| EASA | AIRWORTHINESS DIRECTIVE |
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| | **AD No.: 2009-0208R3**<br><br>**Date: 24 June 2013**<br><br>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 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].

| **Design Approval Holder's Name :** | **Type/Model designation(s) :** |
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| DASSAULT AVIATION | FALCON 7X aeroplanes |

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| TCDS Number : | EASA.A.155 |
| Foreign AD : | Not applicable |
| Revision: | This AD revises EASA AD 2009-0208R2 dated 22 May 2012. |

| **ATA 34** | **Navigation – Radio-altimeter Lock-up – Operational Procedure** |
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| Manufacturer(s): | Dassault Aviation |
| Applicability: | Falcon 7X aeroplanes, all serial numbers. |
| Reason: | Several occurrences of untimely radio-altimeter lock-up have been reported, where the failed radio-altimeter (RA) indicated a negative distance to the ground despite the aircraft was flying at medium or high altitude.<br><br>A locked RA #1 leads to untimely inhibition of warnings that could be displayed along with certain abnormal conditions while the avionic system switches into landing mode during altitude cruise.<br><br>This condition, if not corrected, may cause the flight crew to be unaware of possible system failures that could require immediate actions, which could ultimately lead to loss of control of the aeroplane.<br><br>To address this unsafe condition, Dassault Aviation developed an Airplane Flight Manual (AFM) operational procedure that, in case of RA #1 lock-up, allows the crew to restore the system warning performance by depowering the RA #1. EASA issued AD 2009-0208 to require application of that new abnormal procedure when RA #1 lock-up occurs. That EASA AD also prohibited dispatch of the aeroplane with any radio-altimeter inoperative.<br><br>Since issuance of EASA AD 2009-0208, Dassault Aviation developed Easy avionics load 10 which is embodied through Dassault Aviation production modification M0566 or in-service through Service Bulletin (SB) Falcon 7X n°100. This modification provides new features to display a "RA miscompare" flag on both Primary Display Units (PDU) and allows a commanded system |

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| | reversion to the correct RA output.<br><br>Prompted by this modification, EASA issued AD 2009-0208R1, to allow not deactivating RA #1 in case lock-up conditions occurred in flight, for aeroplanes on which M0566 or SB Falcon 7X n°100 was embodied.<br><br>Since issuance of EASA AD 2009-0208R1, further analysis shows that, for aeroplanes with M0566 applied in production, or SB Falcon 7X N°100 applied in service, the RA#2 lock-up occurrence should be addressed through a commanded system reversion, now only contained in a simplified Falcon 7X AFM procedure 3-140-70A.<br><br>Prompted by this simplified AFM procedure, EASA issued AD 2009-0208R2 to reduce the requirement to amend the AFM by deleting the reference to procedure 3-140-65B. In addition, Dassault Aviation confirmed that all Falcon 7X have been or are being modified with Mod M0566 applied in production, or SB Falcon 7X n°100 applied in service. For this reason, paragraph (1) of this AD was deleted.<br><br>Since issuance of EASA AD 2009-0208R2, Dassault Aviation developed an improved RA P/N 066-01153-5001, which is more robust against locking hazards. Accumulated in-service experience with this improved RA justifies the possibility to restore the MMEL to its original version, for aeroplanes equipped with 2 improved RAs.<br><br>For the reason described above, this AD is revised to allow, for aeroplanes equipped with the improved RAs, dispatch with an inoperative RA. Paragraph (2) of this AD remains applicable to all aeroplanes, irrespective of the installed RA P/N. |
| Effective Date: | Revision 3: 26 June 2013<br><br>Revision 2: 05 June 2012<br><br>Revision 1: 16 June 2010<br><br>Original issue: 27 October 2009 |
| Required Action(s) and Compliance Time(s): | Required as indicated, unless accomplished previously:<br><br>(1) Deleted at Revision 2 of this AD – see Reason section.<br><br>(2) For aeroplanes on which M0566 or SB Falcon 7X n°100 has been embodied, from 16 June 2010 [the effective date of Revision 1 of this AD], amend the AFM to incorporate Falcon 7X AFM procedure 3-140-70A, or as an alternative, amend the AFM to incorporate Dassault Aviation CP054 (which includes Falcon 7X AFM procedure 3-140-70A) and operate the aeroplane accordingly.<br><br>The use of Dassault AFM DGT 105608 revision 15, which includes Dassault Aviation Falcon 7X AFM procedure 3-140-70A, is acceptable to comply with the requirements of paragraph (2) of this AD.<br><br>(3) From 27 October 2009 [the effective date of the original issue of this AD], for aeroplanes equipped with any RA P/N 066-01153-4001, dispatch of the aeroplane with any radio-altimeter inoperative is prohibited.<br><br>(4) From 27 October 2009 [the effective date of the original issue of this AD], for aeroplanes equipped with any RA P/N 066-01153-4001, delete item 34-10 “Radio-Altimeters (RA)” from the operator’s Minimum Equipment List (MEL).<br><br>Inserting a copy of this AD into that MEL for each affected aeroplane is acceptable to comply with the requirements of paragraphs (3) and (4) of this AD. |
| Ref. Publications: | Dassault Aviation Falcon 7X AFM revision 15 DGT105608. This revision includes Dassault Aviation Falcon 7X AFM procedure 3-140-70A. |

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| | Dassault Aviation Falcon 7X MMEL DGT 106042 revision 6.<br>Dassault Aviation SB Falcon 7X n°100 original issue.<br>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.<br>2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.<br>3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail ADs@easa.europa.eu.<br>4. For any question concerning the technical contents of the requirements in this AD, please contact your Dassault Falcon Technical Assistance:<br>• For Europe, Middle East and Africa based operators:<br>Hot Line: (33) 1 47 11 37 37 / Fax: (33) 1 47 11 89 49<br>• For USA, Canada and Mexico based operators:<br>Help Desk: (1) 800-2FALCON (2325266) / Fax: (1) 201 541 4740<br>• All other areas:<br>Help Desk: (1) 201 541 4747 / Fax: (1) 201 541 4740. |