European Aviation Safety Agency

EASA

TYPE CERTIFICATE DATA SHEET
EASA.A.062

MF50, MF900, F900EX

Manufacturer:
DASSAULT AVIATION

9 Rond Point Marcel Dassault
75008 PARIS

For models: MF50, MF900, F900EX

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SECTION 1. GENERAL (ALL MODELS)

- **Data Sheet No**: TCDS DGAC 163 replaced by TCDS EASA.A.062
- Airworthiness Category: Large Airplane
- Performance Category: A
- Certifying Authority: EASA
- **Type Certificate Holder:** DASSAULT AVIATION
  9, Rond Point Marcel Dassault
  75008 PARIS – FRANCE
- **ETOPS:** Not applicable

SECTION 2. MYSTERE FALCON 50

2.I General

Aeroplane: .....MYSTERE-FALCON 50 (MF50)

2.II MF50 Certification Basis

- Application Date for EASA Certification: .....November 14th, 1973
- EASA Certification Date (JAA recommendation): .....February 27th, 1979
- EASA Certification Basis:

Federal Aviation Regulations Part 25, Amendments 1 through 34, supplemented by the following sections.
25.979 (d) and (e) of Amendment 38.
25.1013 (b) (1) of Amendment 36.
25.1351 (d) of Amendment 41.
25.1353 (e) (6) of Amendment 42.

- Special Conditions:

Supplementary conditions, Revision 4 of 22 February 1979.
Compliance with FAR Part 25 requirements relative to flight in icing conditions (25.1093 and 25.1419) has been shown.
Compliance with FAR Part 25 requirements relative to ditching (25.801) has been shown.
Compliance with “Arrêté du 16 Novembre 1990” relative to the “ operation of subsonic jet aircraft in order to limit their noise effect ” has been shown. This "Arrêté" is in force in France at the edition date of type Certificate Data Sheet number 163 issue number 10.

- Exemptions: none
- Equivalent Safety Findings: none
- Environmental Standards:
  Chapter III annex 16 of ICAO Convention.

2.III MF50 Technical Characteristics and Operational Limitations

2.III.1 Type Design Definition

The type aircraft is defined in document DTM800, Revision H.

2.III.2 Equipment

AMD-BA documents DTM380075/91 and 4510/78.
Document A320 (DTM2092/78).

2.III.3 Dimensions

Length	18.516 m
Width	18.858 m
Height	6.975 m
Distance between main landing gears	3.98 m

2.III.4 Engines

Model:
GARRETT TURBINE ENGINE COMPANY TFE 731-3-1C (FAA Type Certificate Data Sheet n° E6WE).

Number: 3.

Engine Limits:
- Maximum takeoff static thrust up to 24° C - Sea level condition (5 minutes): 3.700 lbs (1.646 daN).
- Maximum continuous static thrust at 15° C - Sea level conditions: 3.700 lbs (1.646 daN).

Note:
Refer to Airplane Flight Manual for engine operating instructions.(For the MYSTERE-FALCON 50 aircraft, the DGAC approved " Manuel de Vol " are document DTM803 "French version" and "Air Flight Manual" document DTM813 "English version") . In the remainder of this document, only AFM DTM813 will be mentioned.

- Maximum engine operating speed:
  Low pressure rotor (N1) ..... RPM: 21.000 (Percent 101,5)
  Transient (1 minute) ..... 101.5 to 103 %
  Transient (5 seconds) ..... 103 to 105 %

- High pressure rotor (N2) ..... RPM: 29.692 (Percent 100)
  Transient (1 minute)..... 100 to 103 %
  Transient (5 seconds) ..... 103 to 105 %
- Maximum Interstage Turbine Temperature (ITT)
  During starting..... 907°C
  Transient (10 seconds) ..... 927°C
  Takeoff (5 minutes)..... 907°C
  Transient (10 seconds) ..... 939°C
  Maximum continuous..... 885°C
-- Oil pressure limits
  At idle ..... 25 to 46 psig
  Takeoff and maximum continuous..... 38 to 46 psig
  For more information, refer to Airplane Flight Manual.
- Oil temperature limits (at fan gearbox inlet)
  Maximum, from sea level up to 30.000 ft..... 127°C
  Maximum above 30.000 ft..... 140°C
  Maximum transient at any operational altitude (2 minutes) 149°C
  Minimum, continuous operation ..... 30°C
-- Fuel pressure
  Minimum fuel pressure warning ..... 4,5 psig

2.III.5 Auxiliary Power Unit (APU)

Model: ALLIEDSIGNAL / HONEYWELL ENGINES COMPANY - GTCP 36 - 100(A)

APU Limits:
Usable for ground operation only
EGT: Normal operation: 680°C - Maximum: 732°C
RPM: Normal operation: 100% - Maximum: 109%

2.III.6 Fluids (Fuel/Oil/Additives)

- Fuel conforming to specifications:

See AFM DTM813 page 1-10-4

- Fuel additives

See AFM DTM813 page 1-10-6

- Lubricating system conforming to specifications:

See AFM DTM813 page 1-10-7

2.III.7 Fluid capacities

- Fuel tank capacity (nominal)

	Liters	Kg (*)	US gallons	lbs(*)
USUABLE FUEL				
- Left wing	2.117	1.700	559.3	3.748
- Center wing	1.553	1.247	410.2	2.749
- Right wing	2.117	1.700	559.3	3.748
- Left fuselage	793	637	209.5	1.404
- Center fuselage	1.390	1.116	367.2	2.461
- Right fuselage	793	637	209.5	1.404
TOTAL USABLE	**8.763**	**7.037**	**2.315**	**15.514**
UNUSABLE FUEL				
Drainable:				
- Left wing	3	2.4	0.8	5.3
- Center wing	2	1,6	0.5	3.5
- Right wing	3	2.4	0.8	5.3
- Left fuselage	2.5	2	0.7	4.4
- Center fuselage	2	1.6	0.5	3.5
- Right fuselage	2.5	2	0.7	4.4
Trapped: Tanks and lines	37.3	30	9.8	66.2
TOTAL UNUSABLE	**52.3**	**42**	**13.8**	**92.6**
TOTAL FUEL				
- Left engine	2927.5	2351	773.3	5 183
- Center engine	2960	2376.7	782.2	5 240
- Right engine	2927.5	2351	773.3	5 183
TOTAL	**8 815**	**7078.7**	**2328.8**	**15 606**

(*) Fuel density: 0.803 kg/l

- Refer to weight and balance report of each individual airplane for exact capacity
- Refer to NOTE 2 for information on the use of fuel additives.

- Oil capacity

  Engine lubrication system capacity:

LH, center or RH engine	Liters	U.S. GALLONS
Unusable	1.89	0.5
Usable	8.52	2.25

2.III.8 Air Speeds

(Unless otherwise specified, speeds are indicated airspeeds)

VMO	at sea level	350 kt
VMO	straight line variation up to 10.000 ft	370 kt
VMO	from 10,000 ft to 24.000 ft	370 kt
MMO	above 24.000 ft	0.86
VA	maneuvering speed	210 kt
V_{FE}	slats	200 kt
	slats + flaps 20°	190 kt
	slats + flaps 48°	175 kt
V_{LO}	landing gear operation	190 kt
M_{LO}		0.70
V_{LE}	landing gear extended	220 kt
M_{LE}		0.75
	DV window opening speed	180 kt
	windshield wiper operating speed	205 kt
V_{MCA}	minimum control speed in flight	82.5 kt (CAS)
V_{MCG}	minimum control speed on ground	87.5 kt (CAS)

2.III.9 Maximum Operating Altitude

- Without Modification M17:

The Maximum operating altitude for MYSTERE-FALCON 50 aircraft is Flight level 450.

- With Modification M17:

The Maximum operating altitude for MYSTERE-FALCON 50 aircraft modified by incorporation of Modification M17 or AMD-BA Service Bulletin F50-0163 is Flight level 490.

2.III.10 All weather Capability

Cat .I requirements provided the airplane is operated in accordance with Airplane Flight Manual DTM813.

Cat .II requirements provided the airplane is operated in accordance with Airplane Flight Manual DTM813 supplement N°1 (Service Bulletin F50-10) or supplement N°8 (M1000) or supplement N°12 (M1496)

2.III.11 Maximum Weights

- Airplane without modification M1230 or Service Bulletin SB F50-161
  - Maximum ramp .....17.600 kg (38.800 lbs)
  - Maximum takeoff .....17.600 kg (38.800 lbs)
  - Maximum landing: .....16.200 kg (35.715 lbs)
  - Maximum zero fuel: .....11.600 kg (25.570 lbs)
  - Minimum flight .....8.600 kg (18.959 lbs)
- Airplane with modification M1230 or Service Bulletin SB F50-161
  - Maximum ramp ..... 18,500 kg (40,780 lbs)
  - Maximum takeoff ..... 18,500 kg (40,780 lbs)
  - Maximum landing ..... 16,200 kg (35,715 lbs)
  - Maximum zero fuel ..... 11,600 kg (25,570 lbs)
  - Minimum flight..... 8,600 kg (18,959 lbs)
- Airplane with modification M1430 or Service Bulletin SB F50-191
  - Maximum ramp ..... 18,500 kg (40,780 lbs)
  - Maximum takeoff..... 18,500 kg (40,780 lbs)
  - Maximum landing ..... 16,200 kg (35,715 lbs)
  - Maximum zero fuel..... 11,600 kg (25,570 lbs)
  - Minimum flight ..... 8,600 kg (18,959 lbs)

2.III.12 Center of Gravity Range:

The weight and balance charts are contained in the Airplane Flight Manual.

Gear retraction has a negligible effect on CG range (- 50 mkg, i.e. 0.2 % on CG range at minimum flight weight).

- Airplane without modification M1230 or Service Bulletin SB F50-161

Weight		Forward limit	Aft limit
Kg	lbs	% MAC	% MAC
8.600	18.959	14	32
13.700	30.203	14	32
16.200	35.715	19.8	32
17.600	38.800	22.3	32

- Airplane with modification M1230 or Service Bulletin SB F50-161

Weight		Forward limit	Aft limit
Kg	lbs	% MAC	% MAC
8,600	18,959	14	32
13,900	30,640	14	32
16,200	35,715	19.2	32
18,260	40,255	22.8	32
18,500	40,780	23.3	29.6

- Airplane with modification M1430 or Service Bulletin SB F50-191

Weight		Forward limit	Aft limit
Kg	lbs	% MAC	% MAC
8,600	18,959	14	32
14,800	32,624	14	32
16,200	35,715	17.3	32
18,260	40,255	20.6	32
18,500	40,780	20.9	29.6

NOTE:
- 14% MAC is 0.312 m forward of datum
- 17,3% MAC is 0.218 m forward of datum
- 19.2% MAC is 0.165 m forward of datum
- 19.8% MAC is 0.148 m forward of datum
- 20,6% MAC is 0.125 m forward of datum
- 20,9% MAC is 0.116 m forward of datum
- 22.3% MAC is 0.077 m forward of datum
- 22.8% MAC is 0.062 m forward of datum
- 23.3% MAC is 0.048 m forward of datum
- 25% MAC is datum
- 29.6% MAC is 0.130 m aft of datum
- 32% MAC is 0.199 m aft of datum

2.III.13 Datum

Datum is 25 % of mean aerodynamic chord (MAC) which is marked on aircraft and is 9.724 m from the forward end of the aircraft nose cone.

2.III.14 Mean Aerodynamic Cord (MAC)

MAC = 2.839 m

2.III.15 Leveling Means

A bubble type level may be placed on the head of screws provided on structural components in the fuselage rear compartment.

Leveling can be obtained in the lateral and longitudinal directions.

2.III.16 Minimum Flight Crew

1. Two pilots.
2. One pilot and one trained crew member when Service Bulletin F50-011 (VMO/MMO warning activated by copilot air data system) is incorporated.

The second crew member duties are specified in the Aircraft Operating Manual, Section 2.99: Qualification of the second crew member.

Operation of the MYSTERE-FALCON 50 aircraft with one pilot and one trained crew member is not permitted when AMD-BA modification M1000 (Installation of EFIS) is incorporated.

2.III.17 Maximum Passenger Seating Capacity

19 seats in the passenger cabin, in compliance with the requirements of FAR 25.807 (c) applicable to emergency exits (AMD-BA document DTM 800 defines an approved cabin interior accommodation for 8 or 9 passengers).

The MYSTERE-FALCON 50 aircraft modified by incorporation of Modification M1230 in production or AMD-BA Service Bulletin F50-0161 in service must not carry more than 12 passengers (FAR 25.831 Ventilation) any time the flight is made at an altitude above 45,000 ft.

2.III.18 Exits

	Type	Size
1 Passenger door	I	
2 Emergency exit	III	508 X 914

2.III.19 Baggage/Cargo Compartments

1.000 kg and 600 kg per square meter.

2.III.20 Wheels and Tyres:

This aircraft is equipped with wheels, brakes and tubeless and radial tires.
Main wheel tyres are 26*6 -14''
Nose wheel tyres are 14.5*5.5 - 6''

2.III.21 Environmental Flight Envelope

Refer to approved Airplane Flight Manual.

2.III.22 Other Limitations

Refer to approved Airplane Flight Manual.

2.III.23 Hydraulics

Hydraulic fluid approved for use must conform to MIL-H-5606 specifications (NATO codes H515 or H520)

2.III.24 Notes

GARRETT GTCP 36-100 (A) Auxiliary Power Unit
The installation of the GARRETT GTCP 36-100 (A) Auxiliary Power Unit in the MYSTERE-FALCON 50 aircraft is an approved option. This Auxiliary Power Unit may be installed in aircraft in service per AMD-BA Service Bulletin F50-002.

2.IV MF50 Operating and Service Instructions

- Airplane Flight Manual: documents DTM813 (English language) and DTM803 (French language).
- Maintenance Manual

Airworthiness limitations (life limited airframe components and required maintenance/inspections) are listed in DGAC approved Recommended Maintenance Schedules and TBO's, chapter 5-40-00 of the Maintenance Manual, document DMD11765.

- Service Letters and Service Bulletins

Service Bulletins are listed in Service Bulletin index (SB 0)

- Various statements

The MF50 is compliant to:

- RVSM requirements are met provided airplane complies with Service Bulletin F50-246.
- NAT MNPS: As per AFM, the minimum navigation performance required by NAT MNPS regulations (French "arrêté of November 5th, 1987 and FAR Part 91, Appendix C) are demonstrated provided that there are at least, operating on board, 2 FMS's and:
  2 IRS's in NAV mode or
  2 GPS or
  1 IRS in NAV mode and 1 GPS
- Basic RNAV, RNP10 are operated in accordance with the associated Airplane Flight Manual, Limitations Section, page 1-15-5 and 1-15-6.
- EGPWS (JAR-OPS1) requirements (§665) provided the system is installed and the airplane is operated in accordance with associated AFM supplements.
- TCAS II change 7 (JAR-OPS1) requirements (§668) provided the modification M2737 (TCAS 4000) is applied and the airplane is operated in accordance with Airplane Flight Manual, Supplement 20.

2.V Falcon 50EX version

F50EX designation for Mystere Falcon 50 airplane does not correspond to a new model designation. This is only a commercial designation for Mystere Falcon 50 airplanes on which the six following major modifications are embodied on assembly line:

M1810: new engines - assembly line configuration - TFE 731-40
M1939: new engines control EIED
M1890: new avionics - EFIS
M1940: bleed air system computer
M2159: ADC New calibration (Reduce Vertical Separation Minimum)
M1200: increase of rudder control authority

2.V.1 Certification Basis

- Reference Application Date for EASA Certification:.....April 19th, 1995
- EASA Certification Date (JAA recommendation): .....November, 1996
- EASA Certification Basis:

Applicable requirements (refer to CRI Falcon 50-M1810 A-01 issue 5 and CRI Falcon 50-M1924/1890 A-01 issue 2.

1 - Whole aircraft:

FAR part 25 amendments 1 to 34 plus the following paragraphs:

- FAR 25.979 (d) and (e) amendment 38
- FAR 25.1013 (b) (1) amendment 36
- FAR 25.1351 (d) amendment 41
- FAR 25.1353 (e) (6) amendment 42

- Supplemental Technical Conditions (revision 4 dated 22 February 1979) updated in the CRI Falcon 50-M1810 A-03 and CRI Falcon 50-M1890 A-02.

- Supplementary Condition for flight operation above 41000 ft.

- Arrêté du 15 juin 1994 for noise certification.

2 - New parts:

2.1 M1939 (Installation of Engine Indicator Electronic Displays derived from the F2000 EIED system):

JAR 25X899 change 14
JAR 25.1309 change 14
JAR 25.1322 change 14

2.2 For the new avionics itself (M1890: "new avionics - EFIS"), the following paragraphs of JAR 25 change 14:

JAR 25.773 (d)	JAR 25.1322	JAR 25.1333
JAR 25.777	JAR 25.1323	JAR 25.1335
JAR 25X899	JAR 25.1325	JAR 25.1381
JAR 25.1301	JAR 25.1326	JAR 25.1431
JAR 25.1303	JAR 25.1327	JAR 25X1524
JAR 25.1307	JAR 25X1328	JAR 25.1543
JAR 25.1309	JAR 25.1329	JAR 25.1583
JAR 25.1321	JAR 25.1331	

Plus JAR AWO change 1 plus amdt AWO/91/1.

3 - Dassault Aviation elect to comply requirements:

JAR 25.997 change 14
JAR 25.1013 change 14
JAR 25.1015 change 14
JAR 25.1019 change 14
NPA AWO-3 (Miscellaneous amendment to JAR AWO cat 2)
NPA AWO-4 (Automatic landing system)

- Special Conditions:

- SC E-01 - Reverse - based upon INT/POL/25/7 dated 28 Jul. 92.
- SC S-01 - Lightning protection indirect effects based upon INT/POL/25/4 - Rev 1 dated 01 0ct. 94.
- SC S-03 - H.I.R.F. based upon INT/POL/25/2 dated 10 Feb. 92.
- SC S-04 - Lightning protection direct effects dated 12 Nov. 96.

- Exemptions: None
- Equivalent Safety Findings: None
- Environmental Standards:

Chapter III and IV of annex 16 of ICAO Convention.

2.V.2 Technical Characteristics and Operational Limitations

2.V.2.1 Type Design Definition

Falcon 50 EX airplanes have received modifications:

M1810: new engines - assembly line configuration - TFE 731-40
M1939: new engines control EIED
M1890: new avionics - EFIS
M1940: bleed air system computer

M2159: ADC New calibration (Reduce Vertical Separation Minimum)
M1200: increase of rudder control authority

Falcon 50EX Technical Specifications are detailed in document DGT218952 at latest revision.

2.V.2.2 Equipment

Document A900 List of equipment and categorization (DGT67435 dated August 26, 1996)

2.V.2.3 All weather capability

Cat I and Cat II requirements provided the airplane is operated in accordance with Airplane Flight Manual DTM813EX Limitations Page 1-160-1 and annex 2 (Autopilot coupled approach to Cat II "commercial operation" performance requirements.

2.V.2.4 Engine

Type: ALLIED SIGNAL / HONEYWELL TFE 731-40 (EASA TCDS IM.E.011).

Number: 3

Engine limits
Maximum takeoff static thrust up to 24° C - Sea level condition (5 mn): 1.646 daN (3700 lbs).
Maximum continuous static thrust at 15° C - Sea level conditions: 1.623 daN (3641 lbs).

Note: Refer to Airplane Flight Manual for engine operating instructions

- Maximum engine operating speed:
  Low pressure rotor (N1) .....RPM: 21.021 (Percent 100.1)
  Transient (5 seconds) ..... 21.105 (Percent 100.5)
  High pressure rotor (N2) .....RPM: 31.845 (Percent 101)
  Transient (5 seconds) .....31.952 (Percent 102.5)

- Maximum Interstage Turbine Temperature (ITT)
  During starting ..... 991°C
  Takeoff (5 minutes) .....1 013°C
  Maximum continuous ..... 991°C

- Oil pressure limits
  At idle .....50 to 80 psig
  Takeoff and maximum continuous .....65 to 80 psig

For more information, refer to Airplane Flight Manual.

- Oil temperature limits (at fan gearbox inlet)
  Maximum, from sea level up to 30.000 ft .....127°C
  Maximum above 30.000 ft.....140°C
  Maximum transient at any operational altitude (2 minutes) 149°C
  Minimum, continuous operation ..... 40°C

- Fuel pressure
  Minimum fuel pressure warning .....4,5 psig (320 mbars)

2.V.2.5 Center of Gravity range

- Airplanes without Dassault Aviation Service Bulletin SB F50-161

Weight (kg)	Forward limit % MAC	Aft limit % MAC
8 600	14	32
13 689	14	32
18 008	22.96	32

- Airplanes with Dassault Aviation Service Bulletin SB F50-161

Weight (kg)	Forward limit % MAC	Aft limit % MAC
8 600	14	32
13 888	14	32
18 280	22.99	32
18 500	23.3	29.57

2.V.2.6

2.V.2.7 Maximum weight

- Airplanes without Dassault Aviation Service Bulletin SB F50-161
  - Maximum ramp : 18.008 kg (39.700 lbs)
  - Maximum takeoff : 18.008 kg (39.700 lbs)
  - Maximum landing : 16.200 kg (35.715 lbs)
  - Maximum zero fuel : 11.600 kg (25.570 lbs)
  - Minimum flight : 8.600 kg (18.959 lbs)
- Airplanes with Dassault Aviation Service Bulletin SB F50-161
  - Maximum ramp : 18.500 kg (40.785 lbs)
  - Maximum takeoff : 18.500 kg (40.785 lbs)
  - Maximum landing : 16.200 kg (35.715 lbs)
  - Maximum zero fuel : 11.600 kg (25.570 lbs)
  - Minimum flight : 8.600 kg (18.959 lbs)

2.V.2.8

2.V.2.9 Oil capacity

Engine lubrication system capacity:

LH, center or RH engine	Liters	U.S. GALLONS
Unusable	1.18	0.31
Usable	3.82	1.01

2.V.2.10 Notes

- FM immunity

The F50EX is compliant to:

- FM immunity for navigation system VOR/ILS against ICAO Annex 10, Vol I, §3.1.4 and §3.3.8 provided modification M2115 is applied.
- FM immunity for communication system VHF against ICAO Annex 10, Vol III, §2.3.3 provided modification M2325 is applied.

- Falcon 50 EX Ferry Kit.

Modification M2133 has been developed and approved by DGAC to allow long range ferry flights overseas in order to enable to complete the aircraft delivered at completion center.

The aircraft equipped with the "ferry-kit" may have a French airworthiness certificate for export which can be exchanged for an US airworthiness certificate.

As long as the aircraft is not certified, the aircraft may be flown only with a "laisser-passer exceptionnel".

2.V.3 Operating and Service Instructions

- Airplane Flight Manual: document DTM813EX.

- Maintenance Manual

Airworthiness limitations (life limited airframe components and required maintenance/inspections) are listed in DGAC approved Recommended Maintenance Schedules and TBO's, chapter 5-40-00 of the Maintenance Manual, document DMD11765.

- Various statements

The F50EX is compliant to:

- Basic RNAV, RNP10 - See Airplane Flight Manual, Limitations Section, page 1-160-2 and 1-160-3
- RVSM requirements are met provided airplane complies with SB F50-246
- NAT MNPS: As per AFM, the minimum navigation performance required by NAT MNPS regulations (French "arrêté of November 5th, 1987 and FAR Part 91, Appendix C) are demonstrated provided that there are at least, operating on board, 2 FMS's and:
  2 IRS's in NAV mode or
  2 GPS or
  1 IRS in NAV mode and 1 GPS
- CVR (JAR-OPS1) requirements (2 hours) provided the modification M2372 is applied.
- EGPWS (JAR-OPS 1 § 665) provided the airplane is operated in accordance with the associated Airplane Flight Manual.
- TCAS II change 7 (JAR OPS 1 § 668) provided the airplane is operated in accordance with the associated Airplane Flight Manual (M2737).

SECTION 3. MYSTERE FALCON 900

3.I General

- Aeroplane: .....MYSTERE FALCON 900 (MF900)

3.II MF900 Certification Basis

- Reference Application Date for EASA Certification:.....February, 12th 1982
- EASA Certification Date (JAA recommendation): .....March, 13th 1986
- EASA Certification Basis:

- Federal Aviation Regulations Part 25, Amendments 1 through 56, except for the following sections of Amendments 35 through 56.

25.107	Amendt. 42	- Takeoff speeds
25.109	Amendt. 42	- Accelerate-stop distance
25.111	Amendt. 42 & 54	- Takeoff path
25.149	Amendt. 42	- Minimum control speed
25.629	Amendt. 46	- Flutter, deformation and fail-safe criteria
25.933	Amendt. 40	- Reversing systems
25.997	Amendt. 36	- Fuel strainer or filter
25.1019	Amendt. 36	- Oil strainer or filter
25.1093	Amendt. 36, 38 & 40	- Induction system deicing and anti-icing provisions
25.1141	Amendt. 40	- Powerplant controls - General
25.1167	Amendt. 38	- Accessory gearboxes
25.1305	Amendt. 35, 36, 38 & 54	- Powerplant instruments

- Supplementary conditions (DGAC letter 54-147 SFACT/TC of 22 November 1985, supplemented by DGAC letter 53-260 SFACT/TC of 5 March 1986).
- "Circulaire" No 3938 DTA/M relative to conditions applicable to airborne equipment and installations required to perform precision approaches to Category II landing minimums, 25 November 1971 issue.
- Compliance with “Arrêté du 16 Novembre 1990” relative to the "operation of subsonic jet aircraft in order to limit their noise effect" has been shown.

  This "Arrêté" is in force in France at the edition date of type Certificate Data Sheet number 163 issue number 10. (See NOTE 5).
- Compliance with FAR Part 25 requirements relative to ditching (25.801) has been shown.
- Compliance with FAR Part 25 requirements relative to flight in icing conditions (25.1093 and 25.1419) has been shown.

- Special condition:

French Special Condition for operation between 41,000 and 51,000 ft (DGAC letter 54-063 SFACT/TC of 28 October 1985).

- Exemptions: None.

- Equivalent Safety Findings:

Compliance with FAR Part 25 requirements relative to illumination of Type III passenger emergency exit operating handle (25.811 (e) (3)) has been shown on the basis of an equivalent safety.

- Environmental Standards:

Chapter III and Chapter IV of annex 16 of ICAO convention.

3.III MF900 Technical Characteristics and Operational Limitations

3.III.1 Type Design Definition

The type aircraft is defined in document DTM20078 (including F900C Technical Specifications).
Definition of reference airplane by DASSAULT AVIATION documents A001, A002 and A003 "Liste des plans structure, électrique et avionique".

3.III.2 Equipment

Document A230 DTM 35-II N524 "Liste des équipements"

3.III.3 Dimensions

Length	20,2 m
Span	19,33 m
Height	7,5 m
Distance between main landing gears	4,45 m

3.III.4 Engines

Mystère Falcon 900 Airplanes with modification M1200 and M1548 (SB F900-100) are equipped with ALLIEDSIGNAL / HONEYWELL ENGINES TFE 731-5BR-1C engines. Commercial name of MYSTERE-FALCON 900 airplanes fitted with M1200 and M1548 modifications is F900B.

Number: 3

	Aircraft without M1200 and M1548	**Aircraft with M1200 and M1548**
Type: ALLIEDSIGNAL / HONEYWELL ENGINES TFE731-5xxx (TCDS FAA n° E6WE)	TFE 731-5AR-1C	TFE 731-5BR-1C
- ENGINE LIMITS: . Maximum takeoff static thrust up to 23°C Sea level conditions (5 minutes) . Maximum continuous static thrust at 15° C Sea level conditions **Note**: refer to Airplane Flight Manual for engine operating instructions	 2002 daN (4500 lbs) 2002 daN (4500 lbs)	 2113 daN (4750 lbs) 2061 daN (4634 lbs)
- Maximum engine operating speeds: . Low pressure rotor (N1) . Transient (5 seconds)	 RPM 21000 (percent 100%) 100% to 103%	 RPM 21000 (percent 100%) 100 % to 103 %

	Aircraft without M1200 and M1548	Aircraft with M1200 and M1548
. High pressure rotor (N2) . Transient (5 seconds)	RPM 29989 (percent 101%) 101% to 103%	RPM 30540 (percent 100.8 %) 100.8 % to 103 %
- Maximum Interstage Turbine Temperatures (ITT) . During starting Transient (10 seconds) . Takeoff (5 minutes) Transient (5 seconds) Transient (2 seconds) . Maximum continuous	 952° C 974° C 974° C 984° C 994° C 924° C	 978° C 996° C 996° C 1006° C 1016° C 968° C
- Oil pressure limits . At idle . Takeoff and maximum continuous For more information, refer to Airplane Flight Manual.	 25 to 46 psig 38 to 46 psig	
- Oil temperature limits (at fan gearbox inlet) . Maximum, from sea level up to 30,000 ft . Maximum above 30,000 ft . Maximum transient at any operational altitude (2 minutes) . Minimum, continuous operation	 127° C 140° C 149°C 30° C	
- Fuel pressure . Minimum fuel pressure warning	 4.5 psig	

3.III.5 Auxiliary Power Unit (APU)

Model: ALLIEDSIGNAL / HONEYWELL ENGINES COMPANY - GTCP 36 - 150(F)

APU limits: usable for ground operation only

	Normal operation	Maximum
EGT:	720°C	973°C
RPM:	102%	110%

3.III.6 Fluids (Fuel/Oil/Additives)

- Fuel conforming to specifications:

See AFM

- Lubricating system conforming to specifications:

See AFM

3.III.7 Fluid capacities

Fuel tank capacity (nominal)

	Liters	Kg (*)	US gallons	lbs (*)
USABLE FUEL				
- LH wing and center section	3.422	2.748	904	6.058
- RH wing and center section	3.422	2.748	904	6.058
- Forward and aft fuselage	3.925	3.152	1.037	6.949
TOTAL USABLE	**10.769**	**8.648**	**2.845**	**19.065**
UNUSABLE FUEL				
Drainable:				
- LH wing and center section	11.2	9	3	20
- RH wing and center section	8.7	7	2.3	15.4
- Forward and aft fuselage	8.7	7	2.3	15.4
Trapped: Tanks and lines	38.6	31	10.2	68.4
TOTAL UNUSABLE	**67.2**	**54**	**17.8**	**119.2**
TOTAL FUEL				
- LH engine	3.445	2.767	910	6.100
- RH engine	3.440	2.762	909	6.089
- Center engine	3.951	3.173	1.044	6.995
TOTAL	**10.836**	**8.702**	**2862.8**	**19.184**

(*) Fuel density: 0.803 kg/l

Refer to weight and balance report of each individual airplane for exact capacity.

Refer to NOTE 2 for information on the use of fuel additives.

Oil capacity

Engine lubrication system capacity

LH, center or RH engine	Liters	U.S. GALLONS
Unusable	1.42	0.37
Usable	10.82	2.86

3.III.8

3.III.9 Air Speeds

(unless otherwise specified, speeds are indicated airspeeds).

VMO at sea level		350 kt	
VMO straight line variation up to 10,000 ft		370 kt	
VMO from 10,000 to 25,000 ft		370 kt	
Weight lower than 15,876 kg (35,000 lbs)			
MMO	from 25,000 to 38,000 ft	0.87	
MMO	from 38,000 to 42,000 ft, straight line variation down to		0.84
MMO	above 42,000 ft	0.84	
Weight higher than 15,876 kg (35,000 lbs)			
MMO	from 25,000 to 33,000 ft	0.87	
MMO	from 33,000 to 37,000 ft, straight line variation down to		0.84
MMO	above 37,000 ft	0.84	
V_A	maneuvering speed	228 kt	
V_{FE}	slats + flaps 7°	200 kt	
	slats + flaps 20°	190 kt	
	slats + flaps 40°	180 kt	
V_{LO}	landing gear operation	190 kt	
M_{LO}		0.70	
V_{LE}	landing gear extended	245 kt	
M_{LE}		0.75	
	DV window opening speed	215 kt	
	windshield wiper operating speed	215 kt	

	without M1200 and M1548	with M1200 and M1548
V_{MCA} Minimum control speed in flight	83 kt (CAS)	85,3 kt (CAS)
V_{MCG} Minimum control speed on ground	83,6 kt (CAS)	86 kt (CAS)

3.III.10 Maximum Operating Altitude

Flight level: FL 510

3.III.11 All weather Capability

Cat II requirements

3.III.12 Maximum Weights

- Airplane without DASSAULT AVIATION modification M1196

- Maximum ramp.....20 729 kg (45 700 lbs)
- Maximum take off.....20 639 kg (45 500 lbs)
- Maximum landing .....19 051 kg (42 000 lbs)

- Maximum zero fuel .....12 800 kg (28 220 lbs)
- Minimum flight ..... 9 390 kg (20 700 lbs)

- Airplane with DASSAULT AVIATION modification M1196

- Maximum ramp ..... 21,183 kg (46,700 lbs)
- Maximum takeoff ..... 21,092 kg (46,500 lbs)
- Maximum landing ..... 19051 kg (42000 lbs)
- Maximum zero fuel ..... 14,000 kg (30,865 lbs)
- Maximum flight ..... 9,390 kg (20,700 lbs)

3.III.13 Center of Gravity Range

- Airplane without DASSAULT AVIATION modification M1196

Weight		Forward limit	Aft limit
Kg	lbs	% MAC	% MAC
9,390	20,700	14	31
19,051	42,000	14	31
20,639	45,500	14	31

- Airplane with DASSAULT AVIATION modification M1196

Weight		Forward limit	Aft limit
Kg	lbs	% MAC	% MAC
9,390	20,700	14	31
19,051	42,000	14	31
21,092	46,500	14	31

- 14 % MAC is 0.318 m forward of datum
  15 % MAC is 0.289 m forward of datum
  25 % MAC is datum
  31 % MAC is 0.173 m aft of datum

The weight and balance charts are contained in the DGAC approved Manuel de Vol.

Gear retraction has a negligible effect on CG range (-46 mkg, i.e. - 0,17 % on CG range at minimum flight weight).

3.III.14 Datum

Datum is 25 % of mean aerodynamic chord (MAC) which is marked on aircraft and is 10.679 m from the forward end of the aircraft nose cone.

3.III.15 Mean Aerodynamic Cord (MAC)

MAC = 2.888 m

3.III.16 Leveling Means

A bubble type level may be placed on the passenger seat tracks.
Leveling can be obtained in the lateral and longitudinal directions.

3.III.17 Minimum Flight Crew

Two pilots.

3.III.18 Maximum Passenger Seating Capacity

19 seats in the passenger cabin, in compliance with the requirements of FAR 25.807 (c) applicable to emergency exits (AMD-BA document DTM20164 defines an approved cabin interior accommodation for 12 passengers).

3.III.19 Exits

	Type	Size
1 Passenger door	I	0.800*1.72m (31.50*67.72in)
1 Emergency exit	III	0.534*0.916m (21.02*36.06in)

3.III.20 Baggage/Cargo Compartments:

1,300 kg and 600 kg per square meter.

3.III.21 Wheels and Tyres:

This aircraft is equipped with wheels , brakes and tubeless and radial tyres .
Main wheel tyres are 29 X 7.7 -15''
Nose wheel tyres are 17.5 X 5.75 -8"

3.III.22 Notes

- FM immunity

The MF900 is compliant to:

- FM immunity for navigation system VOR/ILS against ICAO Annex 10, Vol I, §3.1.4 and §3.3.8 provided modification M1865 is applied.
- FM immunity for communication system VHF against ICAO Annex 10, Vol III, §2.3.3 provided modification M2731 is applied.

3.III.23 Environmental Flight Envelope

Refer to approved Airplane Flight Manual.

3.III.24 Other Limitations

Refer to approved Airplane Flight Manual.

3.III.25 Hydraulics

Hydraulic fluid approved for use must conform to MIL-H-56 06 specifications (NATO codes H515 or H520)

3.IV MF900 Operating and Service Instructions

- Airplane Flight Manual: document DTM20103
- Maintenance Manual

Airworthiness limitations (life limited airframe components and required maintenance/inspections) are listed in DGAC approved Recommended Maintenance Schedules and TBO's, chapter 5-40-00 of the Maintenance Manual, document DMD35543.

- Service Letters and Service Bulletins

Service Bulletins are listed in Service Bulletin index (SB 0)

- Various statements

The MF900 is compliant to:

- Basic RNAV, RNP10 airworthiness requirements are operated in accordance with Airplane Flight Manual, Limitations Section, Kinds of Operation, pages 1-16-2 and 1-16-3
- CVR (JAR-OPS1) requirements (2 hours) provided modification M2819 is applied.
- RVSM requirements (Service Bulletin F900-186) if the airplane is operated in accordance with Airplane Flight Manual page 1-16-4.
- NAT MNPS: As per AFM, the minimum navigation performance required by NAT MNPS regulations (French "arrêté of November 5th, 1987 and FAR Part 91, Appendix C) are demonstrated provided that there are at least, operating on board, 2 FMS's and:
  2 IRS's in NAV mode or
  2 GPS or
  1 IRS in NAV mode and 1 GPS
- TCAS II change 7 (JAR OPS 1 § 668) if the airplane is operated in accordance with the associated Airplane Flight Manual Supplements. (M3377 and M3501 or Service Bulletin F900-251 / M3219)

3.V Falcon 900C version

F900C designation for Mystere Falcon 900 airplane does not correspond to a new model designation. This is only a commercial designation for Mystere Falcon 900 airplanes on which one of these 2 major modifications is embodied on assembly line:

- M1975: Primus 2000 avionics - Installation on product line.
- M2695: Primus 2000 avionics - Installation by Service Bulletin.

3.V.1 Certification Basis

- Reference Application Date for EASA Certification:..... Feb 20th, 1998.
- EASA Certification Date (JAA recommendation): ..... Jun 15th, 1999.
- EASA Certification Basis:

- Airworthiness requirements:

Certification basis of Falcon 900C is defined in CRI F-01 , "New avionics installation, certification basis" dated on March 15th, 1999 . Certification Plan of Falcon 900C is introduced in DGT/NAV 74.373 Doc M1975-001 document dated on Jun-4, 1999.

Certification basis consists in Falcon 900 certification basis, plus following requirements:

1- JAR25 change 14 Plus op/96/1 relevant paragraphs applicable to the significant change:

JAR 25 subpart D - Design and construction:
- JAR 25.773 (d) “Pilot Compartment View”
- JAR 25X899 “Electrical bonding and protection”

JAR 25 subpart F - Equipment:
- JAR 25.1301: « Function and Installations »
- JAR 25.1303: « Flight and Navigation Instruments »
- JAR 25.1307 (c)(d)(e): « Miscellaneous equipments »
- JAR 25.1309: « Equipment, systems and installations »
- JAR 25X1315: « Negative acceleration »
- JAR 25.1316: « System lightning protection »
- JAR 25.1321: « Arrangement and visibility »
- JAR 25.1322: « Warning, Caution and advisory lights »
- JAR 25.1323: « Airspeed indicating system »
- JAR 25.1326: « Pitot heat indication systems »
- JAR 25.1327: « Magnetic direction indicator »
- JAR 25X1328: « Direction indicator »
- JAR 25.1329: « Automatic pilot system »
- JAR 25.1331: « Instruments using a power supply »
- JAR 25.1333: « Instrument systems »
- JAR 25.1335: « Flight director systems »
- JAR 25.1381 Instrument Lights
- JAR 25.1431 Electronic Equipment
- -JAR 25.1457 “Cockpit voice recorders”
- JAR 25.1459 “Flight recorders”

JAR 25 subpart G - Operating limitations and information:
- JAR 25X1524 Systems and equipment limitations
- JAR 25.1529 Instructions for Continued Airworthiness
- JAR 25.1543 Instrument Markings: General
- JAR 25.1545 Airspeed limitation information
- JAR 25.1547 Magnetic Direction Indicator
- JAR 25.1549 Powerplant Instruments

Plus JAR AWO Change 2.

2- Special conditions:

DGAC special conditions are:
- CRI F-02: «HIRF»
- CRI F-04: «Lightning indirect effects»
- CRI F-08: «E-GPWS option»

- Special Conditions: None.
- Exemptions: None.
- Equivalent Safety Findings: None.

3.V.2 Technical Characteristics and Operational Limitations

3.V.2.1 Type Design Definition

Two changes are issued to cover the basic installation:

Modification M1975: Primus 2000 avionics suite installation on MF900, which is the basic installation on the newly produced aeroplanes, with serial number equal or greater than S/N 179.

Modification M2695: Primus 2000 avionics suite installation on MF900 (retrofit), installation of this avionics suite on by a specific Service Bulletin.

3.V.2.2 Equipment

See modification sheets listed here above.

3.V.2.3 All weather capability

Cat II.

3.V.3 Operating and Service Instructions

- Airplane Flight Manual: Document FM900C
- Maintenance Manual

Airworthiness limitations are listed in the DGAC approved recommended maintenance schedules and TBO's, Chapter 5-40-00 of the Maintenance Manual DMD 35542.

- Various statements

The F900C is compliant to:

- Basic RNAV, RNP10 airworthiness provided the airplane is operated in accordance with Airplane Flight Manual, Limitations Section, kind of operations, page 1-160-2
- CVR (JAR-OPS1) requirements (2 hours) provided the modification M2819 is applied
- RVSM requirements (SB F900EX-4) if the airplane is operated in accordance with Airplane Flight Manual page 1-160-1.
- NAT MNPS: As per AFM, the minimum navigation performance required by NAT MNPS regulations (French "arrêté of November 5th, 1987 and FAR Part 91, Appendix C) are demonstrated provided that there are at least, operating on board, 2 FMS's and:
  2 IRS's in NAV mode or
  2 GPS or
  1 IRS in NAV mode and 1 GPS
- EGPWS (JAR-OPS 1 § 665) provided the modification M2811 is applied and the airplane is operated in accordance with the associated AFM Supplement 7.
- TCAS II change 7 (JAR OPS 1 § 668) (M3219 or S/B F900EX-89 or M3236 or M3382 or M3428 or M3527 or M3540 or M3627) if the airplane is operated in accordance with the associated Airplane Flight Manual Supplements.

SECTION 4. FALCON 900EX

4.I General

- **Aeroplane:** .....FALCON 900EX (F900EX)

4.II F900EX Certification Basis

- Reference Application Date for EASA Certification:.....March 3, 1993

DGQT/NAV letter No. 153/93

- EASA Certification Date (JAA recommendation): .....May, 31st 1996
- EASA Certification Basis:

- Applicable requirements (refer to CRI A01 issue 8):

1. FAR part 25 up to and including amendment 25.56 except for amendments 36 through 56 which have not been selected for the following paragraphs:

25.109	Amdt 42	Accelerate-stop distance
25.149	Amdt 42	Minimum control speed
25.629	Amdt 46	Flutter, deformation, and fail-safe criteria
25.933	Amdt 40	Reversing systems
25.1093	Amdt 36, 38 and 40	Induction system icing protection
25.1141	Amdt 40	Powerplant controls: general

2. Requirements of JAR 25 change 13 plus Orange Paper 90/1 and associated interpretations for M1466 modifications (300 l tank in rear servicing compartment) and M3008 (Upgrading of Falcon 900EX avionics).

JAR 25X899	JAR 25.1309 (OP 90/1)	JAR 25.1333
JAR 25.901 (c) (OP 90/1)		JAR 25.1335
JAR 25. 963 (e) (and referenced JAR 25.561)	JAR 25X1315	
JAR 25.1141 (f)	JAR 25.1322	
JAR 25.1303	JAR 25.1323	
JAR 25.1305	JAR 25.1329	
	JAR 25.1331	

Plus JAR AWO Change 1 and Amdt AWO/91/1

3. Requirements applied upon Dassault Aviation's request:

JAR 25.107 change 13	Take-off speeds
JAR 25.111 change 13	Take-off path
JAR 25.997 change 13	Fuel strainer or filter
JAR 25.1019 change 13	Oil strainer or filter
JAR 25.1167 OP 90/1	Accessory gearboxes
NPA AWO - 3	Miscellaneous amendments to JAR AWO cat 2
NPA AWO - 4	Automatic landing system Proposal 2

- Special conditions:

  SC S-01 Thrust reverser

  SC S-02 Lightning, indirect effect

  SC S-04 HIRF

- Complementary technical conditions (DGAC letter 54-147 SFACT/TC dated November 22, 1985, with DGAC letter 53-260 SFACT/TC dated March 5, 1986, and with CRI A03 edition 3).
- Special French Condition for flight between 41,000 and 51,000 ft (DGAC letter 54-063 SFACT/TC dated October 28, 1985).
- Noise Limitation: arrêté du 19 Février 1987 relatif au certificat de limitation de nuisance.
- Ditching: compliance with FAR Part 25 requirements regarding ditching (FAR 25-801) was shown.
- Icing Conditions: compliance with FAR Part 25 requirements regarding flight in icing conditions (FAR 25-1093 and 25-1419) was shown.

- Exemptions: None.

- Equivalent Safety Findings:

Compliance with requirements of FAR, Part 25, regarding Type III emergency exit handle lighting III (FAR 25-811 e (3)) was showed on a safety equivalent basis.

- Environmental Standards:

Chapter III and Chapter IV of annex 16 of ICAO convention.

4.III F900EX Technical Characteristics and Operational Limitations

4.III.1 Type Design Definition

The type aircraft is defined in modification M3000 revision B2 of Mystère Falcon 900 (F900EX Technical specification are detailed in document DTM 35-I-177/94 at latest revision).

Definition of reference airplane by DASSAULT AVIATION documents
A-340 DTM 5303/85 MASTER DRAWLING LIST OF THE TYPE AIRCRAFT

4.III.2 Equipment

A 330/1DTM 5100/84 LISTE DES EQUIPEMENTS AVION DE TYPE
A330/2 DTM 5257/84 LISTE DES EQUIPEMENTS OPTIONS

4.III.3 Dimensions

Length	20,2 m
Span	19,33 m
Height	7,5 m
Distance between main landing gears	4,45 m

4.III.4 Engines

Model: ALLIEDSIGNAL / HONEYWELL ENGINES TFE 731-60 (EASA TCDS IM.E.011).

Number: 3.

Engine limits:

- Maximum takeoff static thrust: 2 225 daN (5 000 lbs) (sea level, not installed, ISA conditions + 17°, 5 min max).

Note: Refer to Airplane Flight Manual for engine operating instructions.

- Maximum engine operating speed:
  Low pressure rotor (N1) .....21 000 RPM
  Transient (1 second) .....100 % to 100,5 %
  High pressure rotor (N2) .....31 485 RPM
  Transient (1 second) .....100 % to 100,5 %

- Maximum Interstage Turbine Temperatures (ITT)
  During starting on ground ..... 994°C
  During starting in flight ..... 994°C
  Takeoff (5 minutes) .....1 022°C
  Transient (10 seconds) .....1 032°C
  Maximum continuous ..... 991°C
- Oil pressure limits
  At idle .....25 to 46 psi
  Takeoff and maximum continuous .....38 to 46 psi
  Transient .....max 100 psi
- Oil temperature limits (at fan gearbox inlet)
  Maximum, from sea level up to 30,000 ft .....127°C
  Maximum above 30,000 ft.....140°C
  Maximum transient at any operational altitude (2 minutes) 149°C
  Minimum, continuous operation ..... 30°C
- Fuel pressure
  Minimum fuel pressure warning .....4,5 psi

4.III.5 Auxiliary Power Unit (APU)

Model: ALLIEDSIGNAL / HONEYWELL ENGINES COMPANY - GTCP 36 - 150(F)

APU limits: usable for ground operation only
EGT Normal operation: 720°C - Maximum: 973°C
RPM Normal operation: 102% - Maximum: 110%

4.III.6 Fluids (Fuel/Oil/Additives):

Fuel conforming to specifications:
See AFM
Lubricating system conforming to specifications:
See AFM

4.III.7 Fluid capacities:

Fuel capacity
(Initial specification has been confirmed through tests)

	Liters	kg (*)	US Gallons	lbs (*)
USABLE FUEL				
Left wing	2 129	1 710	563	3 769
Left center fuselage	822	660	217	1 455
Front left tank	534	429	141	945
Left feeder tank	481	386	127	852
Total left circuit	**3 966**	**3 185**	**1 048**	**7 021**
Right wing	2 129	1 710	563	3 769
Right center fuselage	822	660	217	1 455
Front right tank	509	409	135	901
Right feeder tank	481	386	127	852
Total right circuit	**3 941**	**3 165**	**1 041**	**6 977**
Front tank	1 656	1 330	438	2 932
Aft tank	1 706	1 370	451	3 020
Aft compartment tank	300	241	79	531
Center feeder tank	193	155	51	342
Total center circuit	**3 857**	**3 097**	**1 019**	**6 828**
TOTAL USABLE	**11 764**	**9 446**	**3 109**	**20 825**
UNUSABLE FUEL				
Drainable:				
Left circuit	21,4	17,2	6	38
Right circuit	23,0	18,5	6	41
Center circuit	19,8	15,9	5	35
Trapped: Tanks and lines	26	21	7	46
TOTAL UNUSABLE	**90**	**73**	**24**	**160**
TOTAL FUEL PER ENGINE				
Left circuit	3 996,14	3 208,9	1 056	7 074,4
Right circuit	3 972,76	3 190,1	1 050	7 033,1
Center circuit	3 885,52	3 120,1	1 027	6 878,6
TOTAL FUEL	**11 854**	**9 519**	**3 133**	**20 986**

* Fuel density: 0,803 kg/l

- Refer to weight and balance report of each individual airplane for exact capacity.
- Refer to NOTE 2 for information on the use of fuel additives.

Oil Capacity

Total oil engine capacity	:	6,9 l. (7,3 quarts)
Usable	:	3,8 l. (4,05 quarts)
Unusable	:	1,2 l. (1,25 quart)

4.III.8 Air Speeds

(Unless otherwise specified, speeds are indicated airspeeds)

VMO	at sea level.....	350 kt
VMO	straight line variation up to 10,000 ft.....	370 kt
VMO	from 10,000 ft to 25,000 ft	370 kt

Weight lower than 15,980 kg (35,000 lbs)

MMO	from 25,000 to 38,000 ft	0,87
MMO	from 38,000 to 42,000 ft, straight line variation down to	0,84
MMO	above 42,000 ft	0,84

Weight higher than 15,890 kg (35,000 lbs)

MMO	from 25,000 to 33,000 ft	0,87
MMO	from 33,000 to 37,000 ft, straight line variation down to	0,84
MMO	above 37,000 ft	0,84

V_A	maneuvering speed	228 kt
V_{FE}	slats + flaps 7°	200 kt
	slats + flaps 20°	190 kt
	slats + flaps 48°	180 kt

Note: Above 20,000 ft, do not extend, nor keep extended slats and flaps.

V_{LO}	Landing gear operation	190 kt
M_{LO}	.....	0,70
V_{LE}	Landing gear extended	245 kt
M_{LE}	.....	0,75
	DV window opening speed	215 kt
	windshield wiper operating speed	215 kt

V_{MCA}	minimum control speed in flight	85,2 kt (CAS)
V_{MCG}	minimum control speed on ground	88,9 kt (CAS)

4.III.9 Maximum Operating Altitude

Aircraft is approved for 51,000 feet operation.

4.III.10 All weather Capability

Cat II PA
HUD Cat I (M2912)
HUD Cat 2/3 (M2913)

4.III.11 Maximum Weights

Without M3020 (BS N° 1)	Weight		Forward limit	Aft limit
	kg	lbs	% MAC	% MAC
Minimum flight	9.390	20.700	14	31
Maximum zero fuel	14 000	30 864	14	31
Maximum landing	19 051	42 000	14	31
Maximum for aft CG at 31 %	21 228	46 800	14	31
Maximum takeoff	21 908	48 300	14	24,20
Maximum ramp	22 000	48 500	14	23,45

With M3020 (BS N° 1)	Weight		Forward limit	Aft limit
	kg	lbs	% MAC	% MAC
Minimum flight	9 390	20 700	13	31
Maximum zero fuel	14 000	30 864	13	31
Maximum landing	20 185	44 500	13	31
Maximum for aft CG at 31 %	21 228	46 800	13	31
Maximum takeoff	22 226	49 000	13	21,35
Maximum ramp	22 317	49 200	13	20,50

Note: 13 % MAC is 347 mm forward of datum
25 % MAC is datum
14 % MAC is 318 mm forward of datum
31 % MAC is 173 mm aft of datum

Gear retraction has a negligible effect on CG range (- 50 mkg,, i.e. 0.2 % on CG range at minimum flight weight).

4.III.12 Datum:

Datum is 25 % of mean aerodynamic chord (MAC) which is marked on aircraft and is 10 679 mm from the forward end of the aircraft nose cone. 0 % MAC is at 9 957 mm from the forward end of the aircraft.

4.III.13 Mean Aerodynamic Cord (MAC):

MAC = 2 888 mm

4.III.14 Leveling Means:

A bubble type level may be placed on the head of screws provided on structural components in the fuselage rear compartment.

Leveling can be obtained in the lateral and longitudinal directions.

4.III.15 Minimum Flight Crew:

Two pilots (One pilot and one copilot).

4.III.16 Maximum Passenger Seating Capacity:

-19 seats in the passenger cabin.
-12 passengers accommodation cabin layout taken as a reference for performance is given by document F900EX DTM 35-1-177/94.

4.III.17 Exits:

	Type	Size
1 Passenger door	I	0.800*1.72m (31.50*67.72in)
1 Emergency exit	III	0.534*0.916m (21.02*36.06in)

4.III.18 Baggage/Cargo Compartments:

Baggage compartment: 1 300 Kg and 600 kg per square meter.

4.III.19 Wheels and Tyres:

This aircraft is equipped with wheels , brakes and tubeless and radial tyres .

Main wheel tyres are 29*7.7 - 15''
Nose wheel tyres are 17.5*5.75 - 8''

4.III.20 Notes

- FM immunity

The F900EX is compliant to:

- FM immunity for navigation system VOR/ILS against ICAO Annex 10, Vol I, §3.1.4 and §3.3.8 provided modification M2288 is applied.
  FM immunity for communication system VHF against ICAO Annex 10, Vol III, §2.3.3 provided modification M2712 is applied.

4.III.21 Environmental Flight Enveloppe

Refer to approved Airplane Flight Manual.

4.III.22 Other Limitations

Refer to approved Airplane Flight Manual.

4.III.23 Hydraulics

Hydraulic fluid approved for use must conform to MIL-H-56 06 specifications (NATO codes H515 or H520)

4.IV F900EX Operating and Service Instructions

- Airplane Flight Manual: document DTM561
- Maintenance Manual

Airworthiness limitations (life limited airframe components and required maintenance/inspections) are listed in DGAC approved Recommended Maintenance Schedules and TBO's, chapter 5-40-00 of the Maintenance Manual, document DTM568.

- Service Letters and Service Bulletins

Service Bulletins are listed in Service Bulletin index

- Various statements

The F900EX is compliant to:

- Basic RNAV, RNP10 airworthiness provided the airplane is operated in accordance with Airplane Flight Manual, Limitations Section, kind of operations, page 1-160-2
- CVR (JAR-OPS1) requirements (2 hours) provided the modification M2819 is applied
- RVSM requirements (SB F900EX-4) if the airplane is operated in accordance with Airplane Flight Manual page 1-160-1.
- NAT MNPS: As per AFM, the minimum navigation performance required by NAT MNPS regulations (French "arrêté of November 5th, 1987 and FAR Part 91, Appendix C) are demonstrated provided that there are at least, operating on board, 2 FMS's and:
  2 IRS's in NAV mode or
  2 GPS or
  1 IRS in NAV mode and 1 GPS

- EGPWS (JAR-OPS 1 § 665) provided the modification M2811 is applied and the airplane is operated in accordance with the associated AFM Supplement 7.

- TCAS II change 7 (JAR OPS 1 § 668) (M3219 or S/B F900EX-89 or M3236 or M3382 or M3428 or M3527 or M3540 or M3627) if the airplane is operated in accordance with the associated Airplane Flight Manual Supplements.

4.V Falcon 900EX EASy version

F900EX EASy designation does not correspond to new model designation. F900EX EASy is a commercial designation for airplanes on which the following modifications have been applied:

- Step 1: M3083, M2862, M2861, M2963, M2823.
- Step 2: M3795, M3784
- Step 3: M3876, M3706

4.V.1 Certification Basis

- Reference Application Date for EASA Certification:.....November 8th, 1999
- EASA Certification Date (JAA recommendation): .....November 13th, 2003
- EASA Certification Basis:

• Modifications M2862, M2861, M2963 and M2823 are Major Level 2 (Non Significant Changes). They have the same certification basis as for F900EX (defined in above § 4.II)

• Modification M3083 is Major Level 1 (Significant Change). Its certification basis are defined in CRI A-1101 and consist of the followings:

JAR 25 paragraphs applicable at Change 14 plus OP Amdt 25/96/1 (and associated Reversions, if any):

– JAR 25.207 “Stall warning”
– JAR 25.581 “Lightning protection”
– JAR 25.601 “General”
– JAR 25.611 “Accessibility provisions”
– JAR 25.631 “Bird strike damage”
– JAR 25.671 (b)(c) “Control systems: general”
– JAR 25.672 “Stability augmentation and automatic
– JAR 25.677 (b) “Trims systems”
– JAR 25.699 “Lift and drag device indicator”
– JAR 25.703 “Take-Off warning systems”
– JAR 25.729 (e) “Retracting mechanism”
– JAR 25.771 (a)(c)(e) “Pilot compartment”
– JAR 25.773 (a)(d) “Pilot Compartment View”
– JAR 25.777 (a)(c)(b)(d)(e)(f): « Cockpit controls »
– JAR 25.783 (e) “Doors”
– JAR 25.789(a): “Retention of items of mass in passenger and crew compartments and galleys”
– JAR 25.791(a)(b): “ Passenger information signs and placards”
– JAR 25.812(f): “Emergency lighting”

- JAR 25.841(b)(5)(b)(6) “Pressurised cabins“
- JAR 25.863 (c) “Flammable fluid fire protection”
- JAR 25.869 (a) “Fire protection: systems – Electrical system components”
- JAR 25X899 “Electrical bonding and protection”
- JAR 25.903 (d)(2): « Engines »
- JAR 25.1141(a) (f): « Powerplant controls- General »
- JAR 25.1145 (a)(b) “Ignition switches”
- JAR 25.1203 (b)(2)(b)(3)(d): « Fire-detector system »
- JAR 25.1301: « Function and Installations »
- JAR 25.1303: « Flight and Navigation Instruments »
- JAR 25.1305: « Powerplant Instruments »
- JAR 25.1307 (c)(d)(e): « Miscellaneous equipments »
- JAR 25.1309: « Equipment, systems and installations »
- JAR 25X1315: « Negative acceleration »
- JAR 25.1316: « System lightning protection »
- JAR 25.1321: « Arrangement and visibility »
- JAR 25.1322: « Warning, Caution and advisory lights »
- JAR 25.1323: « Airspeed indicating system »
- JAR 25.1325(a)(c)(d)(e)(f)(g): « Static pressure systems »
- JAR 25.1326: « Pitot heat indication systems »
- JAR 25.1327: « Magnetic direction indicator »
- JAR 25X1328: « Direction indicator »
- JAR 25.1329: « Automatic pilot system »
- JAR 25.1331: « Instruments using a power supply »
- JAR 25.1333: « Instrument systems »
- JAR 25.1335: « Flight director systems »
- JAR 25.1337(b)(d): « Powerplant instruments »
- JAR 25.1351: « Electrical systems and equipment - General »⇒ Reversion to FAR 25.1351 Amdt 41 accepted.
- JAR 25.1353: « Electrical equipment and installations » ⇒ Reversion to FAR 25.1353 Amdt 42 accepted.
- JAR 25.1355: “Distribution system” ⇒ Reversion to FAR 25.1355 Amdt 38 accepted
- JAR 25.1357: « Circuit protective devices »
- JAR 25X1360 “Precautions against injury”
- JAR 25.1381 Instrument Lights
- JAR 25.1419 (c) “Ice protection”
- JAR 25.1431 Electronic Equipment
- -JAR 25.1435 (a)(2) “Hydraulic systems”
- JAR 25.1457 “Cockpit voice recorders”
- JAR 25.1459 “Flight recorders”
- JAR 25.1501 (b)(c) “General”
- JAR 25.1523 “Minimum flgith crew”
- JAR 25X1524 Systems and equipment limitations
- JAR 25.1529 Instructions for Continued Airworthiness
- JAR 25.1541 “Markings and placards – General”
- JAR 25.1543 (b) Instrument Markings: General
- JAR 25.1545 Airspeed limitation information
- JAR 25.1547 Magnetic Direction Indicator
- JAR 25.1549 Powerplant Instruments
- JAR 25.1551 “Oil quantity indicator”

– JAR 25.1553 “Fuel quantity indicator”
– JAR 25.1555 “Control and markings”
– JAR 25.1563 “Airspeed placards”
– JAR 25.1581 “Aeroplane flight manual – General”
– JAR 25.1585 (a)(b)(d)(e) “Operating procedures”
– JAR 25A1141 (a)(d) “APU controls: general”
– JAR 25A1305 “All APUs – APU instrument”

– JAR 25A1549 “All APUs – APU instruments”
– JAR25A1551 “All APUs – Oil quantity indicator”

- Special Conditions:

– F-06 EGPWS Airworthiness Approval (from basic F900EX)
– F-21 Electronic Stand-by Instrument system (from basic F900EX)
– F-1106 Protection against HIRF
– F-1123 Requirements for Human Factors.

- Exemptions: None

- Equivalent Safety Findings:

– D-1115: Lift and Drag Devices Indicator
– E-1103: Powerplant instrument – Cabin Markings
– F-1136: Honeywell Primus EPIC Integrated Modular Avionics system (compliance with requirements for individual protection) ; JAR 25.1357 (e) and JAR 25.1309

4.V.2 Technical Characteristics and Operational Limitations

4.V.2.1 Type Design Definition:

F900EX EASy designation does not correspond to new model designation. F900EX EASy is a commercial designation for airplanes on which the following modifications have been applied:

- Step 1: M3083, M2862, M2861, M2963, M2823.
- Step 2: M3795, M3784
- Step 3: M3876, M3706

M3083-01-102 (DGT 97670) - F900EX EASy Drawing List

4.V.2.2 Equipment:

M3083-01-101 (DGT98284) - F900EX EASy Equipment List

4.V.2.3 All weather capability:

Cat I provided the aircraft is operated according to Flight Manual DGT84972
Cat II provided the aircraft is operated according to Flight Manual DGT84972 Annex 2
HUD Cat I (M3090, M3968).
HUD Cat 2/3 (M3725 EASY Step2 and M5089 EASY Step3) .

4.V.3 Operating and Service Instructions

- Airplane Flight Manual: Document DGT84972

- Maintenance Manual

Airworthiness limitations are listed in the DGAC approved recommended maintenance schedules and TBO's, Chapter 5-40-00 of the Maintenance Manual (DGT620)

- Various statements

The F900EX EASy version is compliant to:

- RNP RNAV, P-RNAV, B-RNAV, RNP 10, NAT MNPS, GPS primary means provided the airplane is operated in accordance with associated Airplane Flight Manual.
- CVR (JAR-OPS1) requirements (2 hours).
- RVSM requirements provided the airplane is operated in accordance with Airplane Flight Manual.
- EGPWS (JAR-OPS 1 § 665) provided the airplane is operated in accordance with the associated Airplane Flight Manual.
- TCAS II change 7 (JAR OPS 1 § 668) provided the airplane is operated in accordance with the associated Airplane Flight Manual.

4.VI Falcon 900DX version

F900DX designation does not correspond to new model designation. F900DX is a commercial designation for F900EX airplanes on which the following modifications have been applied:

- Modification Major Level 1: M4000.
- Modification Major Level 2: M3876, M5046, M3755, M2823.

4.VI.1 Certification Basis

- Reference Application Date for EASA Certification:.....June 20th, 2003
- EASA Certification Date (JAA recommendation): .....October 21th, 2005
- EASA Certification Basis:

Modifications M3876, M5046, M3755, and M2823 are Major Level 2 Non Significant Changes. Modification M4000 is Major Level 1 Non-Significant Change.

These modifications have no impact on applicable requirements. Amendment levels from original F900EX type certification and most recent significant change (M3083 EASy) are retained.

- Special Conditions: None
- Exemptions: None
- Equivalent Safety Findings: None

4.VI.2 Technical Characteristics and Operational Limitation

4.VI.2.1 Type Design Definition

F900DX airplane have received modifications:

- M3876: F900EX EASY Step 3
- M5046: FQMC 1-6
- M3755: Rear compartment Fire detection deletion
- M2823: Electro pneumatic oxygen controller
- M4000: Definition of F900DX

- Equipment: see modifications here above.

4.VI.2.2 Fuel capacity

USABLE FUEL	Liters	kg (*)	US Gallons	lbs (*)
Left wing and half center wing box:	3423	2749	904	6060
Right wing and half center wing box:	3439	2762	908	6088
Rear tank:	1945	1562	514	3443
Front tank:	1833	1472	484	3245
TOTAL USABLE	**10640**	**8545**	**2810**	**18836**

TOTAL FUEL PER ENGINE	Liters	kg (*)	US Gallons	lbs (*)
Left circuit	3423	2748	856	6060
Right circuit	3439	2762	909	6090
Center circuit	3773	3030	997	6680
TOTAL FUEL	**10636**	**8541**	**2811**	**18830**

Total unusable fuel: 67kg

4.VI.2.3 Maximum weight

With M4000	Weight	
	kg	lbs
Maximum zero fuel	14,000	30,864
Maximum landing	19,142	42,200
Maximum takeoff	21,183	46,700
Maximum ramp	21,273	46,900
Minimum flight	9,390	20,700

4.VI.3 Operating and Service Instructions

- Airplane Flight Manual: Document DGT84972 (with Supplement 9 included).
- Maintenance Manual

Airworthiness limitations are listed in the DGAC approved recommended maintenance schedules and TBO's, Chapter 5-40-00 of the Maintenance Manual, document DGT620

- Various statements

The F900DX version is compliant to:

- RNP RNAV, P-RNAV, B-RNAV, RNP 10, NAT MNPS, GPS primary means provided the airplane is operated in accordance with associated Airplane Flight Manual.
- CVR (JAR-OPS1) requirements (2 hours).
- RVSM requirements provided the airplane is operated in accordance with Airplane Flight Manual.
- EGPWS (JAR-OPS 1 § 665) provided the airplane is operated in accordance with the associated Airplane Flight Manual.
- TCAS II change 7 (JAR OPS 1 § 668) provided the airplane is operated in accordance with the associated Airplane Flight Manual.

4.VII Falcon 900LX version airplanes:

F900LX designation does not correspond to new model designation. F900LX is a commercial designation for F900EX EASy airplanes on which the following modifications M5281 and M5535 have been applied.

4.VII.1 Certification basis:

Application date for EASA certification ..... September 14, 2006
EASA certification date: ..... July 7,2010

EASA certification basis:
Modification M5281 is classified major change level 1 significant.
The applicable airworthiness standard at the EASA application date is CS25 amendment 1.

The certification basis of the F900LX are defined in the CRI A-01 and consist of the following:

A) The EASA « Mandatory » airworthiness standards that are effective on the reference date (September 14, 2006):

CS 25 amendment I and CS AWO initial issue

Except

The following paragraphs for which EASA accept reversion to an earlier amendment in application to PART 21A1 01 (b)

a) FAR 25 paragraphs at amendment 0

25.109, 25.1093

b) FAR 25 paragraphs at amendment 11

25.939, 25.1141 (except (a) and (f))

c) FAR 25 paragraph at amendment 38

25.161, 25.933

d) FAR 25 paragraphs at amendment 56

25.361 to 25.365, 25.399 to 25.409, 25.495 to 25.511, 25.561, 25.563, 25.621, 25.655, 25.657, .25.675, 25.679 to 25.681, 25.685 to 25.697, 25.701, 25.721, 25.723, 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, 25.941 to 25.961, 25.963 (except (e)), 25.965 to 25.994, 25.999 to 25.1017,25.1021 to25.1027, 25.1041,25.1043to25.1091, 25.1103to25.1127,

25.1143,25.1145(c),25.1149to25.1165,25.1181 to25.1201,25.1207, 25.1 337(except (b)(cf)), 25.1363, 25.1383, 25.1403 to 25.1415, 25.1421, 25.1433, 25.1435 (except (a)(2)) to 25.1455, 25.1461, 25.1503 to 25.1521, 25.1525, 25.1527, 25.1531, 25.1533, 25.1557, 25.1561, 25.1583, 25.1587

e) JAR 25 paragraphs at change 13 + 0F 90/1

25.901(c), 25.963(e), 25.997, 25.1019, 25.1041(f), 25.1167

f) JAR 25 paragraphs at JAR 25 change 14

25.1 to 25.33, 25.101 (except (g)), 25.103, 25.105, 25.107, 25.111, 25.115, 25.143(f), 25.147, 25.171 to 25.175, 25.181, 25.231, 25.233, 25.235, 25.237, 25.253, 25.261, 25.1351, 25.1353, 25.1419, 25.1435(a)(2)

g) JAR 25 paragraphs at change 14 plus Orange Paper 96/1

25.113, 25.119, 25.121, 25.125, 25.145, 25.149, 25.177, 25.201, 25.203, 25.207, 25.671, 25.671, 25.672, 25.677, 25.699, 25.703, 25.729(e), 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), 25.1 141(a)(f), 25.1 145(a(b), 25.1203, 25.1301, 25.1303,25.1305,25.1307, 25.1309, 25.1315, 25.1321 to 25.1335, 25.1 337(b)(d), 25.1355 to 25.1360, 25.1381, 25.1457, 25.1459, 25.1501, 25.1523, 25.1529, 25.1541 to 25.1555, 25.1563, 25.1585, subpart J

h) CS 25 amendment 1

25.562, 25.1362, 25.1436, 25.1591 are not retained

j) JAR AWO change 2

Environmental requirements for noise, fuel venting and emissions
CS 36 initial issue and CS 34 initial issue

B) Special conditions issued because the product has novel or unusual design features relative to the design practices on which the applicable CS 25 are based (EC 1702/2003 part 21 .A1 6(a)(1))

F-06	EGPWS Airworthiness Approval	
F-21	Electronic stand-by instrument system (MEGGITT)	
F-1 106	Protection against HIRF	INT/POLI25/2 issue 2
F-1143	Enhanced Flight Vision System (EFVS)	

C) Special conditions issued because the intended use of the product is unconventional (EC 1702/2003 part 21 .A16 (a)(2))

None

D) *Special conditions* issued because experience from other products has shown that unsafe conditions may develop (EC 1702/2003 part 21 .A1 6 (a)(3))

S-01	Thrust reverser certification policy	
	Special condition for flight between 41,000 and 51,000	DGAC letter 54-063 SFACT/TC dated October 28, 1985
F-1123	Requirement for human factors	INT/POL/25/14 issue 2

E) *Special conditions* issued from an elect to comply by the applicant with NPA or other regulatory proposals

F-1117	Head-Up Guidance system	JAR AWOG HUDS 901, 902 and 903

F) *Elect to Comply*

CS36 amendment 2
ICAO Annex 16 Volume 1 Chapter 4 and ICAO ETM Doc 9501

G) *Equivalent safety*

D-1115	Lift and Drag Device Indicator
E-1103	Powerplant instruments — Color markings
F-1136	Honeywell PRIMUS EPIC integrated modular avionics system

H*) Deviations*:

None

4.VII.2 Technical Characteristics and Operational Limitation

Only the paragraphs impacted by the change are described here below

4.VII.2.1 Type Design Definition

Only new aircraft F900EX EASy manufactured under the DASSAULT AVIATION POA are fitted with winglets under M5281 and new slats under M5535 modifications. No Service Bulletin is planned for retrofit of aircraft in service.

F900EX EASy airplanes have received the following modifications on the production line:

- M5281 Winglet installation
- M5250 - Easy treatment of AGM obsolescence(prerequisite but not linked to winglet installation)
- M5535 External Slats setting adaptation
- M5487 Fuselage reinforcement
- M5583 Full capabilities for Winglets installations (includes wing reinforcement),
- M5454 Aileron bearing #1 change
- M5532 Guiding roller capabilities
- M5155 Wiring provision for EASy Phase 2
- M5605 Aileron Control Rod Assy Evolution

4.VII.2.2 Dimensions

Length	20,2 m
Span	21,38 m
Height	7,5 m
Distance between main landing gears	4,45 m

4.VII.2.3 All weather capability:

Cat 1 provided the aircraft is operated according to Flight Manual DGT84972
Cat 2 provided the aircraft is operated according to Flight Manual DGT84972

4.VII.3 Operating and Service Instructions

- Airplane Flight Manual:

Document DGT 84972 (with supplement n° 6 included)

- Maintenance Instructions and Airworthiness limitations

Airworthiness limitations (life limited airframe components and required maintenance/inspections) are listed in the AMM Chapter 5.40 referenced DGT113875 of the maintenance manual approved by EASA.

- Various statements:

The F900LX version is compliant to:

  - RNP RNAV, P-RNAV, B-RNAV, RNP 10, NAT MNPS, GPS primary means provided the airplane is operated in accordance with associated Airplane Flight Manual.
  - CVR (JAR-OPS1) requirements (2 hours).
  - RVSM requirements provided the airplane is operated in accordance with Airplane Flight Manual.
  - EGPWS (JAR-OPS 1 § 665) provided the airplane is operated in accordance with the associated Airplane Flight Manual.
  - TCAS II change 7 (JAR OPS 1 § 668) provided the airplane is operated in accordance with the associated Airplane Flight Manual.

SECTION 5. NOTES

NOTE 1.

a) A current weight and balance report, including the list of the certified empty weight equipment and the loading instructions (Performance Manual - Section 2) must be carried in the aircraft at all times from the moment the aircraft is originally certified.

b) Loading of the aircraft must be accomplished in a manner that always maintains the center of gravity within the specified limits considering crew and passenger movements as well as fuel consumption and transfer.

c) The weight of unusable fuel must be included in the aircraft empty weight and the fuel quantity indicators must read zero when the usable fuel quantity is zero.

d) The total weight of unusable oil in the tanks and lines (25.66 kg for the Mystere-Falcon 50, 33.39 kg for the Mystere-Falcon 900 and 18,82 kg for the Falcon 900EX) must be included in the aircraft empty weight.

e) The total weight of hydraulic fluid (48 kg) must be included in the aircraft empty weight.

NOTE 2.

a) If a different type of fuel, or a mixture of fuels, is used, the engine computer must be adjusted (in order to adapt the computer to the density of the fuel used) so as to preserve the starting, acceleration and deceleration characteristics of the engine.

b) The use of anti-ice additive conforming to Air 3652 or MIL.I.27686 D or E, (JP4 and JP8) or MIL.I.8570 (JP5) or equivalent, is approved in amounts up to 0.15 % by volume.

c) The use of an anti-static additive is approved for use in the fuel provided concentration do not exceed
   - 1 part per million for SHELL ASA 3.
   - 3 parts per million for STADIS 450.

   SOHIO Biobor JF biocide additive, or equivalent, is approved for use in the fuel at a concentration not to exceed 270 parts per million.

NOTE 3.

a) ALLIEDSIGNAL ENGINES Service Information letters give brand names of oils conforming to Specification EMS 53 110, Class B, Type 2.

b) Brand names of oils approved for use in the Auxiliary Power Unit are listed in the Maintenance Manuals of the GTCP 36-100A and GTCP 36-150 (F) APU's.

NOTE 4.

The cabin interior arrangements must be in compliance with the DASSAULT AVIATION general specifications for cabin interior completion, and are covered by the document DTM 802-30 for MYSTERE-FALCON 50 airplane and DTM 20-167 for MYSTERE-FALCON 900 and Falcon 900EX. These specifications mainly cover the gust and forced landing load factors.

NOTE 5.

The MYSTERE-FALCON 50, MYSTERE-FALCON 900, FALCON 900EX and FALCON 900DX certified noise levels are specified in the Airplane Flight Manual of each model.

NOTE 6.

On June 19th 1990 the name of manufacturer (AMD-BA: Avions Marcel Dassault - Breguet Aviation), has been changed. The new name, Dassault Aviation is now used on all documents and airplanes nameplates. However documents where old name still appear are valid.

NOTE 7.

Production agreement N° P05 was delivered by DGAC on December 12, 1991 then JAR 21 G Production Agreement N° F.G.006 on December 22, 1997, then EASA production agreement n°FR.21G.0006 on September 24th, 2004.

Consequently:

a - Mystère Falcon 50 airplanes S/N 226, and beyond, are produced in the scope of one of these agreements.

b - Mystère Falcon 900 airplanes S/N 100 ; 106 ; 112 and beyond, are produced in the scope of one of these agreements.

c - Falcon 900EX airplanes, all serial numbers, are produced in the scope of one of these agreements.