AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/F100/48 Amdt 3 and issues the following AD under subregulation 39.1 (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.

Fokker F100 (F28 Mk 100) Series Aeroplanes

AD/F100/48 Main Landing Gear Main Fitting 11/2003
Amdt 4

Applicability: Model F.28 Mk.0100 aircraft, all serial numbers, if equipped with Messier-Dowty Main Landing Gear Units part numbers as listed in Messier-Dowty Service Bulletin F100-32-102, dated 24 February 2003.

Requirement: 1. Inspect in accordance with the requirements of Netherlands CAA AD 2001-141.

2. Accomplish either of the following:

   a. Replace the main landing gear in accordance with Section B. Part 1 of the Accomplishment Instructions of Fokker Services Service Bulletin F100-32-134, dated 24 March 2003; or,

   b. Inspect and rework, if necessary, the Main Landing Gear Main Fitting Sub-Assembly “on aircraft” in accordance with Part C. “Procedure on Aircraft” (alternative option) of Section 3 Accomplishment Instructions of Messier-Dowty Service Bulletin F100-32-102.

Note 1: Accomplishment of the requirements of either Requirement 2.a. or 2.b. of this Directive constitutes terminating action for the inspection requirements of Requirement 1.

Note 2: Messier-Dowty Service Bulletins SB F100-32-101 and SB F100-32-100 Revision 1 refer.

Note 3: Netherlands CAA AD 2003-040 refers.

Compliance: 1. Inspect as specified in the Requirement document, until accomplishment of Requirement 2.

2. Before or during the next scheduled overhaul of the affected Main Landing Gear Main Fitting.

This Amendment becomes effective on 30 October 2003.
Background: A Fokker 100 aircraft experienced a main landing gear main fitting failure on landing, resulting in failure of the lower part of the main fitting, including the main landing gear sliding member, wheels and brakes.

Amendment 1 corrected a compliance time typographical error.

Amendment 2 required a conditional initial inspection and two repeat inspections, as a consequence of seven more main landing gears with an Eddy-Current indication in the affected area at the original inspection.

Amendment 3 required the accomplishment of an etch penetrant inspection to terminate the necessity for further repetitive eddy-current inspections, and rework or replacement of any fitting when cracks are found. Recent tests and analysis have shown that a limited number of repeat inspections, combined with a final etch penetrant inspection during overhaul (or “on aircraft”) is sufficient to restore the safe life condition of the Main Landing Gear Main Fitting.

Amendment 4 is issued to correct the Requirement 2.a. document number.

Amendment 3 of this Airworthiness Directive became effective on 2 October 2003.

Amendment 2 of this Airworthiness Directive became effective on 18 April 2002.

Amendment 1 of this Airworthiness Directive became effective on 27 December 2001.

The original issue of this Airworthiness Directive became effective on 29 November 2001.

David Villiers
Delegate of the Civil Aviation Safety Authority

16 September 2003

The above AD is notified in the Commonwealth of Australia Gazette on 8 October 2003.