
EASA

AIRWORTHINESS DIRECTIVE

AD No.: 2015-0102R1

Date: 20 July 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:		Type/Model designation(s):			
DASSAULT AVIATION		Falcon 2000EX aeroplanes			
TCDS Numbers :	EASA.A.008				
Foreign AD :	Not applicable				
Revision:	This AD revises EASA E	mergency AD 2015-0102-E dated 08 June 2015.			
ATA 30	Ice and Rain Protec Aircraft Flight Manu	tion – Engine Air Inlet Anti-Ice System – ual – Amendment			
Manufacturer(s):	Dassault Aviation (form	nerly Avions Marcel Dassault, Bréguet Aviation)			
Applicability:	Falcon 2000EX aeroplanes, all manufacturer serial numbers.				
Reason:	A quality review of recently delivered aeroplanes identified a manufacturing deficiency of some engine air inlet anti ice piccolo tubes.				
9	This condition, if not detected and corrected, could lead to reduced performance of the engine anti-ice protection system, with consequent ic accretion and ingestion, possibly resulting in dual engine power loss and reduced control of an aeroplane.				
	05,"Operations in Icing (N1) during combined of However, the AFM doe engine anti-ice system that the operation of an for combined wing and anti ice performance do	rcraft Flight Manual (AFM) contains a procedure 4-20 Conditions", addressing minimum fan speed rotation operation of wing anti-ice and engine anti-ice systems is not specify minimum N1 values for stand-alone operation. The subsequent investigation demonstrate engine at or above the minimum N1 value applicable engine anti-ice operations, provides efficient engine arring stand-alone engine anti-ice operation for engine let affected by the manufacturing deficiency.			
	to require amendment	oed above, EASA issued Emergency AD 2015-0102-lof the applicable AFM, which can be removed (or is notes having both engine air inlets marked "NRK" on the			

		associated data plate.				
		Since that AD was issued, it was identified that this requirement only applies to aeroplanes equipped with engine air inlet Part Number (P/N) 06ND71600-1 and that some clarification was needed related to engine air inlets that have been refurbished by NORDAM.				
		This AD is still considered to be an interim measure and further AD action may follow.				
	Effective Date:	Revision 1: 27 July 2015				
		Original issue: 10 June 2015				
1	Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: For aeroplanes equipped with engine air inlet P/N 06ND71600-1:				
		(1) Within 10 flight cycles after 10 June 2015 [the effective date of this AD at original issue], amend the applicable AFM as specified in Appendix 1 of this AD, inform the flight crew and, thereafter, operate the aeroplane accordingly.				
		Amending the AFM can be accomplished by inserting a copy of Appendix 1 of this AD into the applicable AFM.				
		(2) An aeroplane which incorporates, on both engines, an air inlet P/N 06ND71600-1 with a marking "NTR-RKFAL97" or "NTR-RKFAL98" (see Note below) on the data plate is not (or no longer, as applicable) affected by the requirement of paragraph (1) of this AD.				
		Note: Engine air inlets P/N 06ND71600-1 which were already refurbished (NORDAM Rework Kit applied) comply with the design standard and are marked as "NTR-RKFAL97" or "NTR-RKFAL98" on the air inlet data plate. Examples of data plates are shown in Appendix 2 of this AD.				
Р	Ref. ublications:	None				
	Remarks :	 If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 				
		 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. 				
5		3. Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu .				
		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) 201 541 4747 				

Appendix 1

Amendment to AFM sections 4-200-05, 4-200-05A OPERATION IN ICING CONDITIONS

This amendment comes in additions to existing AFM procedures

Engine Anti Ice System Operation

During in flight operation of an engine anti-ice system (ENG ANTI-ICE) maintain the N1 of both engines equal to or more then the values defined in Table 1 of this Appendix, as applicable to atmospheric condition.

 $Table \ 1 \\$ Minimum N_1 values required during in flight operation of an engine anti-ice system

Z	-30 °C	-15 °C	0 °C	+10 °C
31,000 ft	72.6	65.6	50.8	50.8
22,000 ft	70.4	61.7	50.8	50.1
3,000 ft	55.3	52.9	47.4	46.8
0 ft	52.9	52.9	47.4	46.8

TAT – Total Air Temperature

Z - Altitude

Note 1: Maintaining the N1 above the minimum anti-ice N1 on both engines may lead to exceedance of approach speed. Early approach or landing configuration of an aeroplane and/or application of airbrakes may be used to control the excessive airspeed. If, the airspeed remains higher than required, it is authorized to reduce the thrust by reducing the N1 below to values indicated in the Table 1 of this Appendix for **the last 3 minutes before touchdown**. In this case disengage Autothrottle, if previously engaged. This 3 minutes operation below the minimum N1 does not apply to any other in-flight icing situation.

Note 2: During ground operations before take-off, the engine anti ice system remains efficient when engine power levers are at idle.

Appendix 2 Example of air inlet data plate marked with NORDAM Rework Kit (NRK)



MODEL: FALCON 2000EX
CUST PN.
NORDAM PN. 06ND71600-1
REV LEV B D. 0. M.
SERIAL NO 600-1-0663
INSP CUST INSP
MODIFICATION INCORPORATED

NRK: NTR-RKFAL97

NRK: NTR-RKFAL98