

Civil Aviation Authority

MANDATORY PERMIT DIRECTIVE

Number: 2013-004

Issue date: 09 September 2013



In accordance with 22(1) of Air Navigation Order 2009 as amended the following action required by this Mandatory Permit Directive (MPD) is mandatory for applicable aircraft registered in the United Kingdom operating on a UK CAA Permit to Fly.

Type Approval Holder's Name:		Type/Model Designation(s):
Boeing Autair Hawker Siddeley Canada Limited		Harvard all variants
Title:	Wing Spar Corrosion Inspection	
Manufacturer:	North American Canadian Car	
Applicability:	 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. Harvard (Army AT-16) aeroplanes. Harvard 2, Harvard 4 aeroplanes. All serial numbers.	
Reason:	All serial numbers. 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. 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 MPD, 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.

ENSURE COMPLIANCE WITH THIS MPD IS RECORDED IN THE AIRCRAFT LOGBOOK

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:	 This MPD was posted on 30 July 2013 as PMPD 13-02 for consultation until 03 September 2013. 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. 		
	Tel: +44 (0)1293 573726	Fax: +44 (0)1293 573976	
	E-mail: Tony.Love@caa.co.uk		