EASA

AIRWORTHINESS DIRECTIVE

AD No.: 2015-0006



Date : 15 January 2015

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 EU 748/2012, Part 21.A.3B. In accordance with EU 1321/2014 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 [EU 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Design Approval Holder's Name: DASSAULT AVIATION

Type/Model designation(s):

Mystère-Falcon 50, Mystère-Falcon 900, Falcon 900EX, Falcon 2000 and Falcon 2000EX aeroplanes

TCDS Numbers : EA

EASA.A.062 and EASA.A.008

Foreign AD : Not applicable

Supersedure : None

ATA 39	Lightning – Anti-Collision Light Bonding – Modification
Manufacturer(s):	Dassault Aviation (formerly Avions Marcel Dassault, Bréguet Aviation)
Applicability:	Mystère-Falcon 50, Mystère-Falcon 900, Falcon 900EX, Falcon 2000 and Falco 2000EX aeroplanes, all serial numbers, as defined in Appendix 1 of this AD.
Reason:	An occurrence was reported where a Falcon 2000 aeroplane experienced an in flight lightning strike, which caused severe damage and induced the loss of som aeroplane functions. The investigation results revealed that the entering point of the lightning was at the WHELEN anti-collision light located on the top of the vertical fin tip.
	When the lightning strike hit the anti-collision light, an electric arc occurred between the aeroplane structure and the anti-collision light and created a conductive path by which the lightning current entered inside the aeroplane. Further analysis has determined that the electrical bonding between the WHELEN anti-collision light, Part Number (P/N) 01-0790044-09, and the fin tip fairing or the No. 2 engine air intake cover is insufficient to withstand a lightning strike.
	In case of severe lightning, this condition, if not corrected, could lead to an unsa condition (loss of electrical power and/or of essential functions) possibly resulting in reduced control of the aeroplane.
	To address this potential unsafe condition, Dassault Aviation developed a modification (mod) to improve the WHELEN anti-collision light bonding when the anti-collision light is located on top of the vertical fin tip or on No. 2 engine air intake cover, and issued several Service Bulletins (SB) to modify all affected aeroplanes in service.
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	collision light bonding.				
Effective Date:	29 January 2015				
Required Action(s)	Required as indicated, unless accomplished previously:				
and Compliance Time(s):	Within 24 months after the effective date of the AD, modify the anti-collision light bonding in accordance with the instructions of the applicable Dassault Aviation SB, depending on aeroplane model and configuration, as specified in Table 1 of this AD.				
	Table 1 – Applicable Dassault Aviation SB Aeroplane Affected Configuration(s) SB				
	Aeroplane Mystère-Falcon 50	see Appendix 1	F50-481		
	Mystère-Falcon 900 Falcon 900EX	see Appendix 1 – Group 1	F900-372		
		see Appendix 1 – Group 2	F900-378		
		see Appendix 1 – Group 2	F900EX-285		
		see Appendix 1 – Group 2	F900EX-305		
	Falcon 2000	see Appendix 1	F2000-337		
	Falcon 2000EX	see Appendix 1	F2000EX-108		
Ref. Publications:	Dassault Aviation SB F50-481 original issue, dated 22 August 2007. Dassault Aviation SB F900-372 original issue, dated 22 August 2007. Dassault Aviation SB F900-378 original issue, dated 19 September 2007.				
	Dassault Aviation SB F900EX-285 original issue, dated 18 July 2007.				
	Dassault Aviation SB F900EX-305 original issue, dated 19 September 2007.				
	Dassault Aviation SB F2000-337 original issue, dated 25 July 2007.				
	Dassault Aviation SB F2000EX-108 original issue, dated 25 July 2007.				
	The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.				
Remarks :	 If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 				
	2. This AD was posted on 18 September 2014 as PAD 14-166 for consultation until 16 December 2014. The Comment Response Document can be found at http://ad.easa.europa.eu/ .				
	 Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u>. 				
	 For any question concerning the technical content of the requirements in this AD, please contact your Dassault Falcon Technical Assistance: 				
	 For Europe, Middle East and Africa based operators: Hot Line: (33) 1 47 11 37 37 				
	 For USA, Canada and Mexico based operators: Help Desk: (1) 800-2FALCON (2325266) 				
	 All other areas: Help Desk: (1) 2 	201 541 4747			

Appendix 1 – Applicability Definition

Aeroplanes	Configuration – AD applicable on all serial numbers on which Mod (see Notes 1 to 3)	Except aeroplanes modified through (see Note 4)	
		Mod embodied in production	SB in service
Mystère-Falcon 50	M1853 has been embodied in production or in service through SB F50-241	M2083 or M3094	SB F50-257
Mystère-Falcon 900	Group 1: M1682 has been embodied in production or in service through SB F900-182	M5381	
	Group 2: M1682 has been embodied in production or in service through SB F900-182 <u>and</u> Mod M1947 has been embodied in production or in service through SB F900-176	M5386	
Falcon 900EX	Group 1: M1682 has been embodied in production or in service through SB F900EX-025	M5381	
	Group 2: M1682 has been embodied in production or in service through SB F900-025 <u>and</u> Mod M1947 has been embodied in production or in service through SB F900EX-19	M5103 or M5386	
Falcon 2000	M331 has been embodied in production or in service through SB F2000-44	M810 or M1061 or M2778	SB F2000-111
Falcon 2000EX	M1802 has been embodied in production	M810 or M1061 or M2778	

Note 1: All Mod and all SB specified in the Table above are from Dassault Aviation.

- Note 2: Mod M2083, SB F50-257, Mod M1947, SB F900-176, SB F900EX-19, Mod M5103, as applicable, introduce fin tip SATCOM fairing, in production or in service.
- Note 3: Group 1 : Aeroplanes with Whelen anti-collision light located on top of vertical fin tip, Group 2 : Aeroplanes with Whelen anti-collision light located on top of air intake engine No. 2.
- Note 4: The excluded aeroplanes as specified in the Table above embody either one Mod in production or one SB in service, as applicable.