

	United Kingdom Civil Aviation Authority	MPD No: 2007-002 R2 Issue Date: 23 June 2010
MANDATORY PERMIT DIRECTIVE		
In accordance with Article 22(1) of the 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.		
MPD: 2007-002 R2 BRITISH AEROSPACE		
Subject:	Port and Starboard mainplane spar upper attachment lugs cracking.	
Applicability:	All British Aerospace Jet Provost and Strikemaster aeroplanes.	
Reason:	This MPD was originally issued partly as a precautionary measure pending the Final Report on the accident to Strikemaster VH-AKY in Australia in October 2006. Revision 1 of this MPD was then raised due to new information received by the CAA regarding the nature of the lug bore cracking and the way the aircraft can be operated even when subject to 'non-aerobatic' operations. Revision 2 is to clarify the intent of compliance instructions, and to record that the issuance of the report referred above did not alter the need for compliance with this MPD as stated on Page 2. The wing upper lug cracking has occurred before in military service, prior to aircraft achieving their limiting Fatigue Index (FI). There are some distinguishing features that may indicate whether an aircraft has been subject to the loading necessary to cause this cracking. These features are not foolproof but if present will indicate a high probability of cracking in the bore of the lug, requiring lug bore inspection before further flight. Where these features are not present, historical evidence indicates that lug bore cracking may still be present. As such, operational restrictions will still need to be maintained until the bore of the affected lug can be clearly shown to be free from cracking. The CAA also understands that high 'G' manoeuvres can still be flown in normal 'non-aerobatic' operations, so negating the purpose of the original MPD, leaving open the possibility of lug bore crack propagation. The CAA has therefore determined that a limit on 'G' would be a better means of controlling the situation. The limits have been chosen to slow down the growth of any incipient crack.	

Compliance:	(1) Before further flight, from 6 August 2007 (the effective date of Revision 1 of this MPD), insert a placard within plain view of the pilots stating: “Manoeuvres are restricted to between +3.0G to -0.25G”. Insert a similar page in the Aircraft Manual, referring also to this MPD (2) Within the next 5 flying hours, from 6 August 2007 (the effective date of Revision 1 of this MPD), carry out the following: Visually inspect the upper neck of the wing attachment lug fitting to see if a repair has been carried out resulting from crack detection following CSI 50 Appendix 3 inspection. If a repair has been carried out (ie as a result of a crack being detected by application of the CSI), the lug bush should be removed and the lug bore inspected in accordance with the eddy current inspection of CSI 50 Appendix 2, before further flight. Any cracking in the lug must be rectified before further flight, in accordance with CSI 50. If no repair has been carried out, operation may continue under the g limitations in paragraph 1. (3) Confirmation that the lug is free from cracking by inspection in accordance with the eddy current inspection of CSI 50 Appendix 2 with the bush removed (or another method agreed with the Authority), removes the operational limitation applied by paragraph 1 of this MPD.
Ensure compliance with this MPD is recorded in the aircraft logbook.	
Effective Date:	Revision 2: 24 June 2010 Revision 1: 6 August 2007 Original Issue: 10 March 2007
1. This MPD was not published as a PMPD for consultation as Revision 2 does not alter the intent of Revision 1. 2. Enquiries regarding this MPD should be referred to Aircraft Certification, Civil Aviation Authority, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, United Kingdom. Tel: +44 (0)1293 573726 Fax: +44 (0)1293 573976 Email: department.certification@caa.co.uk	