EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2009-0269R1 **Date: 11 March 2010** Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Type Approval Holder's Name :	**Type/Model designation(s) :**
Fokker Services B.V.	F28 Mark 0100 aeroplanes

TCDS Number :	EASA.A.037
Foreign AD :	Not applicable
Revision :	This AD revises and replaces EASA AD 2009-0269 dated 17 December 2009.

ATA 32	**Landing Gear – Main Landing Gear (MLG) – Modification / Replacement**

Manufacturer(s):	Fokker Aircraft B.V.
Applicability:	F28 Mark 0100 aeroplanes, all serial numbers, if Messier-Dowty (formerly Dowty-Rotol, Dowty Aerospace Gloucester) MLG units with Part Number (P/N) 201072011, P/N 201072012, P/N 201072013, P/N 201072014, P/N 201072015 or P/N 201072016 are installed.
Reason:	Since introduction of the F28 Mark 0100 aeroplane into airline service, there have been a number of occurrences with Messier-Dowty MLG units where the main fitting failed, due to fatigue cracking in the area of the filler and bleeder holes, and occurrences where the sliding member failed, due to fatigue cracking at the area of chrome run-out/lower radius of the sliding tube portion of the sliding member. Investigation has revealed that the most probable cause of both the main fitting and sliding member cracks is high compressive stress during braking at higher deceleration levels outside the regular fatigue load spectrum. Starting at deceleration stress levels somewhat below limit load, the high compressive stress locally exceeds the elasticity limit of the material, leaving a residual tensile stress at release of the heavy braking load. Subsequently, this local residual tensile stress results in a negative effect on the fatigue life of the component. This condition, if not detected and corrected, could lead to failure of the MLG, possibly resulting in loss of control of the aeroplane during the landing roll-out. To address this unsafe condition, the Civil Aviation Authority of the

	Netherlands (CAA-NL) issued AD NL-2005-012 (EASA approval 2005-6363) to require repetitive inspections of the sliding member (Fokker Services SBF100-32-144) and AD NL-2006-003 (EASA approval 2006-0041) to require repetitive inspections of the main fitting (Fokker Services SBF100-32-146). Messier-Dowty has now developed a modification, resulting in a strengthened sliding member and a strengthened main fitting, which is the terminating action for these repetitive inspections. For the reasons described above, this AD requires the modification and re-identification of the affected MLG units, or replacement of the affected MLG units with modified units. This AD has been revised to correct paragraph (3) and to amend paragraph (5) to state that modification of an aeroplane as required by paragraph (1) of this AD also constitutes terminating action for the actions required by CAA-NL AD (BLA) 2002-115/2 dated October 8, 2004.
Effective Date:	Revision 1 : 11 March 2010 Original issue : 31 December 2009
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously. (1) At the next MLG overhaul or within 48 months, whichever occurs first after the effective date of the original issue of this AD, modify the aeroplane by accomplishing the actions of either paragraph (1.1) or (1.2) of this AD: (1.1) Replace each affected MLG unit with a MLG unit having P/N 201072017, P/N 201072019 or P/N 201072021 (LH), and P/N 201072018, P/N 201072020 or P/N 201072022 (RH), in accordance with the Accomplishment Instructions of Fokker Services SBF100-32-155. (1.2) Modify and re-identify each affected MLG unit in accordance with the Accomplishment Instructions of Messier-Dowty SB F100-32-112. (2) After modification of an aeroplane as required by paragraph (1) of this AD, do not install a P/N 201072011, P/N 201072012, P/N 201072013, P/N 201072014, P/N 201072015 or P/N 201072016 MLG unit on that aeroplane. (3) Prior to returning the aeroplane to service after modification as required by paragraph (1) of this AD, remove the Airplane Flight Manual amendment and placard that were installed as required by CAA-NL BLA 2002-115 (Fokker Services SBF100-32-137). (4) Before or concurrent with the modification of an aeroplane as required by paragraph (1) of this AD, accomplish the following actions: (4.1) Introduce the torque link spacer with changed outer diameter in accordance with the Accomplishment Instructions of Fokker Services SBF100-32-097. (4.2) Remove, if installed, the water spray deflectors in accordance with the Accomplishment Instructions of Fokker Services SBF100-32-132. (4.3) Replace all P/N AE70690E, P/N AE70691E, P/N AE99111E and P/N AE99119E brake quick-disconnect couplings with improved units in accordance with Part 2 of the Accomplishment Instructions of Fokker Services SBF100-32-156. EASA AD 2009-0176 also requires this modification, the compliance time of which expires on 20 August 2011 for aeroplanes registered in Europe. (5) Modification of an aeroplane as required by paragraph (1) of this AD constitutes terminating action for the requirements of the following ADs:

	- CAA-NL AD (BLA) 93-108/3 dated April 29, 1994. - CAA-NL AD (BLA) 1996-133/2 dated January 31, 1997. - CAA-NL AD (BLA) 2002-115/2 dated October 8, 2004. - CAA-NL AD NL-2005-012 (EASA 2005-6363) dated October 17, 2005. - CAA-NL AD NL-2006-003 (EASA 2006-0041) dated February 7, 2006. (6) Modification of an aeroplane as required by paragraph (1) of this AD constitutes compliance with the following ADs: - CAA-NL AD (BLA) 90-022/2 dated June 29, 1990. - CAA-NL AD (BLA) 2003-040 dated March 31, 2003 and its Correction issued May 14, 2003. (7) Compliance with the following ADs is required prior to or concurrent with modification of an aeroplane as required by paragraph (1) of this AD: - CAA-NL AD (BLA) 1999-138 dated October 29, 1999, the compliance time of which expired on 20 November 2001 for aeroplanes registered in Europe. - CAA-NL AD NL-2005-008 (EASA 2005-6044) dated June 30, 2005, the compliance time of which expired on 15 July 2006 for aeroplanes registered in Europe. - CAA-NL AD NL-2007-001 (EASA 2007-0054) dated February 26, 2007, the compliance time of which expired on 01 September 2009 for aeroplanes registered in Europe.
Ref. Publications:	Fokker Services SBF100-32-155 dated 23 July 2009. Messier-Dowty Service Bulletin SB F100-32-112 dated 17 July 2009. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks:	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The original issue of this AD was posted on 23 October 2009 as PAD 09-128 for consultation until 20 November. The Comment Response Document can be found at http://ad.easa.europa.eu/. 3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail ADs@easa.europa.eu. 4. For any question concerning the technical aspects of the requirements in this AD, please contact: 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 The referenced publication can be downloaded from www.myfokkerfleet.com