AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

British Aerospace BAe 146 Series Aeroplanes

AD/BAe 146/121 Lift Spoiler Actuator Life Limits 8/2006

Applicability: BAe 146 and AVRO 146-RJ aeroplanes.

Requirement:

1. Determine the life of each lift spoiler actuator/jack, part number P308-45-0002, P308-45-0102 or P308-45-0202, in accordance with Paragraph 1.D of Service Bulletin 27-178 Revision 0 or later approved revision.

2. Replace each lift spoiler actuator/jack part number P308-45-0002, P308-45-0102 or P308-45-0202, in accordance with Paragraph 2.A of Service Bulletin 27-178 Revision 0 or later approved revision.

Note: EASA AD 2006-0138 dated 23 May 2006 refers.

Compliance:

1. Within 30 days after the effective date of this AD.

2. Prior to the part accumulating 55,000 flight cycles or before 1 September 2007, whichever occurs later after the effective date of this AD.

This Airworthiness Directive becomes effective on 3 August 2006.

Background: The life limitation relating to the P308-45 series of lift spoiler jacks was originally qualified to 55000 flight cycles and there is no new data to support an increase to this figure.

The aircraft life is currently defined in Chapter 5 of the aircraft Maintenance Manual as 40,000, 43,000 or 50,000 cycles depending on variant. The life limit of the lift spoiler jack is not defined as this is in excess of the stated aircraft life.

The lift spoiler jack life limitation has been reviewed as part of the BAe 146 and AVRO RJ aircraft (systems) Life Extension Programme. The lift spoiler actuator is highly loaded at high flap angles with the aircraft operating near to the maximum permitted speed for that flap angle. The most likely flight phase for this failure to occur is therefore approach or take-off. The low altitude of these flight phases provides less time in which to safely control the increased roll rate. Therefore the unit life must remain at 55,000 cycles.

British Aerospace BAe 146 Series Aeroplanes

AD/BAe 146/121 (continued)

A number of aircraft are approaching the applicable life limitation. Also, where accurate records are not available for individual units, the calculated theoretical life may exceed 55,000 cycles. This has been determined as acceptable for the limited period defined within the AD compliance requirement.

James Coyne
Delegate of the Civil Aviation Safety Authority

20 June 2006