EASA AD No: 2009-0268

EASA

AIRWORTHINESS DIRECTIVE

AD No.: 2009-0268

Date: 17 December 2009

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].

2 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 0070 and Mark 0100 aeroplanes	
TCDS Number: EASA.A.037			
Foreign AD: Not applicable			
Supersedure :	None		
ATA 32	Landing Gear – Main Landing Gear (MLG) Upper Side Brace Assembly – Modification / Replacement		
Manufacturer(s):	Fokker Aircraft B.V.		
Applicability:	F28 Mark 0070 and Mark 0100 aeroplanes, all serial numbers, if equipped with Goodrich (formerly Menasco, Colt Industries) MLG units, fitted with Part Number (P/N) 41350-1 MLG upper side braces.		
Reason:	The flight crew of a F28 Mark 0070 (Fokker 70) aeroplane received a MLG unsafe message after landing gear down selection during approach. After cycling the landing gear, only a LH MLG unsafe indication remained. A go-around was initiated and alternate landing gear down selection was performed twice, but the LH MLG did not lock down. During final approach, without further flight crew action, all 3 green lights illuminated and an uneventful landing was made.		
	Inspection just after landing revealed a lot of ice near the LH MLG downlock actuator. Further investigation revealed that the piston rod of the downlock actuator had failed at the threaded end close to the eye end, which is attached to the lower lock link, and that the piston rod was broken in an overload by bending in the neck close to the threaded end.		
	Based on the quantity and location of the ice, it is considered highly likely the the ice had formed between the upper end of the downlock actuator and the upper side brace, and was accumulated during taxi on slush- and snow-contaminated taxiways and runway at the departure airport.		
	Ice in this location prevents the actuator from turning freely relative to the upper side brace during landing gear down selection, likely resulting in failure of the piston rod. This condition, if not corrected, could lead to further cases of		

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	MLG extension problems, possibly resulting in loss of control of the aero during landing roll-out.		
	To address this unsafe condition and prevent the accumulation of water, slush and/or snow, Goodrich, the MLG manufacturer, has introduced a new upper side brace, Part Number (P/N) 41350-3, which has two additional drain holes. Goodrich Service Bulletin (SB) 41350-32-25 describes the modification of the P/N 41350-1 MLG upper side brace, introducing the two additional drain holes and consequent re-identification of the part to P/N 41350-3.		
	For the reasons described above, this AD requires modification of both (LH and RH) P/N 41350-1 MLG upper side braces, or replacement of the P/N 41350-1 upper side braces with modified P/N 41350-3 upper side braces.		
Effective Date:	31 December 2009		
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously.		
	(1) Within 8 000 flight cycles after the effective date of this AD, modify or replace the side stay upper braces of the LH and RH MLG in accordance with the Accomplishment Instructions of Fokker Services SBF100-32-157 and Goodrich SB 41350-32-25.		
	(2) After modification of an aeroplane as required by paragraph (1) of this AD, do not install a Goodrich (formerly Menasco, Colt Industries) P/N 41350-1 side stay upper brace assembly on that aeroplane.		
	(3) After modification of an aeroplane as required by paragraph (1) of this AD, do not install a Goodrich (formerly Menasco, Colt Industries) MLG unit on that aeroplane, unless it has been verified that a P/N 41350-3 side stay upper brace assembly is fitted on that MLG unit.		
	Note : In an operational environment where slush and snow contaminated runways and taxiways in ground-icing conditions as defined in the AFM can be completely excluded over the full calendar year and for the operator's complete operating network, the operator may consider to request the local authority to obtain an exemption for the actions required by this AD.		
Ref. Publications:	Fokker Services SBF100-32-157 original issue dated 25 May 2009, or Revision 1 dated 07 October 2009.		
	The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.		
	Goodrich SB 41350-32-25 dated 30 January 2009.		
Remarks :	 If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 		
	 This AD was posted on 14 October 2009 as PAD 09-123 for consultation until 11 November. The Comment Response Document can be found at http://ad.easa.europa.eu/. 		
	 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 content 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		

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