



Nr. **NL-2005-008**

Distribution : **L**

Date : June 30, 2005

Type Certificate Holder :

FOKKER SERVICES B.V.

(formerly Fokker Aircraft B.V.)

F28 Mark 0070 and Mark 0100

EASA Type Certificate Nr.

A.037

Caution

This Airworthiness Directive is issued by the Minister of Transport, Public Works and Water Management in accordance with the Aviation Act 2001 (Wet Luchtvaart), Article 3.22. Airworthiness Directives affect aviation safety. These are regulations which require immediate attention. No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements thereof, unless otherwise agreed with the Authority of the State of Registry (EC2042/2003, M.A.201 & M.A.303).

Correction dated July 6, 2005

THIS AIRWORTHINESS DIRECTIVE IS PUBLISHED BY THE CAA-NL :

- acting for and on behalf of the European Aviation Safety Agency (EASA), as Airworthiness Authority (ICAO Annex 8) of the State of Design for the affected product(s) with reference to 21A.3B (a) and (b); and
- has been approved under EASA Reference Number 2005-6044 dated June 28, 2005.

Supersedure : Not Applicable

Subject : LANDING GEAR - INTEGRATED AXLE NUT & SPACER - INTRODUCTION

Applicability : Fokker Aircraft B.V. F28 Mark 0070 and Mark 0100 aircraft, all serial numbers, if equipped with **Messier-Dowty** (formerly known as **Dowty Rotol** and **Dowty Aerospace Gloucester**) Main Landing Gear (MLG) units.

Reason :

Over the years, several Fokker 100 (F28 Mark 0100) operators reported that a MLG wheel fell off during regular operation of the aircraft. These incidents occurred due to a missing spacer, which had inadvertently not been installed during a previous wheel change. Omitting the installation of the wheel spacer allows the wheel to move sideways along the axle, which subsequently leads to bearing failure, followed by loss of the wheel. Investigation by Fokker and Messier-Dowty has shown that two separate items, the spacer and the axle nut, can be replaced by a single axle-nut/spacer assembly, to prevent the possibility of omitting the spacer. In 1995, Messier-Dowty issued Service Bulletin (SB) F100-32-72 to make sure that the operator does not assemble the axle nut without the spacer. Fokker subsequently issued SB F100-32-096 to notify Fokker 100 operators of the (optional) Messier-Dowty SB's existence. At a later stage, Fokker revised the SB to the status of "recommended". In spite of all this attention to the spacer problem, wheel losses are still being reported due to missing wheel nut spacers. This condition, if not corrected, may lead to further wheel loss incidents, each of which could conceivably result in loss of control of the aircraft during the take-off run, landing rollout or taxiing operations. Since a potentially unsafe condition has been identified that may exist or develop on aircraft of the same type design, this Airworthiness Directive requires the replacement of the axle-nut and spacer with an integrated axle-nut/spacer assembly. In addition, the Aircraft Maintenance Manual (AMM) and Illustrated Parts Catalogue (IPC) must be amended to prevent reversal to a separate axle-nut and spacer installation during a subsequent wheel change.

Effective date : July 15, 2005

Mandatory Actions and Compliance Times : Required as indicated, unless accomplished previously.

- (a) Within the next 12 calendar months after the effective date of this directive, replace each MLG wheel axle-nut and spacer with an integrated axle-nut/spacer assembly in accordance with the Accomplishment Instructions of Messier-Dowty SB F100-32-72 dated January 25, 1995 or a later CAA (United Kingdom) approved revision;

Note : Fokker 70/100 Service Letter (SL) 102 Revision 1 dated February 12, 1998; and Fokker Services SB F100-32-096 Revision 2 dated April 29, 2005 also pertain to this subject.

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(b) Prior to or at the same time as the replacement as required by paragraph (a) of this directive, amend the AMM and IPC in accordance with the instructions of Fokker Manual Change Notification – Maintenance (MCNM) F100-033 dated April 30, 1999.

Reference Publication(s) :

Fokker 70/100 AMM

Fokker 70/100 IPC

Fokker MCNM F100-033

Messier-Dowty SB F100-32-72

Fokker SB F100-32-096 Rev.2

Fokker 70/100 Service Letter 102 Rev.2

Remarks :

- Operators of the affected aircraft may obtain copies of the referenced service information upon request directly from **Fokker Services B.V., Technical Services Dept., P.O.Box 231, 2150 AE Nieuw-Vennep, The Netherlands; telephone (31) 252-627-350; facsimile (31) 252-627-211; e-mail technicalservices.fokkerservices@stork.com or can be downloaded from www.myfokkerfleet.com.**
- Compliance with this directive must be recorded in the proper Aircraft Log Book(s).
- Where applicable, the requirements of this directive must be integrated into the aircraft's Maintenance Schedule.

Address inquiries concerning this AD to : Civil Aviation Authority, Aircraft Division, Section C&D, P.O. Box 575, 2130 AN Hoofddorp, The Netherlands; telephone +31-23-566-3155; facsimile +31-23-566-3006; e-mail Info.Register@ivw.nl.