DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A50NM
Revision 17
DASSAULT AVIATION
FALCON 2000
FALCON 2000EX

September 5, 2026

TYPE CERTIFICATE DATA SHEET No. A50NM

This data sheet which is part of Type Certificate No. A50NM prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the US Federal Aviation Regulations.

Type Certificate Holder Dassault Aviation
9 rond Point des Champs Elysées
75008 PARIS
FRANCE

The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 and exported by the country of manufacture is FAR Sections 21.183(c) or 21.185(c).

The U.S. airworthiness certification basis for aircraft type certificated under FAR Section 21.29 exported from countries other than the country of manufacture (e.g. third party country) is FAR 21.183(d) or 21.185(b).

Notwithstanding that the FAR referenced in the above paragraph does not specifically address or require a foreign civil airworthiness authority certification, such certification is the only practical way for an applicant to show, and the Federal Aviation Administration (FAA) to find conformity to the FAA-approved type design and conditions for safe operation.

Additional guidance is contained in FAA Advisory Circular 21-23, Airworthiness Certification of Civil Aircraft, Engines, Propellers, and Related Products Imported into the United States.

I. Model Falcon 2000 (Transport Category) approved February 2, 1995

(a) Basic Model Definition

Engines	2 engines. CFE Company, Model CFE 738-1-1B *(see NOTE 3b)*
Engine Limits	Static, Standard, Sea Level Take-off (5 min)5,725 lb(2,547 daN) Maximum Continuous5,560 lb(2,474,daN) Maximum Steady State Rotor Speeds Low pressure rotor (N1)RPM 9,400 (96.7%) High pressure rotor (N2) 5 minutesRPM 28,000 (106%) ContinuousRPM 27,709 (104.9%)

Page	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Revision	17	-	-	1	3	-	15	8	14	14	17	13	11	12	6	6
Page	17	18	19	20	21	22										
Revision	12	9	17	16	14	14										

Engine Limits (cont'd)

Turbine Interstage Temperature Limits
Ground starting815 °C
Air starting864 °C
Maximum take-off (5 min)877 °C
Maximum take-off (2 min)890 °C
Maximum continuous861 °C
Airstart transient (10 sec)890 °C
Airstart transient (2 sec)1000 °C

Oil Temperature
Maximum continuous138 °C
Minimum continuous30 °C
Maximum transient (3 min)155 °C

Fuel Pump Inlet Pressure
Minimum5 psi above true vapor pressure
Maximum50 psig

Oil Pressure
Idle30-85 psig
Normal operating range60-85 psig
Maximum transient (3 min)100 psig (may be exceeded for 2.5 min. in case of a cold start (temp < 0 C))

Thrust Reversers

Thrust reverser use is not approved, unless Dassault Aviation change M3B has been incorporated.

APU

Allied Signal Model GTCP36-150 (F2M)

Limitation
Maximum operating starting altitude35,000 ft
Maximum N1 (%)110
Exhaust gas temperature, Steady746 °C
Exhaust gas temperature, Starting974 °C
Maximum oil temperature163 °C
Minimum oil pressure35 psi

Operation of the APU with passengers in the cabin and without crew member monitoring is not authorized.

Airspeed Limits

Unless otherwise stated, speeds are indicated airspeeds

VMO (Maximum Operating)
350 kt at sea level, 370 kt at 10,000 ft with straight line variation between those points.
370 kt from 10,000 to 25,000 ft

MMO (Maximum Operating)
M = 0.862 from 25,000 to 38,000 ft
0.862 at 38,000 ft, 0.85 at 42,000 ft with straight line variation between those points
0.85 above 42,000 ft

Airspeed Limits (cont'd)

VA (Maneuvering)198 kt

VFE (Slat and Flap Speeds)
Slats + Flaps 10°200 kt
Slats + Flaps 20°160 kt
Slats + Flaps 40°160 kt

VLO (Landing Gear Operation)190 kt

MLO0.70

VLE (Landing Gear Extended)245 kt

MLE0.75

VMC (Minimum Control Speed)
Flight90 kt

Windshield Wiper Operation215 kt

Direct Vision Window215 kt

CG Range
(Gear Extended)

a. Without Option M57

Weight (lb)	Forward Limit (% MAC)	Rearward Limit (% MAC)
36,000	16.7	26.2
33,000	14	-
28,660 or less	14	32.5

b. With Option M57

Weight (lb)	Forward Limit (% MAC)	Rearward Limit (% MAC)
36,500	17.2	25.8
33,000	14	-
28,660 or less	14	32.5

Straight line variation between points.
Gear retraction has negligible effect on CG range.

Datum

Datum is 25% of mean aerodynamic chord (MAC) which coincides with fuselage station FS + 400.43 in (Fuselage station reference +0 is the forward end of the airplane nose cone).

Mean Aerodynamic chord (MAC)

Length113.69 in
Zero percent MAC is at FS +372.01 in

Leveling Means

Standard bubble type level to be installed on the passenger seat tracks

Weight Limitations	Without Option M57With Option M57 Maximum ramp36,000 lb36,500 lb Maximum take-off35,800 lb36,500 lb Maximum landing33,000 lb33,000 lb Maximum zero fuel28,660 lb28,660 lb Minimum flight at 14% CG23,075 lb23,075 lb at 32.5% CG20,100 lb20,100 lb
Minimum Crew	2 - Pilot and copilot
Maximum Passenger Seats	19 - limited by emergency exit requirements of Federal Aviation Regulations § 25.807(c) 0 - Without passenger provision but incorporating Dassault Ferry flight configuration : M0054.
Maximum Baggage	Baggage compartment1,600 lb (not to exceed 61.4 lb per sq ft)
Fuel Capacity	Nominal - Refer to weight and balance report of each airplane for exact capacity Refer to NOTE 1(b) for data on unusable system fuel and oil **Usable FuelUS GallonsPoundsArm (in)** LH outboard wing348.42,334 22.64 LH inboard wing213.71,432-27.68 LH center wing box216.91,453-37.76 LH Feeder tank127851-16.34 RH outboard349.22,340 22.64 RH inboard wing214.11,435-27.68 RH center wing box217.41,457-37.76 RH feeder tank127.3853-57.87 **Total Usable**1,814.012,155 **Total Fuel**1830.312,259
Fuels	Fuels conforming to General Electric specification No. D50TF2, current revision *See NOTE 4 for fuel additives* The above mentioned fuels and additives are also suitable for the APU
Pressure Fueling	Maximum50 psi
Oil Capacity (each engine)	Refer to NOTE 1(b) for data on unusable system fuel and oil Usable0.55 US gallon Total1.25 US gallon
Oils	Oil conforming to General Electric Specification No. D50TR1, or Allied Signal oil Specification EMS 53110, current revision *See NOTE 5*
Maximum Operating Altitude	47,000 ft
Control Surface Movements	ElevatorDown 16°Up 20° RudderRight 29°Left 29° AileronUp 25°20´Down 24°50´ FlapsDown 40°

Control Surface Movements (cont'd)

AirbrakesInboard up 68°
Center up 50°
Outboards up 37°
Wing slatsDown 30°
StabilizerElectrical stopsAND 2°ANU 10°
Mechanical stopsAND Max 2°30´ANU Max 10°30´
Structural stopsAND Min 2°40´ANU Min 11°
Rigging tolerances are included in Maintenance Manual

II. Model FALCON 2000EX (Transport Category Airplane) approved March 21, 2003

(a) Basic Model Definition

The Falcon 2000EX is defined by Dassault modification M1802 and differs from the Falcon 2000 in the following major respects: (i) Pratt &Whitney Canada Engines PW308C replace CFE 738-1-1B engines; (ii) New forward and aft fuel tanks are added, (iii) New main and nose landing gear, (iv) New tires and brakes

Engines

2 engines. (PRATT & WHITNEY Canada) Model PW308C Turbofan
(see NOTE 3b)

Engine Limits

Static, Standard, Sea Level
Take-off (5 min)6,998 lb(3,114 daN)

Maximum Continuous6,998 lb(3,114 daN)

Maximum Steady State Rotor Speeds
Low pressure rotor (N1)RPM 10,660 (102.5%)
High pressure rotor (N2)RPM 27,316 (102%)

Turbine Interstage Temperature Limits
Ground start950 °C
Air start950 °C
Normal Takeoff (5 min.)860 °C
Maximum take-off (5 min)875 °C
Maximum continuous860 °C
Restarting Max. (air start/ground start)500 °C/ 340 °C
Transient (20 sec)885 °C

Oil Temperature
Maximum135 °C
Minimum takeoff/ in-flight27 °C/ 16 °C
Maximum transient (90 sec.)143 °C
Starting (minimum)-40 °C

Fuel Pump Inlet Pressure
Minimum(SEE ENGINE INSTALLATON MANUAL)
Maximum(SEE ENGINE INSTALLATION MANUAL)

Engine Limits (cont'd)

Oil Pressure
Operating Range36 to 100 psi
Minimum at Idle20 psi
Transient (20 sec.)0 to 220 psi
Transient (90 sec.)10 to 220 psi
Cold start: during starting240 psi

Thrust Reversers

Thrust reverser use is approved only on the ground.

APU

Allied Signal Model GTCP36-150 (F2M)

Limitation
Maximum operating/starting altitude35,000 ft
Maximum N1 (%)110
Exhaust gas temperature, Steady746 °C
Exhaust gas temperature, Starting974 °C
Maximum oil temperature163 °C
Minimum oil pressure35 psi

Operation of the APU with passengers in the cabin and without crew member monitoring is not authorized.

Airspeed Limits

Unless otherwise stated, speeds are indicated airspeeds

VMO (Maximum Operating):
350 kt at sea level, 370 kt at 10,000 ft with straight line variation between those points.
370 kt from 10,000 to 25,000 ft

MMO (Maximum Operating):
0.862 from 25,000 to 38,000 ft
0.862 at 38,000 ft, 0.85 at 42,000 ft with straight line variation between those points
0.85 above 42,000 ft

VA (Maneuvering)198 kt

VFE (Slat and Flap Speeds)
Slats + Flaps 10°200 kt
Slats + Flaps 20°190 kt
Slats + Flaps 40°180 kt

VLO (Landing Gear Operation)190 kt

MLO0.70

VLE (Landing Gear Extended)245 kt

MLE0.75

Airspeed Limits (cont'd)

VMC (Minimum Control Speed)
Flight90 kt

Windshield Wiper Operation215 kt

Direct Vision Window Opening215 kt

CG Range
(Gear Extended)

Weight (lb)	Forward Limit (% MAC)	Rearward Limit (% MAC)
40,900	15.7	23.4
38,300	14	26.0
28,660 or less	14	32.5

Straight line variation between points.
Gear retraction has negligible effect on CG range.

Datum

Datum is 25% of mean aerodynamic chord (MAC) which coincides with fuselage station FS + 400.43 in (Fuselage station reference +0 is the forward end of the airplane nose cone).

Mean Aerodynamic chord (MAC)

Length113.69 in
Zero percent MAC is at FS +372.01 in

Leveling Means

Standard bubble type level to be installed on the passenger seat tracks

Weight Limitations
(Maximums)

	Without M1826 (serial no.1 only)	with M1826	with M1826 and M1842
Taxi and Ramp	40,900 lb	41,500 lb	42,400 lb
Take-off	40,700 lb	41,300 lb	42,200 lb
Landing	38,300 lb	39,300 lb	39,300 lb
Zero fuel	29,700 lb	29,700 lb	29,700 lb
Minimum flight			
at 14% CG	23,444 lb	23,444 lb	
at 32.5% CG	21,149 lb	21,149 lb	

Minimum Crew

2 - Pilot and copilot

Maximum Passenger Seats

19 - limited by emergency exit requirements of Federal Aviation Regulations § 25.807(c)

Maximum Baggage

Baggage compartment1,600 lb
(not to exceed 61.4 lb per sq ft)

Fuel Capacity

Nominal - Refer to weight and balance report of each airplane for exact capacity
Refer to NOTE 1(b) for data on unusable system fuel and oil

Without M1826 applied (serial no. 1 only)

Usable Fuel	**US Gallons**	**Pounds**
LH wing+1/2 center wing box	9116	105
RH wing+1/2 center wing box	9116	105
Rear Tank	244	1,630
Front Tank	329	2,205
Total Usable	2,395	16,045
Total Fuel	2,407	16,127

Fuel Capacity (cont'd)

With M1826 applied (serial no. 2 and on)

Usable Fuel	**US Gallons**	**Pounds**

	LH wing+1/2 center wing box9096,092 RH wing+1/2 center wing box9126,112 Rear Tank2931,962 Front Tank3832,564 **Total Usable**2,49716,730 **Total Fuel**2,50916,812
Fuels	Fuels and additives conforming with the specifications listed in the applicable P&WC Maintenance Manual are approved. *See NOTE 4 for fuel additives.* The above mentioned fuels and additives are also suitable for the APU Fuel anti-icing must be used for fuel temperature below –50 °C
Pressure Fueling	Maximum50 psi
Oil Capacity (each engine)	Refer to NOTE 1(b) for data on unusable system fuel and oil Usable0.49 US gallon Total2.4 US gallon
Oils	Oils conforming to the Specifications listed in the applicable P&WC Maintenance Manual (P/N 30C3882) are approved
Maximum Operating Altitude	47,000 ft
Control Surface Movements	ElevatorDown 16°Up 20° RudderRight 29°Left 29° AileronUp 25°20´Down 24°50´ FlapsDown 40° AirbrakesInboard up 68° Center up 50° Outboards up 37° Wing slatsDown 30° StabilizerElectrical stopsAND 2°ANU 10° Mechanical stopsAND Max 2°30´ANU Max 10°30´ Structural stopsAND Min 2°40´ANU Min 11° Rigging tolerances are included in Maintenance Manual

(b) Falcon 2000EX EASy Definition (Approved June 21, 2004)

EASy designation for Falcon 2000EX does not correspond to a model designation. This is only a commercial designation for airplanes on which Major modification numbers M1691, M1745, and M1504 have been embodied.

Major Change Modification number M1691 to the Falcon 2000EX consists of the installation of an Enhanced Avionics System (EASy) based on the Honeywell “Primus EPIC” product line. This system architecture is mainly built around 2 cabinets called Modular Avionics Units (MAU), 2 Modular Radio Cabinets (MRC), 2 Audio panels, 2 reversionary panels and 4 14.1 inch Liquid Crystal Displays. The pilots have access to the system using the 2 CCDs with multipurpose knob, menu pushbutton, display switch, action pushbuttons and trackball, 2 alphanumeric keyboards and the hard controls.

M1745 installs an “Oxygen system electro-pneumatic altimetric controller"

M1504 installs an "All falcon Common pressurization system"

M1691, M1745, and M1504 are basic on all Falcon 2000EX aircraft serial numbers 6, 28 and subsequent.

All parameters listed in the preceding sub-section (a) for the basic Falcon 2000EX remain valid for airplanes which incorporate M1691, M1745 and M1504.

(c) Falcon 2000DX Definition (Approved October 3, 2007)

The DX definition of the Falcon 2000EX does not correspond to a model designation. The Falcon 2000DX is only a commercial designation for Falcon 2000EX airplanes in the EASy configuration on which modifications M3000 and M3001 are installed at production. Modification M3000 defines the airplane and reduces the fuel tank capacity. Modification M3001 installs a new fuel quantity indication system.

M3000 and M3001 are basic on all Falcon 2000EX airplanes in the EASy configuration starting with serial number 601 and subsequent.

All parameters listed in the preceding sub-section (b) above for the Falcon 2000EX EASy remain valid for airplanes which incorporate M3000 and M3001, except for the following weight limits and useable fuel.

Falcon 2000DX	Weight (lb)
Maximum landing weight	39 300
Maximum takeoff weight	41 000
Maximum taxi and ramp weight	41 200

Useable fuel
Front Tank 189 US Gallons 1,268 lbs
Rear Tank 183 US Gallons1,224 lbs

(d) Falcon 2000LX Definition (Approved April 29, 2009)

The LX definition of the Falcon 2000EX does not correspond to a model designation. The Falcon 2000LX is only a commercial designation for Falcon 2000EX airplanes in the EASy configuration on which modifications M2846 and M3229 are installed. Modification M2846 incorporates winglets on the airplane and M3229 installs new slats.

All parameters listed in the preceding sub-section (c) above for the Falcon 2000EX EASy remain valid for airplanes which incorporate M2846 and M3229, except for the following weight limits.

Falcon 2000LX	Without M3390	With M3390
	Weight (lb)	
Maximum landing weight	39 300	39 300
Maximum takeoff weight	42 200	42 800
Maximum taxi and ramp weight	42 400	43 000

(e) Falcon 2000LXS Definition (Approved March 25, 2013)

The LXS definition of the Falcon 2000EX does not correspond to a model designation. The Falcon 2000LXS is only a commercial designation for Falcon 2000EX airplanes in the EASy configuration on which modifications M2846, M3229, M3254, M3390, M3453, and M5000 are installed at production. Modification M2846 installs winglets, M3254 incorporates the EASy Phase II, M3390, incorporates a weight and balance envelope increase for take-off, M3453 incorporates new FADEC software V9.03 for the PW308C engines and M5000 incorporates movable inboard leading edge slats.

All parameters listed in the preceding sub-section (d) above for the Falcon 2000LX remain valid for airplanes which incorporate modification M5000, except for the following weight limits.

Falcon 2000LXS	Weight (lb)
Maximum zero fuel weight	31 200

(f) Falcon 2000S Definition (Approved March 25, 2013)

The S definition of the Falcon 2000EX does not correspond to a model designation. The Falcon 2000S is only a commercial designation for Falcon 2000EX airplanes in the LXS configuration on which modifications M3000, M3001, and M5001 are installed at production. Modification M5001 incorporates movable inboard leading edge slats.

All parameters listed in the preceding sub-section (c) above for the Falcon 2000DX remain valid for airplanes which incorporate modifications M3000, M3001 and M5001, except for the following weight limits.

Falcon 2000S	Without M5031	With M5031
	Weight (lb)	
Maximum takeoff weight	41 000	42 800
Maximum taxi and ramp weight	41 200	43 000

Data Pertinent to all Models

Manufacturer Serial Number Eligible

A French "Certificat de Navigabilité pour Exportation" endorsed as noted under "Import Requirements" must be submitted for each individual aircraft for which application for US certification is made.

Serial Numbers:
For FALCON 2000: Aircraft serial number 1 and up

For FALCON 2000EX: Aircraft serial number 1 through 5 and 7 through 27. Serial numbers 6 and 28 through 217 include M1691, M1745, and M1504 as standard (F2000EX EASy definition). Aircraft serial numbers 601 through 700 include M3000 and M3001 as standard (F2000DX definition). Aircraft serial numbers 218 through 262 include M2846 and M3229 (F2000LX definition). Aircraft serial number 263 and subsequent includes M2846, M3229, M3254, M3390, M3453, and M5000. Aircraft serial numbers 701 and subsequent include M3000, M3001, and M5001.

Import Requirements

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft.

Certification Basis

(a) For FALCON 2000 (basic model):

1. FAR, Part 25 as amended by Amendment 25-1 through 25-69.
In addition, Dassault Aviation has elected to comply with amendments 25-71 for § 25.365(e), 25-72 for §§ 25.783(g) and 25.177; 25-75 for § 25.729(e); 25-79 for § 25.811(e)(2) and 25-80 for § 25.1316

2. FAR Part 34, original issue (Fuel Venting and Exhaust Emissions)

3. FAA, Part 36 as amended by amendment 36-1 through 36-20

4. FAA, Special Conditions:

25-ANM-90 - High Altitude Operation
25-ANM-91 - High -Intensity Radiated Fields
25-ANM-94 - Automatic Takeoff Thrust Control System
25-713-SC - Non-Rechargeable Lithium Batteries, effective to design changes applied for after January 18, 2018. See the applicability section of this special condition for more information on which design changes must meet it.

5. FAA Exemption No. 7104A (for side facing sofa)

For precision approach and landings, the applicable technical requirements are complemented by FAA Advisory Circulars (AC) 120-29 and AC 120-28(c)

For the automatic flight control system, the applicable technical requirements are complemented by AC 25.1329-1A for cruise.

Equivalent safety findings exist with respect to the following requirements:
•Design gust criteria, (refer to Issue Paper (IP) A-5)
•Use of the 1-g stall speeds instead of minimum speed in the stall as a basis for determining compliance (refer to IP F-1)
•Rejected take-off and landing performance (refer to IP F-3)
•N2 Digital Indication (refer to IP P-10)
•Flight Critical Thrust Reverser Certification (refer to IP P-7)

Compliance has been shown to the following optional requirement:
•Ditching, FAR § 25.801
•Ice Protection FAR § 25.1419

For Falcon 2000 airplanes incorporating modification M-OPT0413 (Starlink Antenna Provisions):

Equivalent Level of Safety Findings according to the provisions of 14 CFR 21.21(b)(1) for the following:

Section 25.251: Vibration and Buffeting (documented in ELOS memo AT20300IB-T-ESF-B25.251-01)

Type Certificate A50NM issued February 2, 1995
Reference date for type certification: November 30, 1989

(b) For Falcon 2000EX

(1) For parts of the airplane not changed or not affected by the modifications:

Unchanged from basic Falcon 2000

(2) For those parts of the airplane that are changed or are affected by the modifications M1802, M1803, M1804, M1805:

The following sections of 14 CFR 25 as amended by amendments 25-1 through 25-98 apply per the FAA derivative aircraft process FAA Order 8110.4B to the changes and areas affected by the changes for the Falcon 2000EX:

Subpart B – Flight:

All the paragraphs are applicable at amendment 25-98 except the following which are applicable as modified in Equivalent Level of Safety Finding Issue

Paper F-4 titled “Use of 1-g Stall Speeds Instead of Minimum Speed in the Stall as a Basis for Determining Compliance”

25.103, 25.107, 25.111, 25.119, 25.121, 25.125, 25.143, 25.145, 25.147, 25.149, 25.161, 25.175, 25.177, 25.181, 25.201, 25.207, 25.231, 25.233, 25.237

Subpart C – Structure:

All the paragraphs are applicable at amendment 25-98

Subpart D – Design and Construction:

The following paragraphs are applicable at amendment 25-98:

25.601 to 25.703, 25.721, 25.723, 25.729, 25.801, 25.863 to 25.869

The following paragraphs are applicable as modified by Equivalent Level of Safety Issue Paper F-4 titled “Use of 1-g Stall Speeds Instead of Minimum Speed in the Stall as a Basis for Determining Compliance”:

25.735, 25.773

Subpart E – Powerplant:

All the paragraphs are applicable at amendment 25-98 except the following which is applicable as modified in Equivalent Level of Safety Finding Issue Paper F-4 titled “Use of 1-g Stall Speeds Instead of Minimum Speed in the Stall as a Basis for Determining Compliance”

25.1001

Subpart F – Equipment:

The following paragraphs are applicable at amendment 25-98:

25.1301, 25.1305 to 25.1322, 25.1337, 25.1431

The following paragraphs are applicable as modified by Equivalent Level of Safety Issue Paper F-4 titled “Use of 1-g Stall Speeds Instead of Minimum Speed in the Stall as a Basis for Determining Compliance”:

25.1323, 25.1325, 25.1587

Subpart G – Operating Limitations and Information:

All the paragraphs are applicable at amendment 25-98 except the following:

25.1515, 25.1522, 25.1523, 25.1525, 25.1529, 25.1531, 25.1547, 25.1561

(3) FAR Part 34, original issue (Fuel Venting and Exhaust Emissions)

(4) FAA, Part 36 as amended by amendment 36-1 through 36-24

(5) FAA, Special Conditions:
25-ANM-90 - High Altitude Operation
25-ANM-91 - High -Intensity Radiated Fields

25-ANM-94 - Automatic Takeoff Thrust Control System
25-713-SC - Non-Rechargeable Lithium Batteries, effective to design changes applied for after January 18, 2018. See the applicability section of this special condition for more information on which design changes must meet it.

(6) FAA Exemption No. 8007A (for side facing sofa)

(7) Equivalent safety findings according to 14 CFR 21.21(b)(1) for the following subjects:

- § 25.103 & related paragraphs, 1-G Stall Speeds (documented in TAD ELOS Memo AT0021IB-T-F-4)
- Section 933(a)(1)(ii): Reversing Systems (documented in TAD ELOS Memo AT0012IB-T-P-12)
- § 25.1203(a) Fire Detector System (documented in TAD ELOS Memo AT0021IB-T-P-15)
- §§ 25.809(b) and 25.813(c)(2)(ii) - Emergency Exit Access (documented in TAD ELOS Memorandum AT10010IB-T-CI-101)
- § 25.813(c)(2) “Emergency Exit Access” (documented in TAD ELOS Memo SP00843IB-T)

(8) Miscellaneous:
For precision approach and landings, the applicable technical requirements are complemented by FAA Advisory Circulars (AC) 120-29 and AC 120-28(c)

For the automatic flight control system, the applicable technical requirements are complemented by AC 25.1329-1A for cruise.

Reference date of application for amendment to type certificate is January 7, 2000.

(c) For FALCON 2000EX airplanes incorporating Dassault modifications M1691, M1745, and M1504 (Falcon 2000EX EASy definition):

(1) For parts of the airplane not changed or not affected by the modifications: Unchanged from basic Falcon 2000EX

(2) For those parts of the airplane that are changed or are affected by the modifications M1691, M1745, and M1504:

The following sections of 14 CFR 25 as amended by amendments 25-1 through 25-98 apply per the FAA derivative aircraft process FAA Order 8110.4B to the changes and areas affected by the changes for the Falcon 2000EX EASy definition:

Subpart B – Flight:

25.207 : « Stall warning »

Subpart C – Structure:

25.581 : « Lightning protection»

Subpart D – Design and Construction:

25.601 : « General »
25.611 : « Accessibility provisions »
25.631 : « Bird strike damage »
25.671(b)(c) : « Control systems : general »
25.672 : « Stability augmentation and automatic and power-operated systems »
25.677(b) : « Trim systems »
25.699 : « Lift and drag device indicator »
25.703 : « Take-Off warning systems »
25.729(e) : « Retracting mechanism »
25.771 (a) (c) (e) : « Pilot compartment »
25.773(a)(d) : « Pilot compartment view »
25.777 (a)(b)(c)(d)(e)(f) : « Cockpit controls »
25.783(e) : « Doors »
25.789(a) : "Retention of items of mass in passenger and crew compartments and galleys"
25.791(a)(b) : " Passenger information signs and placards"
25.812(f) : "Emergency lighting"
25.841(b)(5)(b)(6) : « Pressurised cabins »
25.863(c) : « Flammable fluid fire protection »
25.869(a) : « Fire protection : systems »

Subpart E – Powerplant:

25.901 (c) : « Installation »
25.903 (b) and (d)(2) : « Engines »
25.1141(a) and (f) : « Powerplant controls- General»
25.1143(a), (b) and (c) : « Engine controls»
25.1145(a)(b) : « Ignition switches »
25.1155 : « Reverse thrust and propeller pitch settings below the flight regime»
25.1189(f) : « Shutoff means»
25.1203 (b)(2)(b)(3)(d) : « Fire-detector system »
Subpart F – Equipment:

25.1301 : « Function and Installations »
25.1303 : « Flight and Navigation Instruments »
25.1305 : « Powerplant Instruments »
25.1307(c)(d)(e) : « Miscellaneous equipments »
25.1309 : « Equipment, systems and installations »
25.1316 : « System lightning protection »
25.1321 : « Arrangement and visibility »
25.1322 : « Warning, Caution and advisory lights »
25.1323 : « Airspeed indicating system »
25.1325(a)(c)(d)(e)(f)(g) : « Static pressure systems »
25.1326 : « Pitot heat indication systems »
25.1327 : « Magnetic direction indicator »
25.1329 : « Automatic pilot system »
25.1331 : « Instruments using a power supply »
25.1333 : « Instrument systems »
25.1335 : « Flight director systems »
25.1337(b)(d) : « Powerplant instruments »
25.1351 : « Electrical Systems and Equipment - General »
25.1353 : « Electrical equipment and installations »
25.1355 : « Distribution system »
25.1357 : « Circuit protective devices »
25.1381 : « Instrument lights »
25.1419(c) : « Ice protection »

25.1431 : « Electronic equipment »
25.1435 (a)(2) : « Hydraulic systems »
25.1457 : « Cockpit voice recorders »
25.1459 : « Flight recorders »

Subpart G – Operating Limitations and Information:

25.1501(b)(c) : « General »
25.1523 : « Minimum flight crew »
25.1529 : « Instructions for continued airworthiness »
25.1541 : « Markings and placards - General »
25.1543(b) : « Instrument markings : General »
25.1545 : « Airspeed limitation information »
25.1547 : "Magnetic direction indicator"
25.1549 : « Powerplant instruments »
25.1551 : « Oil quantity indicator »
25.1553 : « Fuel quantity indicator »
25.1555 : « Control markings»
25.1563 : « Airspeed placard »
25.1581 : « Airplane flight manual – General »
25.1585(a)(b)(d)(e) : « Operating procedures »

Special Conditions
25-713-SC - Non-Rechargeable Lithium Batteries, effective to design changes applied for after January 18, 2018. See the applicability section of this special condition for more information on which design changes must meet it.

(d) For FALCON 2000EX EASy airplanes incorporating Dassault modifications M3000 and M3001 (Falcon 2000DX definition):

See (c) above.

(e) For FALCON 2000EX EASy airplanes incorporating Dassault modification M2846 and M3229 (Falcon 2000LX definition):

(1) For parts of the airplane not changed or not affected by the modifications: Unchanged from basic Falcon 2000EX EASy

(2) For those parts of the airplane that are changed or are affected by the modification M2846:

Based on the application date of September 14, 2006, for Modification M2846, under the provisions of Federal Aviation Regulation 14 CFR 21.101, the applicable type certification standards for the modification to the Model Falcon 2000EX series are as follows:

14 CFR part 25, effective February 1, 1965, including Amendments 25-1 through 25-117. The following are the applicable regulations:

Subpart A – General
25.1Applicability.
25.2Special retroactive requirements.

Subpart B – Flight
25.21Proof of compliance.
25.23Load distribution limits.
25.25Weight limits.

25.27Center of gravity limits.
25.29Empty weight and corresponding center of gravity.
25.31Removable ballast.
25.101General.
25.103Stall speed.
25.105Takeoff.
25.107Takeoff speeds.
25.109Accelerate-stop distance.
25.111Takeoff path.
25.113Takeoff distance and takeoff run.
25.115Takeoff flight path.
25.117Climb: general.
25.119Landing climb: All-engines-operative.
25.121Climb: One-engine-inoperative.
25.123En route flight paths.
25.125Landing.
25.143General.
25.145Longitudinal control.
25.147Directional and lateral control.
25.149Minimum control speed.
25.161Trim.
25.171General.
25.173Static longitudinal stability.
25.175Demonstration of static longitudinal stability.
25.177Static lateral-directional stability.
25.181Dynamic stability.
25.201Stall demonstration.
25.203Stall characteristics.
25.207Stall warning.
25.237Wind velocities.
25.251Vibration and buffeting.
25.253High-speed characteristics.
25.255Out-of-trim characteristics.

Subpart C – Structure
25.301Loads.
25.303Factor of safety.
25.305Strength and deformation.
25.307Proof of structure.
25.321General.
25.331Symmetric maneuvering conditions.
25.333Flight maneuvering envelope.
25.335Design airspeeds.
25.337Limit maneuvering load factors.
25.341Gust and turbulence loads.
25.343Design fuel and oil loads.
25.345High lift devices.
25.349Rolling conditions.
25.351Yaw maneuver conditions.
25.367Unsymmetrical loads due to engine failure.
25.373Speed control devices.
25.391Control surface loads: General. (d)(e)
25.395Control system.
25.427Unsymmetrical loads.
25.445Auxiliary aerodynamic surfaces. (a)
25.457Wing flaps.
25.459Special devices.
25.471General. (a)(b)
25.473Landing load conditions and assumptions. (a)(b)(c)(e)
25.479Level landing conditions.
25.493Braked roll conditions.
25.495Turning.

25.519Jacking and tie down provisions. (c)
25.571Damage-tolerance and fatigue evaluation of structure. (a)(b)(e)
25.581Lightning protection.

Subpart D – Design and Construction
25.601General.
25.603Materials.
25.605Fabrication methods.
25.607Fasteners.
25.609Protection of structure.
25.611Accessibility provisions.
25.613Material strength properties and material design values.
25.619Special factors.
25.621Casting factors.
25.623Bearing factors.
25.625Fitting factors.
25.629Aeroelastic stability requirements.
25.651Proof of strength.
25.672Stability augmentation and automatic and power-operated systems.
25.703Takeoff warning system.
25.863Flammable fluid fire protection. (a)(b)
25.869Fire protection: systems. (a)(4)

Subpart E – Powerplant
25.954Fuel system lightning protection.
25.981Fuel Tank Ignition Prevention (a)(b)
25.1011 Oil Systems;General (b)

Subpart F – Equipment
25.1301Function and installation.
25.1309Equipment, systems, and installations.
25.1316System lightning protection.
25.1327Magnetic direction indicator.
25.1329Automatic pilot system.
25.1351General. (a)(d)
25.1353Electrical equipment and installations. (a)(b)(d)
25.1357Circuit protective devices. (a)
25.1385Position light system installation.
25.1387Position light system dihedral angles.
25.1389Position light distribution and intensities.
25.1391 Minimum intensities in the horizontal plane of forward and rear position lights.
25.1393Minimum intensities in any vertical plane of forward and rear position lights.
25.1395Maximum intensities in overlapping beams of forward and rear position lights.
25.1397Color specifications.
25.1401Anticollision light system.
25.1419Ice protection. (introduction paragraph only)
25.1431Electronic equipment. (a)(c)(d)
25.1443Minimum mass flow of supplement oxygen. (b)(c)

Subpart G – Operating Limitations and Information
25.1501General (b)
25.1503Airspeed limitations: general.
25.1505Maximum operating limit speed.
25.1507Maneuvering speed.
25.1511Flap extended speed.
25.1513Minimum control speed.
25.1515Landing gear speeds.
25.1517Rough air speed, V_{RA}.
25.1519Weight, center of gravity, and weight distribution.
25.1527Ambient air temperature and operating altitude.
25.1529Instructions for Continued Airworthiness.

25.1531Maneuvering flight load factors.
25.1533Additional operating limitations.
25.1581General.
25.1583Operating limitations.
25.1585Operating procedures.
25.1587Performance information.
Appendix A(Sec 25.1)
Appendix C(Sec 25.1)
Appendix G(Sec 25.1)
Appendix H(Sec 25.1)
Appendix H(Sec 25.2)
Appendix H(Sec 25.3)
Appendix H(Sec 25.4)

(3) **Special conditions:** The following Special Conditions are applicable to Modification M2846:

a.Docket No. NM-100; Special Conditions No. 25-ANM-90 Dassault Aviation Model Falcon 2000 Airplane; High Altitude Operation.

b.Docket No. NM-101; Special Conditions No. 25-ANM-91 Dassault Aviation Model Falcon 2000 Airplane; High Intensity Radiated Fields.

c.Docket No. FAA-2017-1143; Special Conditions No. 25-713-SC Non-Rechargeable Lithium Batteries, effective to design changes applied for after January 18, 2018. See the applicability section of this special condition for more information on which design changes must meet it.

(4) **Equivalent Safety Findings:** According to the provisions of 14 CFR 21.21(b)(1), the following subject has been identified as an equivalent safety findings.

a. Section 25.1419 – Ice Protection (documented in TAD ELOS Memo TD0592IB-T-S-101)

(5) **Exemptions:** FAA Exemption No. 5991 (for side facing sofa).

(f) For FALCON 2000EX EASy airplanes incorporating Dassault modification M2846, M3229, M3254, M3390, M3453, and M5000 (Falcon 2000LXS definition):

(1)Airworthiness & Environmental Standards for components and areas not affected by the change

See (e) above.

(2)Airworthiness and Environmental Standards for components and areas affected by the change

Based on the application date of November 18, 2008, for Modification M5000, under the provisions of Federal Aviation Regulation 14 CFR 21.101, the applicable type certification standards for the modification to the Model Falcon 2000EX series are as follows:

14 CFR part 25, effective February 1, 1965, including Amendments 25-1 through 25-125, except for the sections which are complied with as amended through the indicated Amendments:

a) 14 CFR part 25 paragraphs at Amendment 125
25.21 to 25.27, 25.31, 25.101, 25.109, 25.113 to 25.117, 25.145 to 25.203, 25.231 to 235, 251(e), 25.301 to 25.351, 25.367, 25.391(d),(e), 25.393 to 25.397, 25.409 to 25.427, 25.457 to 25.495, 25.499, 25.507 to 25.519, 25.561 to 25.625, 25.631, 25.651, 25.657, 25.671, 25.675, 25.685, 25.693 to 25.701, 25.801, 25.863(a),(d), 25.1316, 25.1333, 25.1501, 25.1519, 25.1533, 25.1581, 25.1583(a),(c), 1585(a),(c),(d), 25.1587(b)

b) 14 CFR part 25 paragraphs at Amendment 122
25.1701 to 25.1731 (i.e. before EWIS implementation)

c) 14 CFR part 25 paragraphs at Amendment 120
25.21(g), 25.103, 25.105, 25.107, 25.111, 25.119, 25.121, 25.123, 25.125, 25.143, 25.207, 25.237, 25.253, 25.1419
d)14 CFR part 25 paragraphs at Amendment 108
25.735

e) 14 CFR part 25 paragraphs at Amendment 98:
25.503, 25.655, 25.672, 25.677 to 25.683, 25.689, 25.703, 25.721, 25.729, 25.771, 25.773, 25.777, 25.783, 25.789, 25.791, 25.841, 25.865, 25.867, 25.899 to 25.1182, 25.1185 to 25.1315, 25.1321 to 25.1357, 25.1360, 25.1363, 25.1365, 25.1381, 25.1423 to 25.1431, 25.1435, 25.1457, 25.1459, 25.1529

f) 14 CFR part 25 paragraphs at Amendment 79*:*
25.811(e)(2)

g) 14 CFR part 25 paragraphs at Amendment 69*:*
25.725, 25.727, 25.731, 25.733, 25.772, 25.779, 25.781, 25.785, 25.787, 25.793, 25.795, 25.803,25.805, 25.807, 25.809 to 25.820 (except 25.811(e)(2)), 25.832, 25.831, 25.833, 25.843 to 25.859, 25.871, 25.875, 25.1362, 25.1383 to 25.1403, 25.1411, 25.1413, 25.1415, 25.1421, 25.1433, 25.1436 to 25.1450, 25.1453, 25.1455, 25.1461

h) 14 CFR part 25 paragraphs at Amendment 144
25.733(e): « Pilot compartment view » For FalconEye System Installations

SSDs / SRDs and NSSDs / NSRDs are identified in the F2000EX M5000 CPR analysis DGT 118921.

3) Special Conditions

Special Conditions No. 25-713-SC Non-Rechargeable Lithium Batteries, effective to design changes applied for after January 18, 2018. See the applicability section of this special condition for more information on which design changes must meet it..

4) Equivalent Safety Findings

No new equivalent safety findings (existing equivalent safety findings for unchanged airplane still apply).

5) Exemptions

No new exemptions (existing exemptions for unchanged airplane still apply).

6) Optional Design Regulations

The follow approvals are unaffected by the modification:

Ditching §§ 25.801, 25.1411(d), (e), (f), (g) & 25.1415
Ice Protection § 25.1419

7) Noise Standards

14 CFR part 36 at Amdt 28

8) Fuel Venting and Exhaust Emissions Standards

14 CFR Part 38, Airplane Fuel Efficiency Certification, Amendment 38-1, Paragraph 38.17(b)(X).

9) 14 CFR 26

No Impact

(g) For FALCON 2000EX EASy airplanes incorporating Dassault modification M3000, M3001 and M5001 (Falcon 2000S definition):

See (f) above.

(h) For FALCON 2000EX series airplanes incorporating M-OPT0408 (Starlink Antenna Provisions:

See (b),(c), (d),(e), (f) and (g) above.

Equivalent Level of Safety Findings according to the provisions of 14 CFR 21.21(b)(1) for the following:

Section 25.251: Vibration and Buffeting (documented in ELOS memo AT20300IB-T-ESF-B25.251-01)

The Direction Generale de l'Aviation Civile (D.G.A.C.) of France originally type certificated this aircraft under its type certificate Number 185. The FAA validated this product under U.S. Type Certificate Number A50NM. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of the D.G.A.C..

Type Definition

For the Falcon 2000, the type definition is DASSAULT AVIATION Drawing List 01-130 Ref. DGT 21172 Issue A

For the Falcon 2000EX, the type definition is DASSAULT AVIATION document M1802-01-130 (DGT-F/NAV89793) – Master Drawing Lists

Definition of Falcon 2000EX results of the addition of Falcon 2000 definition plus application of M1802, M1803, M1804, M1805, M1820, M1838 and M2233.
From aircraft s/n 2 and on, modification M1826 is applied resulting in an increase in fuel capacity and maximum weights.

Definition of the Falcon 2000EX EASy is the result of the basic Falcon 2000EX definition plus application of M1691, M1745, and M1504.

Definition of the Falcon 2000DX is the result of the basic Falcon 2000EX in the EASy definition plus application of M3000 and M3001.

Definition of the Falcon 2000LX is the result of the basic Falcon 2000EX in the EASy definition plus application of M2846 and M3229.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see certification basis) must be installed on the aircraft for certification. The lists of all equipment as well as optional equipment approved by Direction Générale de l'Aviation Civile (DGAC) of France are contained in the documents:

For the FALCON 2000, in memos Nos.:

•DTM 38-2000/90 (01-940) - Equipment list of the basic airplane
•DTM 38-0735/91 (01-941) - Equipment list of the standard option and other options

In addition, the aircraft must be operated in accordance with the DGAC approved FALCON 2000 Airplane Flight Manual, document DTM 537 approved February 2, 1995

For the FALCON 2000EX:

M1802-01-940 (DGT-DTF/NAV81711) – Equipment List – Basis Aircraft

In addition, the aircraft must be operated in accordance with the DGAC approved FALCON 2000EX Airplane Flight Manual, Document No. DGT84278

For the Falcon 2000EX EASy:

M1691-01-101 (DGT-DTF/NAV 96502) - Equipment list for F2000EX EASy

In addition, the aircraft must be operated in accordance with the Falcon 2000EX EASy Airplane Flight Manual, document DGT88898.

For the Falcon 2000LX, the aircraft must be operated in accordance with the Falcon 2000EX EASy Flight Manual, document DGT88898.

Service Information: Each of the documents listed below that contain a statement that it is approved by the European Aviation Safety Agency (EASA) - or for approvals made before September 28, 2003 - by the Direction Generale de l'Aviation Civile (D.G.A.C.) of France, are accepted by the FAA and are considered FAA approved. Additionally, approvals issued by Dassault Aviation under the authority of EASA approved Design Organization EASA.21J.051 - or for approvals made before September 28, 2003 - under the authority of DGAC Design Organization Approval No. No. F.JA.03 are considered FAA approved. These approvals pertain to the type certificate only such as changes to type design and repair/unrepair of damages.
• Dassault Aviation Service Bulletins, except as noted below,
• Structural repair manuals,
• Vendor manuals referenced in Dassault Aviation service bulletins
• Aircraft flight manuals,
• Repair Instructions.

Note: Design changes that are contained in Dassault Aviation Service Bulletins and that are classified as Level 1 Major in accordance with either the US/Direction Generale de l'Aviation Civile (D.G.A.C.) of France or US/EASA Bilateral Aviation Safety Agreement Implementation Procedures for Airworthiness must be approved by the FAA.

NOTES

NOTE 1 - Weight and Balance

(a)Current weight and balance report including a list of equipment included in certificated empty weight, and loading instructions when necessary must be provided for each aircraft at its delivery.

(b)The following must be included in the airplane empty weight:
•The total unusable fuel, 82 lb, plus
•The unusable engine oil, 4.1 US gallons, 34 lb, (drainable and trapped oil) at arm + 150 in, and
•The hydraulic fluid 83 lb at are + 127 in

(c) The airplane must be loaded in accordance with the FALCON 2000 Loading Manual (DTM 541) or the FALCON 2000EX Loading Manual (DGT 65), as applicable and the CG must be within the specified limits at all times.

NOTE 2 - Reserved

NOTE 3 - Service Life Limits and required Maintenance/Inspections

(a) Airframe components which are life limited, and associated retirement times, are presented in DGAC approved chapter 5.40.00 of the FALCON 2000 and Falcon 2000EX Maintenance Manual, and must be replaced as indicated therein.

(b) For the Falcon 2000: CFE 738-1-1B engine life limits, established for critical rotating components, are published in the approved Engine Light Maintenance Manual, Report Number 72.08.03, Airworthiness Limitation Section.
For the Falcon 2000EX: PW308C engine life limits are listed in the Airworthiness Limitation Section of P&WC Maintenance Manual P/N 30C3882.

(c) Required maintenance and inspections to maintain airworthiness based on involving reliability are presented in DGAC approved chapter 5.40.00 of the FALCON 2000 and Falcon 2000EX Maintenance Manuals.

Chapter 5-40 references :
F2000 : Airworthiness Limitation Section (Chapter 5-40, reference: DGT113876)
F2000EX : Airworthiness Limitation Section (Chapter 5-40, reference: DGT113877

NOTE 4 - Fuel Specifications and Additives

(a)For information concerning equivalent fuel specifications, see Airplane Flight Manual

(b)Additives

For the CFE 738 engines; PW308C engines; and GTCP 36-150 auxiliary power unit, the following additive limitations are approved.

•Anti-icing additives, conforming to AIR 3652 of MIL-I 27686 D or E (JP-4/JP-8) or to MIL-I 85470 (JP-5) or equivalent are approved for use in the fuel in amounts up to 0.15 per cent by volume.
•SOHIO BIOBOR JF biocide additive, or equivalent, is approved for use in fuel at a concentration not exceeding 270 PPM
•Anti-static additive is approved for use in fuel at a concentration not exceeding 1 PPM for SHELL ASA 3; and 3 PPM for STADIS 450

NOTE 5 - Qualified Oils

(a) Engine: See CFE 738 Engine Installation Manual IM 75 550 for specific oils approved per the subject specification.

(b) APU: Brand names of oils approved for use in the APU are listed in the GTCP36-150 Maintenance Manual

NOTE 6 - The Model Falcon 2000 (incorporating M1251), Falcon 2000EX, and Falcon 2000EX EASy have been approved to operate in “Reduced Vertical Separation Minimum” (RVSM) airspace when the airplanes are operated in accordance with Airplane Flight Manual page 1-160-1 (for F2000/2000EX) or page 1-300-05 (for F2000EX EASy). Continued airworthiness and operational approval aspects of RVSM must be constructed according to Advisory Circular (AC) 91-RVSM, titled “Approval of Aircraft and Operators for Flight in Airspace Above Flight Level (FL) 290 Where a 1,000 Foot Vertical Separation Minimum is Applied.”

NOTE 7 - An approved change to the AFM and ALS can be released either through a full revision of the manual or through a Change Project (CP) number bearing the same reference as the related manual.

…… END……