


<b>EASA</b>	<b>NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE</b>
	<p><b>PAD No.: 14-166</b></p> <p><b>Date : 18 November 2014</b></p> <p>Note: This Proposed Airworthiness Directive (PAD) 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.</p>
<p>In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below. All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation closing date indicated.</p>	
<p><b>Design Approval Holder's Name:</b> DASSAULT AVIATION</p>	<p><b>Type/Model designation(s):</b> Mystère-Falcon 50, Mystère-Falcon 900, Falcon 900EX, Falcon 2000 and Falcon 2000EX aeroplanes</p>
TCDS Number : EASA.A.062 and EASA.A.008	
Foreign AD : Not applicable	
Supersedure : None	
<b>ATA 39</b>	<b>Lightning – Anti-Collision Light Bonding – Modification</b>
Manufacturer(s):	Dassault Aviation (formerly Avions Marcel Dassault, Bréguet Aviation)
Applicability:	Mystère-Falcon 50, Mystère-Falcon 900, Falcon 900EX, Falcon 2000 and Falcon 2000EX aeroplanes, all serial numbers, as defined in Appendix 1, Table 1 of this AD, except aeroplanes as defined in Appendix 1, Table 2 of this AD.
Reason:	<p>An occurrence was reported where a Falcon 2000 aeroplane experienced an in-flight lightning strike, which caused severe damage and induced the loss of some 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.</p> <p>When the lightning strike hit the anti-collision light, an electric arc occurred between the aeroplane structure and the anti-collision light, 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.</p> <p>In case of severe lightning the damage, if this condition is not corrected, it could lead to an unsafe condition (loss of electrical power and/or of essential functions) possibly resulting in reduced control of the aeroplane.</p> <p>To address this potential unsafe condition, Dassault Aviation developed a modification (mod) of the WHELEN anti-collision light bonding when located on the top of vertical fin tip or on No.2 engine air intake cover, and issued several Service Bulletins (SB) to cover all affected aeroplanes, for accomplishment of this</p>

	<p>mod in-service to improve the bonding of the WHELEN anti-collision light when located on the top of the fin tip or on engine #2 air intake cover.</p> <p>For the reasons described above, this AD requires modification of the anti-collision light bonding.</p>
Effective Date:	[TBD : 14 days after final AD issue date]
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>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 Appendix 1 – Table 3 of this AD.</p>
Ref. Publications:	<p>Dassault Aviation SB F50-481 original issue, dated 22 August 2007.</p> <p>Dassault Aviation SB F900-372 original issue, dated 22 August 2007.</p> <p>Dassault Aviation SB F900-378 original issue, dated 19 September 2007.</p> <p>Dassault Aviation SB F900EX-285 original issue, dated 18 July 2007.</p> <p>Dassault Aviation SB F900EX-305 original issue, dated 19 September 2007.</p> <p>Dassault Aviation SB F2000-337 original issue, dated 25 July 2007.</p> <p>Dassault Aviation SB F2000EX-108 original issue, dated 25 July 2007.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> <li>1. This Proposed AD will be closed for consultation on 16 December 2014.</li> <li>2. Enquiries regarding this PAD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>3. For any question concerning the technical content of the requirements in this PAD, please contact your Dassault Falcon Technical Assistance: <ul style="list-style-type: none"> <li>• For Europe, Middle East and Africa based operators: Hot Line: (33) 1 47 11 37 37</li> <li>• For USA, Canada and Mexico based operators: Help Desk: (1) 800-2FALCON (2325266)</li> <li>• All other areas: Help Desk: (1) 201 541 4747</li> </ul> </li> </ol>

## Appendix 1

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

Note 2: Mod M2083, SB F50-257, Mod M1947, SB F900-176, Mod M5103, as applicable, introduce fin tip SATCOM fairing, in production or in service.

Table 1 – Applicability Definition

<b>Aeroplane</b>	<b>Configuration – AD applicable on all serial numbers on which Mod</b>
Mystère-Falcon 50	M1853 has been embodied in production or in service through SB F50-241
Mystère-Falcon 900	Group 1: M1682 has been embodied in production or in service through SB F900-182
	Group 2: M1682 has been embodied in production or in service through SB F900-182 <b>and</b> Mod M1947 has been embodied in production or in service through SB F900-176
Falcon 900EX	Group 1: M1682 has been embodied in production or in service through SB F900EX-025
	Group 2: M1682 has been embodied in production or in service through SB F900-025 and Mod M1947 has been embodied in production or in service through SB F900EX-19
Falcon 2000	M331 has been embodied in production or in service through SB F2000-44
Falcon 2000EX	M1802 has been embodied in production

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 #2.

Table 2 – Aeroplanes Excluded

<b>Aeroplane</b>	<b>Mod embodied in production</b>	<b>Modified in service</b>
Mystère-Falcon 50	M2083 or M3094	SB F50-257
Mystère-Falcon 900	Group 1 : M5381	
	Group 2 : M5386	
Falcon 900EX	Group 1 : M5381	
	Group 2 : M5386	
Falcon 2000	M810 or M1061 or M2778	SB F2000-111
Falcon 2000EX	M810 or M1061 or M2778	

Note 4: The excluded aeroplanes as specified in Table 2 embody either one Mod in production or one SB in service, as applicable.

Table 3 – Applicable Dassault Aviation SB

<b>Aeroplane</b>	<b>Affected Configuration(s)</b>	<b>SB</b>
Mystère-Falcon 50	see Table 1	F50-481
Mystère-Falcon 900	see Table 1 – Group 1	F900-372
	see Table 1 – Group 2	F900-378
Falcon 900EX	see Table 1 – Group 1	F900EX-285
	see Table 1 – Group 2	F900EX-305
Falcon 2000	see Table 1	F2000-337
Falcon 2000EX	see Table 1	F2000EX-108