DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A46EU
Revision 23
DASSAULT AVIATION
MYSTERE-FALCON 50
MYSTERE-FALCON 900
FALCON 900EX

January 16, 2026

TYPE CERTIFICATE DATA SHEET No. A46EU

This data sheet which is part of Type Certificate No. A46EU prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder.
(See NOTE 8)

DASSAULT AVIATION
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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 MYSTERE-FALCON 50 (Transport Category Airplane), approved March 7, 1979.

(a) Basic Model Definition

Engines.

3 engines - Allied Signal Engines, Model TFE 731-3-1C (see Note 3b).

Engine Limits.

Static, Standard Sea level
Takeoff (5 min) lb 3,700
Maximum Continuous lb 3,700

Maximum normal operating rotor speeds
Low pressure rotor (N1) RPM 21,000 percent 101.5%
High pressure rotor (N2) RPM 29,692 percent 100%

Transient Conditions*	1 Minute	5 Seconds
Low pressure rotor (N1)	101.5% to 103%	103% to 105%
High pressure rotor (N2)	100% to 103%	103% to 105%

**(See NOTE 7)*

Interstage turbine temperature (ITT):
During starting 907ºC (1,665ºF)

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Starting (10 sec. transient)	927ºC	(1,700ºF)*
Takeoff (5 minutes)	907ºC	(1,665ºF)
Takeoff (10 sec. transient)	939ºC	(1,722ºF)
Maximum Continuous	885ºC	(1,625ºF)

**(See NOTE 7)*

Oil temperature at fan gearbox inlet:

Maximum (sea level to 30,000 ft)	127ºC	(260ºF)
Maximum (above 30,000 ft)	140ºC	(284ºF)
Maximum (2 minutes transient)	149ºC	(300ºF)
Minimum Continuous	30ºC	(86ºF)

Fuel Pressure
Minimum fuel pressure warning, psig 4.5

Oil pressure limits:

At idle, psig	25 to 46
Takeoff & maximum continuous, psig	38 to 46

APU (optional). (See NOTE 6)

Allied Signal Engines GTCP 36-100(A)
Limitation - Not operable in flight

	RATED	MAX. ALLOWABLE
EGT	680ºC	732ºC
RP	100%	109%

Fuel: See NOTE 4, and Airplane Flight Manual
Oil: See NOTE 5b, and GTCP 36-100 Maintenance Manual.

Airspeed Limits (IAS).

Unless otherwise indicated, speeds are indicated airspeeds.

V_{MO} (Maximum Operating)
350 kts at sea level, 370 kts at 10,000 ft., with straight line variation between those points.
370 kts from 10,000 ft to 24,000 ft.

M_{MO} (Maximum Operating)
M = 0.86 above 24,000 ft.

V_A (Maneuvering)	210 kts	
V_{FE} (Slat and Flap Speeds)		
Slats		200 kts
Slats + flaps 20º		190 kts
Slats + flaps 48º		175 kts
V_{LO} (Landing Gear Operation)		190 kts
M_{LO}		0.70
V_{LE} (Landing Gear Extended)		220 kts
M_{LE}		0.75
Windshield Wiper Operation		205 kts
Cockpit Window Opening		180 kts
V_{MC} (Minimum Control Speed)		
In flight		82.5 kts (CAS)
On ground		87.5 kts (CAS)

C.G. Range. (Gear Extended)

Weight (lb)	Forward Limit (% MAC)	Aft Limit (% MAC)
38,800	22.3	32
35,715	19.8	32
30,203	14	32
18,959	14	32

For aircraft incorporating AMD-BA Modification 1230 (Falcon 50 Service Bulletin Number 161), C.G. Range is modified as follows:

Weight (lb)	Forward Limit (% MAC)	Aft Limit (% MAC)

40,780	23.3	29.6
40,255	22.8	32
35,715	19.2	32
30,640	14	32
18,959	14	32

For aircraft incorporating AMD-BA Modification 1430 (Falcon 50 Service Bulletin Number 191), C.G. Range is modified as follows:

Weight (lb)	Forward Limit (% MAC)	Aft Limit (% MAC)
40,780	20.9	29.6
40,255	20.6	32.0
35,715	17.3	32.0
32,624	14.0	32.0
18,959	14.0	32.0

Gear retraction has negligible effect on C.G. Range.

Datum. Datum is 25% of mean aerodynamic chord (MAC) which is marked on aircraft and coincides with fuselage Station (FS) + 382.83 inches. (Fuselage Station + 0 is the forward end of the aircraft nose cone).

Mean Aerodynamic Chord. Length 111.77 in.
Zero % MAC is at FS + 354.89 in.

Leveling Means. A bubble-type level, when placed on a special leveling rule which in turn is placed on the tops of 3 specific leveling pins on the floor of the fuselage rear compartment, facilitates leveling of the airplane in the longitudinal and lateral directions.

Weight Limitations.

Maximum Weights

Maximum ramp	38,800 lb.
Maximum takeoff (brake release)	38,800 lb.
Maximum landing	35,715 lb.
Maximum zero fuel	25,570 lb.
Minimum weight	18,959 lb.

For aircraft incorporating AMD-BA Modification 1230 or modification 1430 (Falcon 50 Service Bulletin Number 161 or 191), weight limitations are modified as follows:

Maximum ramp	40,780 lb.
Maximum takeoff (brake release)	40,780 lb.
Maximum landing	35,715 lb.
Maximum zero fuel	25,570 lb.
Minimum weight	18,959 lb.

Maximum Passengers. 19 maximum - limited by emergency exit requirement of FAR 25.807(c) (AMD memo DTM 800 identifies approved cabin interior for 8 or 9 passenger seats).

12 maximum - limited by cabin air ventilation requirements of FAR 25.831 when operated above 45,000 feet (AMD Falcon 50 Service Bulletin No. F50-0163 is applied (or AMD Mod. M17).

0 - Without passenger provision but incorporating Dassault Ferry flight configuration : M2133.

Crew Seats. Third crew seat, installed in accordance with Option No. 25-11-02, may be occupied for takeoff and landing.

Maximum Baggage. 2,200 lb in rear baggage compartment.

Fuel Capacity. Nominal - (refer to weight and balance report of each individual airplane for exact capacity).

Usable Fuel	US Gallons	Pounds	Arm (in)
Left wing	559	3,748	-0.94
Center wing	410	2,749	-38.82
Right wing	559	3,748	-0.94
Left fuselage	210	1,404	+51.3
Center fuselage	367	2,461	+51.85
Right fuselage	210	1,404	+51.3
TOTAL USABLE	2,315	15,514	
TOTAL FUEL	2,329	15,607	

Pressure Fueling 50 psi maximum.

Oil Capacity. (Each Engine)
Usable, 0.5 US Gallons
Unusable, 2.25 US Gallons (drainable, and trapped oil) side engine arm + 80.9 in., center engine arm + 225.8 in.

Maximum Operating Altitude.
45,000 ft.
49,000 ft. for serial No. 156 and on, or for aircraft incorporating AMD-BA Modification M17 (Falcon 50 Service Bulletin Number F50-0163).

Control Surface Movements. (Control stops)

Elevator:	Down	16º	Up	20º	
Rudder:	Right	23º	Left	23º	
Aileron:	Up	25º20'	Down	24º50'	
Flaps:	Down	48º			
Airbrakes:	Up	68º			
Wing Slats:	internal	20º			
	external	30º			

Stabilizer:

Electrical stops:	Nose down	1º	Nose up	11º
Mechanical stops:	Nose down (max) 1º30'		Nose up (max)	11º30'
Structural stops:	Nose down (min)	2º	Nose up (min)	12º

Rigging tolerances are included in Maintenance Manual.

(b) Falcon 50EX Definition

EX designation for Mystère Falcon 50 does not correspond to a model designation. This is only a commercial designation for airplanes on which 6 Major modifications are embodied.

Those 6 modifications, listed below, are basic on any aircraft from serial number 253 and subsequent.

M1200: Increase of rudder control authority
M1810: new engines - assembly line configuration - TFE 731-40
M1890: new avionics
M1939: new engine control EIED
M1940: Bleed Air System Computer
M2159: ADC new calibration

The following associated retrofit modifications are available:

M2017: New engines – retrofit – TFE 731-40-1C
M1924: New avionics – retrofit
Other modifications, as retrofit, have the same modification numbers as for new build aircraft.

Engines. 3 engines - Allied Signal Engines, Model TFE 731-40 (FAA Data Sheet EINM-1 July 13, 1995)

Engine Limits.

Static, Standard Sea level		
Takeoff (5 min)	lb	3,700
Maximum Continuous	lb	3,700

Maximum normal operating rotor speeds
Low pressure rotor (N1) RPM 21,021 percent 100.1%
High pressure rotor (N2) RPM 31,485 percent 101%

Transient Conditions*	5 Seconds
Low pressure rotor (N1)	100.5%
High pressure rotor (N2)	102.5

**(See NOTE 7)*

Interstage turbine temperature (ITT):

During starting	991ºC (1,815ºF)
Takeoff (5 minutes)	1013ºC (1,855ºF)
Maximum Continuous	991ºC (1,815ºF)

Oil temperature at fan gearbox inlet:

Maximum (sea level to 30,000 ft)	127ºC (261ºF)
Maximum (above 30,000 ft)	140ºC (284ºF)
Maximum (2 minutes transient)	149ºC (300ºF)
Minimum Continuous	40ºC (104ºF)

Fuel Pressure
Minimum fuel pressure warning, psig 4.5

Oil pressure limits:

At idle, psig	50 to 80
Takeoff & maximum continuous, psig	65 to 80

APU (basic). Unchanged. Included as basic equipment on serial number 253 and subsequent.

Airspeed Limits (IAS). Unchanged

C.G. Range. (Gear Extended)

Weight (lb)	Forward Limit (% MAC)	Aft Limit (% MAC)
39,700	22.96	32
30,179	14	32
18,959	14	32

After incorporation of Falcon 50 Service Bulletin Number 161, C.G. Range is modified as follows:

Weight (lb)	Forward Limit (% MAC)	Aft Limit (% MAC)
40,785	23.3	29.57
40,300	22.99	32
30,618	14	32
18,959	14	32

(Gear Extended)

Datum. Unchanged

Mean Aerodynamic Chord. Unchanged

Leveling Means. Unchanged

Weight Limitations.

Maximum Weights

Maximum ramp	39,700 lb.
Maximum takeoff (brake release)	39,700 lb.
Maximum landing	35,715 lb.(unchanged)
Maximum zero fuel	25,570 lb.(unchanged)
Minimum weight	18,959 lb.(unchanged)

Weight Limitation (cont'd)

After incorporation of Falcon 50 Service Bulletin Number 161, weight limitations are modified as follows:

Maximum ramp	40,785 lb.(unchanged)

Maximum takeoff (brake release)	40,785 lb.(unchanged)
Maximum landing	35,715 lb. (unchanged)
Maximum zero fuel	25,570 lb. (unchanged)
Minimum weight	18,959 lb. (unchanged)

Maximum Passengers. Unchanged, except

Ferry kit definition and installation (0 passenger provisions) is covered by Dassault modification M2133

Crew Seats. Unchanged

Maximum Baggage. Unchanged

Fuel Capacity. Unchanged

Oil Capacity. Usable, 1.01 US Gallons
(Each Engine) Unusable, 0.31 US Gallons

Maximum Operating Altitude. Unchanged

Control Surface Movements. Unchanged ,except

Rudder (M1200): Right 29º Left 29º

II. Model MYSTERE-FALCON 900 (Transport Category Airplane), approved March 21, 1986.

(a) Basic Model Definition

Engines. 3 engines - Allied Signal Engines, Model TFE 731-5AR-1C (See NOTE 3b).

MF900 aircraft incorporating M.1200 (Service Bulletin F900-100) are equipped with 3 engines Allied Signal Engines, Model TFE 731-5BR-1C.

Engine Limits.

	A/C without SB100	A/C with SB100
Static, Standard Sea Level Takeoff (5 min.)	lb 4,500	lb 4,750
Maximum continuous	lb 4,500	lb 4,634
Maximum normal operating rotor speeds		
Low pressure rotor (N1) RPM		21,000 RPM 100%
High pressure rotor (N2) RPM	29,989 RPM 101%	30,540 RPM 100.8%
Transient Conditions*	5 seconds	
Low pressure rotor (N1)		100% to 103%
High pressure rotor (N2)	101% to 103%	100.8% to 103%

* (See NOTE 7)

Interstage turbine temperature (ITT):

During starting	952ºC	(1,746ºF)	978ºC	(1,793ºF)
Starting (10 sec. transient)	974ºC	(1,785ºF)*	996ºC	(1,825ºF)
Takeoff (5 minutes)	974ºC	(1,785ºF)	996ºC	(1,825ºF)
(5 sec. transient)	984ºC	(1,803ºF)	1006ºC	(1,842ºF)
(2 sec. transient)	994ºC	(1,821ºF)	1016ºC	(1,861ºF)
Maximum continuous	924ºC	(1,696ºF)	968ºC	(1,775ºF)

* (See NOTE 7)

Oil temperature at fan gearbox inlet:

Maximum (sea level to 30,000 ft)	127ºC	(260ºF)
Maximum (Above 30,000 ft)	140ºC	(284ºF)
Maximum transient (2 minutes)	149ºC	(300ºF)
Minimum Continuous	30ºC	(86ºF)

Fuel pressure:
Minimum fuel pressure warning psig 4.5
Oil pressure limits:
At idle, psig psig 25 to 46
Takeoff and maximum continuous psig 38 to 46

APU.

Allied Signal Engines Model GTCP 36-150(F)
Limitation - Not operable in flight

	RATED	MAX. ALLOWABLE
EGT	720ºC	973ºC
RPM	102%	110%

Fuel : See NOTE 4, and Airplane Flight Manual
Oil : See NOTE 5b.

Airspeed Limits.

Unless otherwise indicated, speeds are indicated airspeeds.

V_{MO} (Maximum Operating)
350 kts at sea level; 370 kts at 10,000 ft., with straight line variation between those points.
370 kts from 10,000 ft to 25,000 ft.

M_{MO} (Maximum Operating)
- Weight below 35,000 lbs.
M = 0.87 from 25,000 ft. to 38,000 ft.
0.87 at 38,000 ft. to 0.84 at 42,000 ft., with straight line variation between other points.
0.84 above 42,000 ft.

- Weight above 35,000 lbs.
M = 0.87 from 25,000 ft. to 33,000 ft.
0.87 at 33,000 ft. to 0.84 at 37,000 ft. with straight line variations between those points.
0.84 above 37,000 ft.

	Aircraft Without SB100	Aircraft With SB100
V_A (Maneuvering)	228 kts	
V_{FE} (Slat and Flap Speeds)		
Flaps 7º + Slats	200 kts	
Flaps 20º + Slats	190 kts	
Flaps 40º + Slats	180 kts	
V_{LO} (Landing Gear Operation)	190 kts	
M_{LO}	0.70	
V_{LE} (Landing Gear Extended)	245 kts	
M_{LE}	0.75	
Windshield Wiper Operation	215 kts	
Cockpit Window Opening	215 kts	
V_{MC} (Minimum Control Speed)		
In flight	83 kts (CAS)	85.3 kts (CAS)
On ground	83.6 kts (CAS)	86 kts (CAS)

C.G. Range. (Gear Extended)

Weight (lb)	Forward Limit (% MAC)	Aft
45,500	14	31
42,000	14	31
20,700	14	31

For aircraft incorporating Modification 1196, C.G. range is modified as follows:

Weight (lb)	Forward Limit (% MAC)	Aft Limit (% MAC)
20,700	14	31
42,000	14	31
46,500	14	31

Gear retraction has negligible effect on C.G. Range.

Datum.

Datum is 25% of mean aerodynamic chord (MAC) which is marked on aircraft and coincides with fuselage Station (FS) + 420.43 inches. (Fuselage Station + 0 is the forward end of the aircraft nose cone).
Datum is marked on fuselage of A/C S/N's 1 through 11 only.

Mean Aerodynamic Chord.

Length	113.69 in.
Zero % MAC is at FS	+ 392 in.

Leveling Means.

Standard bubble-type level to be installed on the passengers seats tracks.

Weight Limitations.

Maximum Weights

Maximum ramp	45,700 lb
Maximum takeoff (brake release)	45,500 lb
Maximum landing	42,000 lb
Maximum zero fuel	28,220 lb
Minimum weight	20,700 lb

For aircraft incorporating DASSAULT Modification 1196, Weight limitations are modified as follows:

Maximum ramp	46,700 lb
Maximum takeoff	46,500 lb
Maximum landing	42,000 lb
Maximum zero fuel	30,865 lb
Minimum weight	20,700 lb

Maximum Passengers. (See Note 9)

19 maximum - limited by emergency exit requirement of FAR 25.807(c) (AMD memo DTM 20164 identifies approved cabin interior for 12 passenger seats).

Ferry flight configuration (0 passenger provisions) is defined by Dassault modification M3115

Crew Seats.

The optional third crew seat may be occupied for takeoff and landing.

Maximum Baggage.

2,866 lb in rear baggage compartment.

Fuel Capacity.

Nominal - (refer to weight and balance report of each individual airplane for exact capacity).

Usable Fuel	US Gallons	Pounds	Arm (in)
wing and center wing, LH	904	6,058	-12.1
wing and center wing, RH	904	6,058	-12.1
Forward and aft fuselage	1,037	6,949	-28.2
TOTAL USABLE FUEL	2,845	19,065	
TOTAL FUEL	2,863	19,184	

Pressure Fueling: 50 psi maximum.

Oil Capacity. (Each Engine)

Usable, 0.375 US Gallons
Unusable, 2.86 US Gallons (drainable, and trapped oil) side engine arm + 136.7 in., center engine arm + 272.5 in.

Maximum Operating Altitude.

51,000 ft.

Control Surface Movements. (Control Stops)

Elevator:	down	16º	up	20º
Rudder:	right	29º	left	29º
Aileron:	up	25º20'	down	24º50'
Flaps:	down	40º		
Airbrakes:	up	68º		
Wing Slats:	internal	20º		
	external	30º		

Stabilizer:

Electrical stops:	Nose down	2º	Nose up	10º	
Mechanical stops:	Nose down (max)	2º30'	Nose up (max)	10º30'	
Structural stops:	Nose down (min)	2º40'	Nose up (min)	11º	

Rigging tolerances are included in Maintenance Manual.

(b) Falcon 900C Definition

The 900C designation for the Mystere-Falcon 900 does not correspond to a model designation. It is only a commercial designation for Mystere-Falcon 900 airplanes on which one of the following major modifications are incorporated:

M1975: Avionics upgrade - production
M2695: Avionics upgrade – retrofit

The M1975 and M2695 modifications consists of a complete upgrade of the basic Mystere-Falcon 900 avionics, by installation of a variant of the Honeywell Primus 2000 suite. M1975 is basic on all Mystere-Falcon 900 aircraft produced from serial number 179 and subsequent.

All parameters listed in the preceding sub-section (a) for the basic Mystere-Falcon 900 remain valid for airplanes which incorporate M1975 or M2695.

III. Model FALCON 900EX (Transport Category Airplane), approved July 19, 1996.

(a) Basic Model Definition

The Falcon 900EX is defined by Dassault modification M3000 and differs from the Mystere-Falcon 900 in the following major respects: (i) Allied Signal Engines TFE 731-60 replace TFE 731-5AR-1C or TFE 731-5BR-1C engines; (ii) A new aft fuel tank is added, and the forward central fuel tank is increased in capacity; (iii) The instrument panel is changed by the installation of a new avionics suite, including Honeywell Primus 2000 five tube EFIS including autothrottle; (iv) bleed air system is modified by the addition of a Bleed Air System Computer (BASC) and modification of HP flow control; (v) relocation of electrical system components, and use of Falcon 2000 type electrical wires; (vi) an increase in maximum weights.

Engines. 3 engines - Allied Signal Engines TFE 731-60-1C (See Note 3b).

Engine Limits.

Static, Standard Sea Level

Takeoff (5 min.)	lb 5,000	
Maximum Continuous	lb 4,525	

Maximum normal operating rotor speeds:

Low pressure rotor (N1)	rpm 21,000	percent 100%
High pressure rotor (N2)	rpm 31,485	percent 100%

Transient conditions*: 1 second

Low pressure rotor (N1)	100%	to	100.5%
High pressure rotor (N2)	100%	to	101.5%

* (See Note 7)

Interstage Turbine Temperature (ITT):

During starting	994°C	(1,821°F)
Takeoff (5 minutes)	1022°C	(1,872°F)
(10 sec. Transient*)	1032°C	(1,890°F)
Maximum Continuous	991°C	(1,816°F)

* (See Note 7)

Oil temperature at fan gearbox inlet:

Maximum:	- Sea level to 30,000 ft	127°C	(260°F)
	- Above 30,000 ft	140°C	(284°F)
Maximum transient (2 minutes)		149°C	(300°F)
Minimum Continuous		30°C	(86°F)

Fuel pressure:

Minimum fuel pressure warning	psig 4.5

Oil pressure limits:

At idle	psig 50 to 80
Takeoff and maximum continuous	psig 65 to 80
Transient (3 minutes maximum)	psig 100

APU. Allied Signal Engines GTCP 36-150(F)

Limitation - Not operable in flight

	Rated	Max.allowable
EGT	720°C	973°C
RPM	102%	110%

Fuel: See NOTE 4, and Airplane Flight Manual

Oil: See NOTE 5b

Airspeed Limits. Unless otherwise indicated, speeds are indicated airspeeds.

V_{MO} (Maximum operating)

Sea level	350 kt
10,000 ft	370 kt (linear variation from 0 to 10,000 ft)

From 10,000 to 25,000 ft	370 kt
M_{MO} (Weight lower than 35,000 lb)	
From 25,000 to 38,000 ft	Mach 0.87
From 38,000 to 42,000 ft	Linear Variation from Mach 0.87 to 0.84
Above 42,000 ft	Mach 0.84
M_{MO} (Weight above 35,000 lb)	
From 25,000 to 33,000 ft	Mach 0.87
From 33,000 to 37,000 ft	Linear Variation from Mach 0.87 to 0.84
Above 37,000 ft	Mach 0.84
V_A (Maneuvering)	228 kt
V_{FE} (Slat and flaps speeds)	
flaps 7° + slats	200 kt
flaps 20° + slats	190 kt
flaps 40° + slats	180 kt
Landing gear operation	
V_{LO}	190 kt
M_{LO}	Mach 0.70
Landing gear extended	
V_{LE}	245 kt
M_{LE}	Mach 0.75
Windshield wiper operation	215 kt
Cockpit window opening	215 kt
Minimum control speed	
In flight: V_{MCA}	85.2 kt (CAS)
On ground: V_{MCG}	88.9 kt (CAS)

Weight Limits & CG Range.

Without M3020 (SB N° 1)	Weight		Forward CG limit	Rear CG limit
	kg	lb	% CMA	% CMA
Minimum weight	9 390	20 700	14	31
Maximum zero fuel weight	14 000	30 864	14	31
Maximum landing weight	19 051	42 000	14	31
Maximum weight for 31% rear limit	21 228	46 800	14	31
Maximum takeoff weight	21 908	48 300	14	24,20
Maximum ramp weight	22 000	48 500	14	23,45

With M3020 (SB N° 1)	Weight		Forward CG limit	Rear CG limit
	kg	lb	% CMA	% CMA
Minimum weight	9 390	20 700	13	31
Maximum zero fuel weight	14 000	30 864	13	31
Maximum landing weight	20 185	44 500	13	31
Maximum weight for 31% rear limit	21 228	46 800	13	31
Maximum takeoff weight	22 226	49 000	13	21,35
Maximum ramp weight	22 317	49 200	13	20,50

Datum.

Datum is 25% of mean aerodynamic chord (MAC) and coincides with fuselage station +420.43 inches (Fuselage station +0 is the forward end of the aircraft nose cone).

13% MAC is 13.66 inches forward of the reference
14% MAC is 12.52 inches forward of the reference
31% MAC is 6.81 inches rear of the reference.

Mean Aerodynamic Chord. Length 113.69 inches
Zero % MAC is at FS + 392 inches

Leveling Means. Standard bubble type level to be installed on the passengers seats tracks.

Maximum Passengers. 19 maximum.
(See Note 9)

Ferry flight configuration (0 passenger provisions) is defined by Dassault modification M3116

Crew Seats. The optional third crew seat may be occupied for takeoff and landing.

Maximum Baggage. 2,866 lb in rear baggage compartment.

Fuel Capacity. Nominal - (refer to weight and balance report of each individual airplane for exact capacity).

Usable fuel per engine*	Liters	kg*	US gallons	lb*
Engine 1				
Left wing and left front tank, left center tank and left feeder	3 966	3 185	1 048	7 021
Engine 2				
Front tank, rear tank, rear compartment tank and center feeder	3 857	3 097	1 019	6 828
Engine 3				
Right wing and right front tank, right center tank and right feeder	3 941	3 165	1 041	6 977
Usable – total	11 764	9 446	3 109	20 825
Fuel – total	11 854	9 519	3 133	20 986

* Fuel volumic mass: 0,803 kg/l

Pressure fueling 50 psi max.

Oil Capacity. (Each engine)
Usable 1.01 U.S. Gallons (3.81 - 4.05 quarts)
Total 1.823 U.S. Gallons (6,91 - 7,3 quarts)
Unusable 0.317 U.S. Gallons (1,21 - 1,25 quart)

Maximum Operating Altitude. 51,000 ft.

Control Surface Movements. (Control stops)
Elevator - up: 20°
Elevator - down: 16°
Rudder - right: 29°
Rudder - left: 29°
Aileron - up: 25°20
Ailerons - down: 24°50
Flaps - down: 40°
Slats - internal: 20°
Slats - external: 30°
Airbrakes - up 68°

Stabilizer	Nose down	Nose up
Electrical stops	2°	10°
Mechanical stops (maximum)	2°30	10°30
Structural stops (minimum)	2°40	11°

Rigging tolerances are included in Maintenance Manual.

(b) Falcon 900EX EASy Definition (Approved November 14, 2003)

EASy designation for Falcon 900EX does not correspond to a model designation. This is only a commercial designation for airplanes on which a Major modification number M3083 has been embodied.

Major Change Modification number M3083 to the Falcon 900EX 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.

M3083 is basic on all Falcon 900EX aircraft starting with serial number 97 and then continuing with serial number 120 through 600.

All parameters listed in the preceding sub-section (a) for the basic Falcon 900EX remain valid for airplanes which incorporate M3083.

(c) Falcon 900DX Definition (Approved November 3, 2005)

The DX definition of the Falcon 900EX does not correspond to a model designation. The Falcon 900DX is only a commercial desgination for Falcon 900EX airplanes on which the following modifications are installed at production:

Modification number	Title	Modification number	Title
M3083 + M3876	EASy Step 3 Configuration	M4000	Definition of F900DX
M3555	Rear Compartment mod	M3755	Main Battery Relocation
M5047	Feeder Routing in Rear Comp.	M5012	Fastener Change in Longitudinal Beams
M5046	FQMC Software Update	M3987	Electronic Checklist for 900DX

M3083, M3876, M4000, M3555, M3755, M5047, M5012, M5046 and M3987 are basic on all Falcon 900EX aiplanes starting with serial number 601 and subsequent.

All parameters listed in the preceding sub-sections (a and b) for the Falcon 900EX and EASy designation remain valid for airplanes which incorporate M3083, M3876, M4000, M3555, M3755, M5047, M5012, M5046 and M3987, except for the following weight limits and CG changes:

Weight Limits & CG Range for Falcon 900DX, except for s/n 621 and s/n 624 which incorporate M5051 and are the same as the Falcon 900EX:

Falcon 900DX without M5051	Weight		Forward CG limit	Rear CG limit
	kg	lb	% CMA	% CMA
Minimum weight	9 390	20 700	14	31
Maximum zero fuel weight	14 000	30 864	14	31
Maximum landing weight	19 142	42 200	14	31
Maximum weight for 31% rear limit	21 228	46 800	14	31
Maximum takeoff weight	21 183	46 700	14	24,20
Maximum ramp weight	21 273	46 900	14	23,45

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(d) Falcon 900LX Definition (Approved July 15, 2010)

The LX definition of the Falcon 900EX does not correspond to a model designation. The Falcon 900LX is only a commercial designation for the Falcon 900EX on which modifications M5281 and M5535 (winglets) have been installed at production**.**

All parameters listed in the preceding sub-section (b) above for the Falcon 900EX EASy remain valid for airplanes which incorporate M5281 and M5535.

IV. DATA PERTINENT TO ALL MODELS.

Fuel. - Fuels conforming to Allied Signal Engine Company Specifications: (See NOTE 4).

EMS 53111 (Type JET A)
EMS 53112 (Type JET A 1)
EMS 53113 (Type JET B and JP4)
EMS 53116 (Type JP5)

Oil. - Oils conforming to Allied Signal Engine Company Specifications EMS 53110,

Class B, Type 2.

- (See NOTE 5a).

Minimum Crew. 2 - Pilot and co-pilot.

Serial Numbers Eligible. A French "Certificat de Navigabilite pour Exportation" endorsed as note under "Import Requirements" must be submitted for each individual aircraft for which application for US certification is made.

Serial Numbers:

For MYSTERE FALCON 50: Aircraft serial number 1 (s/n 2 See DGAC TCDS 163) through 250, and serial number 252. Serial number 251, 253 and subsequent are FALCON 50EX definition

For MYSTERE FALCON 900: Aircraft serial number 1 (s/n 3 See DGAC TCDS 163) and Followings. Serial number 179 and subsequent include M1975 as standard (F900C definition).

For FALCON 900EX: Aircraft serial number 1 through 119 except 97. Serial numbers 97, 120 through 600 include M3083 as standard (F900EX EASy definition). Aircraft serial number 601 and subsequent include M3083, M3876, M4000, M3555, M3755, M5047, M5012, M5046 and M3987 as standard (F900DX definition). Aircraft serial number 240 and subsequent include M5281 and M5535 as standard (F900LX definition).

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 MYSTERE - FALCON 50 (basic model):

FAR 21.29; FAR Part 25, dated February 1st, 1965, including amendments No. 25-1 through 25-34 and,
Para 25.255 of amendment 25-42
Para 25.979 (d) and (e) as amended per amendment 25-38
Para 25.1013 (b)(1) as amended per amendment 25-36
Para 25.1351 (d) as amended per amendment 25-41
Para 25.1353 (c)(6) as amended per amendment 25-42
FAA Special Conditions No. 25-86-EU-24 dated March 6, 1979
Special Condition No. 25-712-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.

FAR Part 36, through amendment 36-9

SFAR 27, through amendment SFAR 27-1 (fuel venting)

Reference date of application for Type Certificate: 14 November 1973.

(b) For MYSTERE - FALCON 50 airplanes incorporating Dassault modifications (Falcon 50EX definition):

M1200: Increase of rudder control authority

M1810: new engines - assembly line configuration - TFE 731-40
M1890: New Avionics
M1939: new engine control EIED
M1940: Bleed Air System Computer
Or associated retrofit modifications:
M2017: new engines – retrofit TFE 731-40-1C
M1924: new avionics - retrofit

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

Unchanged from basic Mystere-Falcon 50

(2) For those parts of the airplane that are changed or are affected by the modifications M1200, M1810, M1890, M1939, M1940, M2017, M1924: The certification basis includes, in addition to the certification basis of record indicated above in (b)(1), the following sections as amended by the indicated amendments:

Section	Amend.	Title	Section	Amend.	Title
25.2	25-72	Special retroactive req'mts	25.1143	25-57	Engine controls
25.207	25-42	Stall warning	25.1145	25-40	Ignition switches
25.305	25-77	Strength and deformation	25.1163	25.57	Powerplant accessories
25.307	25-54	Proof of structure	25.1165	25-72	Ignition systems
25.331	25-72	Maneuver and gust loads	25.1181	25-72	Fire zones
25.341	25-72	Gust loads	25.1183	25-57	Flammable fluid carrying components
25.343	25-72	Fuel and oil loads	25.1195	25-46	Fire extinguishing systems
25.345	25-72	High lift devices	25.1197	25-40	Fire extinguishing agents
25.351	25-72	Yawing conditions	25.1303	25-38	Flight and navigation instruments
25.361	25-72	Engine torque	25.1305	25-36	Powerplant instruments
			25.1307	25-72	Miscellaneous equipment
25.571	25-72	Damage tolerance	24.1309	25-41	Equipment, systems and installations
			25.1316	25-80	Lightning protection
25.603	25-46	Materials	25.1321	25-41	Instruments arrangement
25.605	25-46	Fabrication methods	25.1322	25-38	Warning, caution and advisory lights
25.613	25-72	Material strength properties	25.1323	25-57	Airspeed indicating system
25.693	25-72	Joints	25.1325	25-41	Static pressure systems
25.729	25-75	Retracting mechanism	25.1326	25-43	Pitot heating indicating systems
25.773	25-72	Pilot Compartment view	25.1329	25-46	Automatic pilot system
25.777	25-46	Cockpit controls	25.1331	25-41	Instruments using a power supply
25.779	25-72	Motion and effect of cockpit controls	25.1333	25-41	Instrument systems
25.781	25-72	Cockpit control knob shape	25.1335	25-41	Flight director systems
25.807	25-72	Passenger emergency exits	25.1337	25-40	Powerplant instruments
			25.1381	25-72	Instrument lights
25.831(e)	25-41	Ventilation	25.1438	25-41	Pressurization systems
25.863	25-46	Flammable fluid fire protect.	25.1501	25-42	Operating limitations
25.869	25-72	Fire protection: systems	25.1521	25-72	Powerplant limitations
25.901	25-40	Powerplant installation	25.1529	25-54	Instructions for continued airworthiness
25.939	25-40	Engine operating characteristics	25.1543	25-72	Instrument markings
25.943	25-40	Negative acceleration	25.1551	25-72	Oil quantity indication
25.1013	25-72	Oil tanks	25.1557	25-72	Miscellaneous markings
25.1015	25-36	Oil tank tests	25.1581	25-72	Flight manual
25.1019	25-57	Oil strainer or filter	25.1583	25-72	Operating limitations
25.1021	25-57	Oil system drains	25.1585	25-46	Operating procedures
25.1041	25-38	Cooling - general			
25.1091	25-57*	Air induction			

25.1121	25-40	Exhaust system - general	

* NOTE: applicable for nacelles mounted on the fuselage sides

2. 14 CFR Part 36, effective December 1, 1969, as amended by Amendments 36-1 through 36-20.
3. 14 CFR Part 34, original issue.

4. Special Condition No. 25-ANM-115 HIRF
   Special Condition No. 25-712-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. 6451 for 25.571(e)(1), Amendment 25-72, Bird Strike Speed.
6. Equivalent safety findings for the following requirements:
   N2 Digital Only Indication (refer to Issue Paper P-6)
7. Compliance will be shown to the following optional requirements:
   - Ditching: § 25.801 Amendment 25-72
   - Ice Protection : § 25.1419 Amendment 25-72
   Reference date of application for design change is September 19, 1994.

(c) For the MYSTERE - FALCON 900:
- FAR Part 25, Amendment 25-1 through 25-56, except for the following sections which are complied with as amended through the noted Amendments.

25.107 - Amdt 25-38	- Take-off speeds
25.109 - Amdt 25-34	- Accelerate-stop distance
25.111 - Amdt 25-34	- Take-off path
25.149 - Amdt 25-34	- Minimum control speed
25.629 - Amdt 25-45	- Flutter, deformation and fail safe criteria
25.933 - Amdt 25-38	- Reversing systems
25.997 - Amdt 25-34	- Fuel strainer or filter
25.1019 - Amdt 25-34	- Oil strainer or filter
25.1093 - Amdt 25-34	- Induction system deicing and anti-icing provisions
25.1141 - Amdt 25-34	- Powerplant controls - General
25.1167 - Amdt 25-34	- Accessory gearboxes
25.1305 – Amdt 25-34	- Powerplant instruments

- Special condition SC 25-ANM-8 High Altitude Operation
- Special Condition No. 25-712-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.

- SFAR 27, Amendments 27.1 through 27.5. (Fuel Venting)

- FAR Part 36, Amendments 36.1 through 36.12.

- Equivalent safety findings exist with respect to the following regulations:
  FAR Part 25.811(e)(3) Type III Exit Handle Illumination
  FAR Part 25.903(b) Engine Isolation

- Advisory circular 120.29 change 3 criteria for approving Category I and Category II landing minima for FAR 121 operators.

Compliance has been shown the following optional requirements.

DITCHING; FAR 25.801 – Amdt 25-72
(overwater operation may be approved when the aircraft is equipped and installation approved to FAR 25.801).

ICE PROTECTION; FAR 25.1419 – Amdt 25-72

Reference date of application for Amendment to Type Certificate is Febuary 12, 1982

(d) For Mystere-Falcon 900 airplanes incorporating Dassault modifications M1975 or M2695 (Falcon 900C definition):

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

Unchanged from basic Mystere-Falcon 900 certification basis

(2) For those parts of the airplane that are changed or are affected by the modifications M1975 or M2695, the certification basis includes, in addition to the certification basis of record indicated above in (d)(1), the following sections as amended by the indicated amendments:

- 14 CFR part 25, including Amendments 25-1 through 25-91, except for sections 25.1305(c)(8) and 25.1305(d)(3), which are complied with as amended through Amendments 25-1 through 25-34.
- Special Condition 25-ANM-115 High Intensity Radiated Fields (HIRF)
- Special Condition No. 25-712-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.

- An equivalent level of safety finding was established with respect to the following regulation:
  Section 25.1549 Digital only display of engine high pressure rotor speed (issue paper P-1)
- For precision approaches and landings, the applicable technical requirements are complemented by FAA advisory circulars AC 120-29 and AC 120-28C.
- For the TCAS, the applicable technical requirements are complemented by FAA advisory circular AC 20-131A.

Reference date of application for design change is February 8, 1998.

(e) For the FALCON 900EX:

1. (a) For parts of the airplane not changed or not affected by the modification M3000 (Falcon 900EX definition):

14 CFR Part 25, effective February 1, 1965, including amendments 25-1through 25-56, except for the following sections which are complied with as amended through the noted Amendments

25.629 Amdt. 25-45	Flutter, deformation and fail safe criteria
25.997 Amdt. 25-36	Fuel strainer or filter
25.1141 Amdt. 25-40	Powerplant controls - General

(b) For those parts of the airplane that are changed or are affected by the modification M3000:

14 CFR Part 25, effective February 1, 1965, including amendments 25-1 through 25-77, except for the following sections which are complied with as amended through the indicated Amendments:

25.109	Amdt. 25-0	Accelerate-stop distance
25.933	Amdt 25-38	Reversing system
25.1093	Amdt 25-0	Air intake system de-icing and anti-icing provisions
25.1316	Amdt. 25-80	Lightning Protection

2. 14 CFR Part 36 , effective December 1, 1969, as amended by Amendments 36-1 through 36-20.

3. 14 CFR Part 34, original issue.

4. Special Condition No. 25-ANM-8 High Altitude Operation
Special Condition No. 25-ANM-115 HIRF

Special Condition No. 25-712-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. 6451 for 25.571(e)(1), Amendment 25-72, Bird Strike Speed.

6. Equivalent safety findings for the following requirements:
Section 25.1549 N2 Digital Only Indication (refer to Issue Paper P-6)

7. Compliance is shown to the following optional requirements:
- Ditching: § 25.801 Amendment 25-72
- Ice Protection : § 25.1419 Amendment 25-72

8. Miscellaneous
- For precision approaches and landings, the applicable technical requirements are complemented by FAA Advisory Circular (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 March 3, 1993

(f) For FALCON 900EX airplanes incorporating Dassault modification M3083 (Falcon 900EX EASy definition):

1. (a) For parts of the airplane not changed or not affected by modification M3083:

Unchanged from basic Falcon 900EX certification basis

(b) For those parts of the airplane that are changed or are affected by the modification M3083:

14 CFR Part 25, effective February 1, 1965, including amendments 25-1 through 25-98, except for the following sections which are complied with as amended through the indicated Amendments:

25.1351	Amdt. 25-41	General
25.1353	Amdt. 25-42	Electrical Equipment and Installations
25.1355	Amdt. 25-38	Distribution System

2. 14 CFR Part 36 , effective December 1, 1969, as amended by Amendments 36-1 through 36-20.

3. 14 CFR Part 34, original issue.

4. Special Condition No. 25-ANM-8 High Altitude Operation
Special Condition No. 25-ANM-115 HIRF
Special Condition No. 25-712-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. 6451 for 25.571(e)(1), Amendment 25-72, Bird Strike Speed.

6. Equivalent safety findings for the following requirements:
Section 25.1549 N2 Digital Only Indication (refer to Issue Paper P-6)
Section 25.813(c)(2) Emergency Exit Access (documented in TAD ELOS Memo AT10291IB-T-C-101)
Section 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)

7. Compliance is shown to the following optional requirements:
- Ditching: § 25.801 Amendment 25-72
- Ice Protection : § 25.1419 Amendment 25-72

8. Miscellaneous
- For precision approaches and landings, the applicable technical requirements are complemented by FAA Advisory Circular (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 design change M3083 is November 8, 1999.

(g) For Falcon 900EX airplanes incorporating Dassault modification M4000 (F900DX): See (f) above.

(h) For Falcon 900EX airplanes incorporating Dassault modification M5281 (F900LX):

1. (a) For parts of the airplane not changed or not affected by modification M5281:

Unchanged from basic Falcon 900EX certification basis

(b) For those parts of the airplane that are changed or are affected by the modification M5281:

Based on the application date of September 14, 2006, for Modification M5281, under the provisions of Federal Aviation Regulation 14 CFR 21.101, the applicable type certification standards for the modification to the Model Falcon 900EX series are as follows:

14 CFR Part 25, effective February 1, 1965, including amendments 25-1 through 25-119, except for the following sections which are complied with as amended through the indicated Amendments:

- 14 CFR part 25 paragraphs at Amendment 34

  25.1093 and 25.1141 (except (a) and (f))

- 14 CFR part 25 paragraphs at Amendment 38

  25.933

- 14 CFR part 25 paragraphs at Amendment 45

  25.629

- 14 CFR part 25 paragraphs at Amendment 56

  25.361 to 25.367, 25.399 to 25.409, 25.495 to 25.511, 25.561, 25.562, 25.563, 25.621, 25.655, 25.657, 25.675, 25.679 to 25.697, 25.701, 25.721, 25.723, 25.729 (except (e)), 25.731 to 25.745, 25.772, 25.773(b)(c), 25.775, 25.779, 25.783(except (e)), 25.785, 25.787, 25.793, 25.801 to 25.811, 25.812 (except (f)), 25.813, to 25.833, 25.841 (except (b)(5)(6)),

25.843 to 25.859, 25.863 (except (c)), 25.871, 25.875, 25.901 (except (c)), 25.903 (except (d)(2)), 25.905 to 25.929, 25.934, 25.937, 25,939, 25.941 to 25.961, 25.963 (except (e)), 25.965 to 25.994, 25.999 to 25.1017, 25.1021 to 25.1027, 25.1041 (except (f)), 25.1043 to 25.1091, 25.1103 to 25.1127, 25.1143, 25.1145 (c), 25.1149 to 25.1165, 25.1181 to 25.1201, 25.1207, 25.1337 (except (b)(d)), 25.1351, 25.1353, 25.1362, 25.1363, 25.1383, 25.1403 to 25.1415, 25.1421, 25.1433, 25.1435 (except (a)(2)), 25.1436 to 25.1455, 25.1461, 25.1503 to 25.1521, 25.1525, 15.1527, 25.1531, 25.1533, 25.1557, 25.1561, 25.1583, and 25.1587

- 14 CFR part 25 paragraphs at Amendment 72

  25.1419

- 14 CFR part 25 paragraphs at Amendment 77

  25.145, 25.149, 25.201, 25.203, 25.233, 25.253, 25.901 (c), 25.963 (e), 25.997, 25.1019, 25.1167

- 14 CFR part 25 paragraphs at Amendment 98

  25.1 to 25.33; 25.147; 25.171; 25.173; 25.175; 25.177; 25.181; 25.207; 25.231; 25.235; 25.237; 25.671; 25.672; 25.677; 25.699; 25.703; 25.729 (f); 25.771; 25.773 (a) (d); 25.783 (e); 25.789; 25.791; 25.812 (f); 25.841 (b)(5) (b)(6); 25.863 (c); 25.869; 25.899; 25.903 (d)(2); 25.1141 (a) (f); 25.1145 (a) (b); 25.1203; 25.1301; 25.1303; 25.1305; 25.1307; 25.1309;25.1321; 25.1322; 25.1323; 25.1325; 25.1326; 25.1327; 25.1329; 25.1331; 25.1333; 25.1335; 25.1337 (b) (d); 25.1351; 25.1353; 25.1355; 25.1357; 25.1360; 25.1381; 25.1435 (a)(2); 25.1457; 25.1459; 25.1501; 25.1523; 25.1529; 25.1541; 25.1543; 25.1545; 25.1547; 25.1549; 25.1551; 25.1553; 25.1555; 25.1563; 25.1585

- 14 CFR part 25 paragraphs at Amendment 144

  25.773(e) : « Pilot compartment view » For FalconEye System Installations.

2. 14 CFR Part 36 , effective December 1, 1969, as amended by Amendments 36-1 through 36-28.

3. 14 CFR Part 34, original issue.

4. Special Condition No. 25-ANM-8 High Altitude Operation
   Special Condition No. 25-ANM-115 HIRF
   Special Condition No. 25-712-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 Exemptions: Existing exemptions apply and No. 109332 for 25.629(d)(9) Amdt 25-45 and 25.671(c)(2) Amdt 25-56.

6. Equivalent safety findings for the following requirements:
   Section 25.1419 – Ice Protection (documented in TAD ELOS Memo TD0710IB-T-S-101)

Reference date of application for design change M5281 is September 14, 2006.

(i) For FALCON 900EX series airplanes incorporating M-OPT0501 (Starlink Antenna Provisions:

See (e),(f), (g), and (h) 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 AT20750IB-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 163. The FAA validated this product under U.S. Type Certificate Number A46EU. 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 Mystere-Falcon 50, the type definition is in Note DTM 800, Revision G

For the Mystere-Falcon 900, the type definition is in Note DTM 20.078, Revision C

For the Falcon 900EX, the type definition is in Modification M3000, Revision B3 of Mystere-Falcon 900

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 Generale de l'Aviation Civile (DGAC) of France are contained:

For the MYSTERE - FALCON 50, in the AMD-BA memos No. DTM 380075/91 and DTM 4510/78

For the MYSTERE - FALCON 900, in the AMD-BA memos No. DTM 5100/84 and DTM 5257/84

For the FALCON 900EX, in the Dassault Aviation memo No. DTM 35-3287/95

In addition, the following is required:

(a) For the MYSTERE - FALCON 50:
DGAC approved FALCON 50 Airplane Flight Manual, Document DTM-813 approved September 9, 1988, as of revision 24 and subsequent -
It supersedes DTM 884 which must no longer be used.

For the MYSTERE - FALCON 50, s/n 253 and subsequent (Falcon 50 EX definition): DGAC approved FALCON 50 Airplane Flight Manual, Document DTM-813EX revision 1 approved December 20, 1996

For the MYSTERE - FALCON 900:
DGAC approved FALCON 900 Airplane Flight Manual, Document DTM 20103 approved June 6, 1986.

For the Mystere-Falcon 900, s/n 179 and subsequent (F900C definition):
DGAC approved Falcon 900 Airplane Flight Manual, Document FM900C approved 15 June 1999

For the FALCON 900EX s/n 1 through 119 except 97:
DGAC approved Airplane Flight Manual, Document DTM 561 Revision 1, approved July 16, 1996.

For the FALCON 900EX serial numbers 97, 120 and subsequent (F900EX EASy definition):
DGAC approved Airplane Flight Manual, Document DGT84972 approved November 13, 2003.

(b) Nose wheel must be equipped with a chined tire.

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 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 list of equipment in certified empty weight and loading instructions must be provided for each aircraft at delivery.

(b) The following must be included in the airplane empty weight:

(1)For the MYSTERE - FALCON 50:
The total unusable fuel (92.6 lb) listed as follows, plus unusable oil (54 lb), plus hydraulic fluid (106 lb at + 93.3 in.)

UNUSABLE FUEL	US GALLONS	POUNDS	ARM (in)
Drainable:			
Left Wing	0.8	5.3	-7.87
Center Wing	0.5	3.5	-7.87
Right Wing	0.8	5.3	-7.87
Left fuselage	0.7	4.4	+70.87
Center fuselage	0.5	3.5	+70.87
Right fuselage	0.7	4.4	+70.87

UNUSABLE FUEL	US GALLONS	POUNDS	ARM (in)
Trapped Fuel:			
Tanks and fuel lines:	9.8	65.4	+14.77
TOTAL UNUSABLE FUEL	13.8	91.8	

(2) For the MYSTERE - FALCON 900:
The total unusable fuel 119 (lbs.) listed as follows, plus unusable oil 73.6 (lbs.), plus hydraulic fluid (106 lbs. at +79.57 in.).

UNUSABLE FUEL	US GALLONS	POUNDS	ARM (in)
Drainable:			
Wing and center wing, LH	3.03	20.3	-35.33
Wing and center wing, RH	2.34	15.7	-35.33
Forward and aft fuselage	2.30	15.4	+20.20

Trapped Fuel:			
Tanks and fuel lines:	10.20	68.3	-44.13
TOTAL UNUSABLE FUEL	17.86	119.7	

(3) For the FALCON 900EX:
The total unusable fuel (114 lbs, at -21.2 in.), plus the unusable oil (42 lbs), plus hydraulic Fluid (106 lbs. At + 79.57 in.

Unusable fuel per engine	Liters	Kg	US Gallons	lb
Drainable:				
Engine 1 (left circuit)	21.4	17.2	6	38
Engine 2 (center circuit)	19.8	15.9	5	35
Engine 3 (right circuit)	23	18.5	6	41
Non drainable:				
Tanks and pipes	26	21	7	46
Unusable – total	90	73	24	160

(c) The airplane must be loaded in accordance with the Falcon 50 Performance Manual, Section 2, or the Falcon 900 Loading Manual, Loading Instructions, as applicable, and the C.G. 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 50 or FALCON 900 and 900EX Maintenance Manual, and must be replaced as indicated therein.
b. Engine Life Limited parts are listed in FAA-approved Allied Signal Service Bulletin TFE 731 72-3001.
c. Required Maintenance and Inspections to maintain airworthiness based on/involving reliability are presented in DGAC approved Chapter 5.40.00 of the Falcon 50 or Falcon 900 and 900EX Maintenance Manual.

Chapter 5-40 references:
MF50/F50EX : Airworthiness Limitation Section (Chapter 5-40, reference: DGT 113872)
MF900/F900C : Airworthiness Limitation Section (Chapter 5-40, reference: DGT113873)
F900EX : Airworthiness Limitation Section (Chapter 5-40, reference: DGT113874)
F900EX Easy/DX/LX: Airworthiness Limitation Section (Chapter 5-40, reference: DGT113875)

NOTE 4. Fuel Specifications and Additives:

a. For information concerning equivalent fuel specifications see Airplane Flight Manual. If a different type of fuel is used, or a mixture of fuels are used, the engine computer must be adjusted in accordance with the TFE 731-3,or TFE 731-5, or TFE 731-40, or TFE 731-60 Maintenance Manual (as applicable) to adapt the computer to the density of the fuel used in order to preserve both the starting, and the acceleration deceleration characteristics of the engine.
b. ADDITIVES
For the TFE 731 engine, the GTCP 36-100 and GTCP 36-150 auxiliary power unit the following additives limitations are approved:
- Anti-Icing Additive, conforming to AIR 3652 or
- MIL-I-27686D or E, (JP-4/JP-8) or to MIL-I-85470 (JP-5) or equivalent are approved for use in fuel in amounts up to 0.15 percent by volume.
- SOHIO Biobor JF biocide additive, or equivalent, is approved for use in the fuel at a concentration not to exceed 270 PPM -
- Antistatic additive, provided the quantity added does not exceed 1 PPM for SHELL ASA 3 and 3 PPM for STADIS 450.

NOTE 5. Qualified Oils:

a. Allied Signal Turbine Engine Company Service Information Letters give brand names of oils conforming to Specification EMS 53110, Class B, Type 2.
b. Brand names of oils approved for use in the APU are listed in the GTCP 36-100 or GTCP 36-150 Maintenance Manual as applicable.

NOTE 6. For the MYSTERE - FALCON 50,
Installation of the AiResearch Model GTCP 36-100(A) turbine auxiliary power unit is an approved optional installation and may be installed subsequent to airplane delivery in accordance with AMD-BA Service Bulletin No. FALCON 50-0002.

NOTE 7. If these transient limits are exceeded refer to engine Maintenance Manual for corrective action.

NOTE 8. Effective June 19, 1990 the name of AVIONS MARCEL DASSAULT-BREGUET AVIATION changed to DASSAULT AVIATION. The new name will appear as of this date on all documents and nameplates. However, documents bearing the old name remain valid and will be updated when and where necessary.

NOTE 9. The cabin interior arrangements must comply with the FAA certification basis. General specification for cabin interior completions are covered by the document DTM 802-30 for Mystere-Falcon 50 airplanes, and by DTM 20-167 for Mystere-Falcon 900 and Falcon 900EX airplanes. These specifications mainly cover the gust and forced landing load factors.

For the Mystere-Falcon 900 and Falcon 900EX, DGAC France has granted an equivalent safety finding for FAR 25.813(e) to allow cabin interior doors. This equivalent safety finding is not included in the FAA certification basis and is therefore not valid for US registered airplanes.

NOTE 10. The modifications MF50 M2210 (from serial number 263), MF900 M2440 (from serial number 165), F900EX M2458 (from serial number 015) have been approved to operate in "Reduced Vertical Separation Minimun" airspace. Continued airworthiness and operational approval aspects of RVSM must be constructed according to advisory circular 91- RVSM. Aircraft RVSM capability remains valid after further incorporation of any DGAC approved Dassault Aviation Modification.

NOTE 11. 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.

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