-80
Supersedure:	Not applicable
ATA-57-00	**Wing Spar Corrosion Inspection**
Manufacturer(s):	North American Canadian Car
Applicability:	1. AT-6 (SNJ-2), AT-6A (SNJ-3), AT-6B, AT-6C (SNJ-4), AT-6D, (SNJ-5), AT-6F (SNJ-6), BC-1A, Harvard (Army AT-16), SNJ-7 and T-6G aeroplanes. 2. Harvard (Army AT-16) aeroplanes. 3. Harvard 2, Harvard 4 aeroplanes. All serial numbers, certificated in any category.
Reason:	Severe corrosion has been detected in the lower main spar of a Harvard aircraft, reducing thickness of affected primary structural members to 20% of original. Structural strength is seriously diminished thereby and if flown in this state could lead to the loss of the aircraft. In the particular case, existence of corrosion was suspected because of signs of previous corrosion having been dressed out on the outer, more visible, part of the spar. The materials from which the spar caps are constructed are susceptible to intergranular or exfoliation corrosion.

Reason Cont:	Although existing FAA ADs 2005-12-51 and 50-38-01 are intended to detect corrosion, they were not written to detect corrosion encountered in this event, and they do not require the removal of lower wing panels. Transport Canada's AD CF-2005-19 applied similar action to Canadian produced Harvard aircraft (Harvard 2 and Harvard 4). This directive imposes an additional deeper inspection involving removal of wing panels to expose the inner surfaces of the spars, together with time scales for repeat inspections.
Effective Date:	11 September 2013
Compliance/Action:	Accomplish the following at the next annual inspection after the effective date of this AD, unless already accomplished within the previous 12 months and thereafter every 5 years :- Carry out a detailed visual inspection for corrosion and replace any affected parts in accordance with referenced FAA/Transport Canada ADs and in addition: - Remove the lower wing access panels to fuel tank bays and inspect the upper and lower wing spar caps and visible structure for exfoliation/ intergranular corrosion. - Replace or repair affected parts in accordance with the appropriate maintenance/repair manual for the type.
Reference Publications:	FAA AD 2005-12-51 and FAA AD 50-38-01 Transport Canada AD CF-2005-19 Structural repair manual AN 01-60F-3
Remarks:	1. This AD was posted on 30 July 2013 as PAD 1958 for consultation until 03 September 2013. 2. Enquiries regarding this Airworthiness Directive should be referred to: Aircraft Certification Department, Civil Aviation Authority, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex RH6 0YR.
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