

reconnaissance, ECM, FLIR and laser designation pods, including Thales Damoclès target designator and projected Thales RECO-NG pod. Terrain-following system initially cleared (1999) to 152 m (500 ft); over land, reduced to 91 m (300 ft) by 2002, plus 30 m (100 ft) over sea; eventual goal is 30 m (100 ft) land and 15 m (50 ft) over water.

Self-defence: Spectra radar warning and ECM suite by Thales and MBDA. Thales DAL (*Détecteur d'Alerte Laser*) system.

EQUIPMENT: Integral, electrically operated, folding ladder in Rafale M.

ARMAMENT: One 30 mm Giat DEFA 791B cannon in side of starboard engine duct (except naval two-seat). Fourteen external stores attachments: two on fuselage centreline, two beneath engine intakes, two astride rear fuselage, six under wings and two at wingtips; of these, five stressed for heavy stores and fuel tanks. Forward centreline position deleted on Rafale M. Normal external load 6,000 kg (13,228 lb); maximum permissible, 9,500 kg (20,944 lb); see weapon options table. In strike role, one ASMP standoff nuclear weapon. In interception role, up to eight MICA AAMs (with IR or active homing) and two underwing fuel tanks; or six MICAs and three external fuel tanks. In air-to-ground role, typically sixteen 227 kg (500 lb) bombs, two MICAs and two 1,250 litre (330 US gallon; 275 Imp gallon) tanks; or two APACHE standoff weapon dispensers, two MICAs and three tanks; or FLIR pod, Atlas laser designator pod, two 1,000 kg (2,205 lb) laser-guided bombs, two AS.30L laser ASMs, four MICAs and single tank. In anti-ship role, two Exocet sea-skimming missiles, four MICAs and two external fuel tanks. Future weapons will include AASM (*Armement Air-Sol Modulaire*) powered LGB.

DIMENSIONS, EXTERNAL:
Wing span, incl wingtip missiles 10.80 m (35 ft 5¼ in)
Wing aspect ratio 2.6
Length overall 15.27 m (50 ft 1¼ in)
Height overall (Rafale D) 5.34 m (17 ft 6¼ in)

AREAS:
Wings, gross 45.70 m² (491.9 sq ft)

WEIGHTS AND LOADINGS (estimated):
Basic weight empty, equipped:
Rafale C 9,850 kg (21,716 lb)
Rafale B 10,450 kg (23,038 lb)
Rafale M 10,460 kg (23,060 lb)
Rafale N 10,710 kg (23,611 lb)
External load (incl fuel): normal 6,000 kg (13,228 lb)
max 9,500 kg (20,944 lb)
Max fuel weight: internal:
single seat 4,500 kg (9,921 lb)
two seat: Rafale B 4,350 kg (9,590 lb)
Rafale N 4,240 kg (9,348 lb)
underwing 7,500 kg (16,535 lb)
conformal 1,850 kg (4,079 lb)
Max T-O weight: early production 19,500 kg (42,990 lb)
subsequent production 22,500 kg (49,604 lb)
developed version 24,500 kg (54,013 lb)
Max landing weight 22,500 kg (49,605 lb)
Max wing loading:
initial version 426.7 kg/m² (87.39 lb/sq ft)
developed version 536.1 kg/m² (109.80 lb/sq ft)
Max power loading:
initial version 134 kg/kN (1.31 lb/lb st)
developed version (M88-3) 141 kg/kN (1.38 lb/lb st)

PERFORMANCE (estimated):
Max level speed: at altitude M1.8
at low level 750 kt (1,390 km/h; 864 mph)
Approach speed 120 kt (223 km/h; 139 mph)
Max rate of climb at S/L approx 18,290 m (60,000 ft)/min
Roll rate 270°/s
Max instantaneous turn rate up to 30°/s
Service ceiling 16,765 m (55,000 ft)



No. 101, the first single-seat Rafale for the Air Force (Paul Jackson)

NEW/0552896

T-O distance: air defence 400 m (1,315 ft)
attack 600 m (1,970 ft)
Landing distance 450 m (1,480 ft)
Radius of action: low-level penetration with 12 × 250 kg bombs, four MICA AAMs and 4,000 litres (1,056 US gallons; 880 Imp gallons) of external fuel in three tanks 570 n miles (1,055 km; 655 miles)
air-to-air, long-range with eight MICA AAMs and 6,000 litres (1,585 US gallons; 1,320 Imp gallons) of external fuel in four tanks, 12,200 m (40,000 ft) transit 950 n miles (1,759 km; 1,093 miles)
Operational loiter up to 3 h
g limits +9.0/-3.2
UPDATED

DASSAULT FALCON 7X

TYPE: Long-range business tri-jet.

PROGRAMME: Announced, under temporary name/designation Falcon Next/NXT, at the Paris Air Show in June 2001; then became Falcon FNX; formal designation Falcon 7X announced 29 October 2001. By September 2002, high- and low-speed wind tunnel tests had been conducted at the ONERA facilities in Modane and Toulouse and in the European Transonic Wind Tunnel at Cologne, Germany; design freeze and final wind tunnel confirmation of performance projections were scheduled for second quarter 2003. First flight due early 2005; certification scheduled for mid-2006; first customer deliveries anticipated in late 2006.

CUSTOMERS: Market estimated at 400 aircraft over unspecified period. Total of 40 orders held by October 2002, split approximately evenly between US and other customers.

COSTS: Development cost estimated at US\$600 million to US\$700 million. Unit cost US\$35 million to US\$37 million (all 2002).

DESIGN FEATURES: Similar in configuration to Falcon 900C/900EX, but with cabin some 20 per cent longer, redesigned nose, double-curved windscreen panels and an entirely new high-subsonic section wing with 20 per cent fewer parts, 5° more sweepback, (34° on inboard section, 30° on outboard section), 40 per cent more area and featuring full-span, two-section leading-edge slats. The wing design will be employed on future developments within the Falcon range, expected to be designated Falcon 5X and 9X.

FLYING CONTROLS: Fly-by-wire controls, with sidestick controllers.

STRUCTURE: Total of 21 programme partner suppliers announced by May 2003, including: CASA (horizontal stabiliser); Fokker (trailing-edge control surfaces); Hurel Hispano/Aermacchi (engine nacelles and thrust reversers); Latécoère (T5 fuselage section); Socata (T34 upper fuselage section and body fairing); Sonaca (wing leading-edges); and Sully Saint Gobain (windscreen and cabin windows). Final assembly in new 25,000 m² (269,097 sq ft) facility at Bordeaux.

LANDING GEAR: Retractable tricycle type by Messier-Dowty. Wheels and brakes by ABSC. Steerable nosewheel ± 60°. Minimum ground turning radius 8.80 m (61 ft 8 in).

POWER PLANT: Three Pratt & Whitney Canada PW307A turbofans, each flat-rated to 27.1 kN (6,100 lb st) at ISA +18°C. Usable fuel capacity 16,326 litres (4,313 US gallons; 3,591 Imp gallons).

ACCOMMODATION: Typical configuration will provide three lounge areas, berthing capability for six passengers, lavatories, galleys, crew rest area and a large flight-accessible baggage compartment. Pressurisation system will provide a 1,830 m (6,000 ft) cabin environment at high cruise altitudes.

SYSTEMS: Honeywell air management system. Pressurisation system maintains 1,830 m (6,000 ft) cabin environment at maximum operating altitude. Honeywell 35-150(FN) APU. Honeywell/Parker hydraulic power generation system. Parker hydraulic system: Inter technique oxygen system; L'Hotelier fire detection and extinguishing; TRW electrical generation and distribution.

AVIONICS: Dassault EASy flight deck as core system, incorporating Honeywell Primus Epic platform.

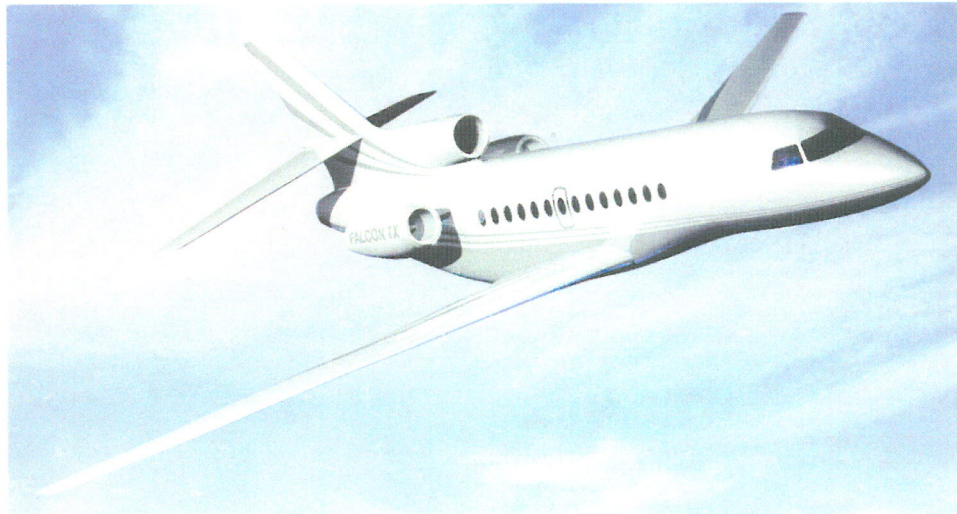
DIMENSIONS, EXTERNAL:
Wing span 25.15 m (82 ft 6 in)
Wing aspect ratio 8.9
Length overall 23.19 m (76 ft 1 in)
Height overall 7.77 m (25 ft 6 in)
Wheel track 9.75 m (31 ft 11¼ in)
Wheelbase 4.27 m (14 ft 0 in)
Passenger door: Height 1.72 m (5 ft 7¼ in)
Width 0.80 m (2 ft 7½ in)
Type III emergency exit: Height 0.91 m (3 ft 0 in)
Width 0.53 m (1 ft 9 in)

DIMENSIONS, INTERNAL:
Cabin
Length, third flight deck seat to baggage compartment 11.91 m (39 ft 1 in)
Width: max 2.64 m (8 ft 8 in)
at floor level 1.91 m (6 ft 3¼ in)



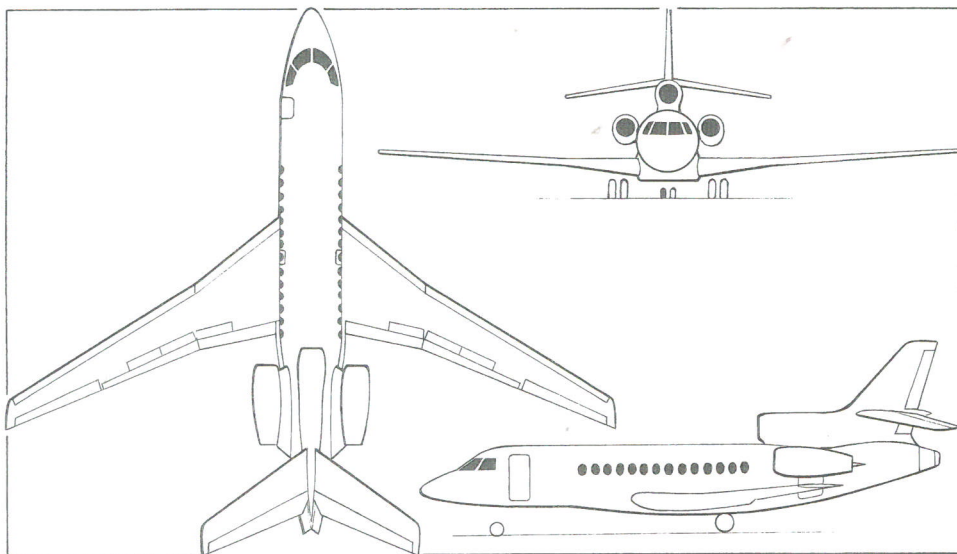
Rafale refuelling probe and OSF sensors (Paul Jackson)

NEW/0552891



Computer generated image of Falcon 7X long-range business tri-jet

NEW/0547127



Provisional configuration of Dassault Falcon 7X (James Goulding)

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Max height	1.88 m (6 ft 2 in)
Volume	43.95 m ³ (1,552 cu ft)
Baggage compartment volume	4.45 m ³ (157 cu ft)

AREAS:	
Wings, gross	70.70 m ² (761.00 sq ft)

WEIGHTS AND LOADINGS:	
Max fuel	13,109 kg (28,900 lb)
Max T-O weight	28,893 kg (63,700 lb)
Max landing weight	27,442 kg (60,500 lb)
Max ramp weight	28,985 kg (63,900 lb)
Max zero-fuel weight	17,735 kg (39,100 lb)
Max wing loading	408.7 kg/m ² (83.71 lb/sq ft)
Max power loading	355 kg/kN (3.48 lb/lb st)

PERFORMANCE:	
Max operating Mach No. (Mmo)	0.90
Max operating speed (Vmo)	370 kt (685 km/h; 425 mph)
Approach speed, landing weight of 16,828 kg (37,100 lb), 8 passengers, NBAA IFR reserves	104 kt (193 km/h; 120 mph)
Max operating altitude	15,545 m (51,000 ft)
FAR Pt 25 balanced T-O field length, S/L, ISA, with eight passengers and max fuel	1,585 m (5,200 ft)
FAR Pt 91 landing distance at landing weight of 16,828 kg (37,100 lb) with eight passengers and NBAA IFR reserves	716 m (2,350 ft)
Range with three crew, eight passengers and NBAA IFR reserves:	
at M0.80	5,700 n miles (10,556 km; 6,559 miles)

UPDATED

DASSAULT FALCON 50

Spanish Air Force designation: T.16

TYPE: Business tri-jet.

PROGRAMME: First flight of prototype Falcon 50 (F-WAMD) 7 November 1976; second prototype 18 February 1978; first (and only) preproduction 13 June 1978. French certification 27 February 1979; FAA certification 7 March 1979; deliveries began July 1979. Available in sigint version from 1994.

Falcon 50EX announced 26 April 1995. Long-range variant; uprated turbofans provide a 7 per cent improvement in fuel consumption and improved initial cruising altitude of 12,500 m (41,000 ft). Production of initial batch of 40 Falcon 50EX airframes began 1995. First flight (F-WOND, c/n 251) 10 April 1996; new avionics suite installed in Falcon 50 c/n 252 for integration flight testing leading to avionics certification by FAA on 15 July 1996; DGAC certification achieved 15 November 1996, followed by FAA approval 20 December; initial production aircraft (F-WWHA, c/n 253) first flight October 1996; flown in 'green' condition Le Bourget, Paris, to Teterboro, New Jersey, 16 November, thence to Orlando, Florida, for US debut at National Business Aircraft Association Convention; first customer delivery (to Volkswagen of Germany) February 1997. Estimated market for 150 to 200 of EX version over unspecified period.

CURRENT VERSIONS: **Falcon 50:** Previous version, now superseded by Falcon 50EX.

Falcon 50-40: Retrofit of earlier version with Honeywell TFE731-40 engines, each 16.46 kN (3,700 lb). See *Jane's Aircraft Upgrades*.

Falcon 50EX: As described.

Falcon 50M Surmar: Maritime surveillance version. Order for French Navy announced 12 November 1996 covering four aircraft (compared with five in original June 1995 statement) at estimated total cost of FF750 million. Sensors include a Thomson-CSF Ocean Master 100 search radar and Thomson-TTD Chlio FLIR. Three mission specialist/console stations, two at front of cabin, one at rear; airdrop door; provision for carriage of up to eight 25-person airdroppable liferafts; two observation windows.

Capabilities include 4 hours on station at 400 n miles (740 km; 460 miles) from base, cruising at 200 kt (370 km/h; 230 mph) at 915 m (3,000 ft).

First flight (No. 36/F-ZWTA) November 1998; first delivery in January 2000; operational with Flottille 24 at Lann-Bihoué from September 2000. Fourth delivery in early 2002.

Falcon 50 Sigint: Model of a potential signals intelligence Falcon 50 displayed at Dubai Air Show in November 1997.

CUSTOMERS: Total 336 Falcon 50s and 50EXs delivered for outfitting by 1 April 2003, including 18 in 2000, 13 (all 50EXs) in 2001, 10 in 2002, and one in the first three

months of 2003. Adopted by governments of Burundi, Djibouti, France, Iraq (later Iran), Italy, Jordan, Libya, Morocco, Portugal, Rwanda, South Africa, Spain, Sudan and Yugoslavia; three of Italian Air Force convertible for medevac.

COSTS: US\$18.23 million (2001).

DESIGN FEATURES: Three-engine layout permits overflight of oceans and desert areas within public transport regulations. Sharply waisted rear fuselage and engine pod designed by computational fluid dynamics; wing has compound leading-edge sweep (24° 50' to 29° at quarter-chord) and optimised section.

FLYING CONTROLS: Fully powered controls with pushrods, dual-barrel hydraulic actuators and artificial feel; variable incidence anhedral tailplane with dual electrical actuation by screwjack; dropped leading-edge inboard and slats outboard; double-slotted flaps; three two-position airbrake/spoiler panels on each wing.

STRUCTURE: All-metal, circular-section fuselage with rear baggage compartment inside pressure cabin; wing boxes are integral fuel tanks bolted to carry-through box. Carbon fibre horizontal tail surfaces introduced during 2001. Latécoère, Potez, Reims Aviation, SEFCA and Socata are subcontractors on the programme; other suppliers include Dassault Equipements (flight controls, flaps, slats and airbrakes), Liebherr-Aerospace Toulouse (engine bleed air system); SARMA (flight control actuating rods) and Sully Produits Spéciaux (windscreen panels).

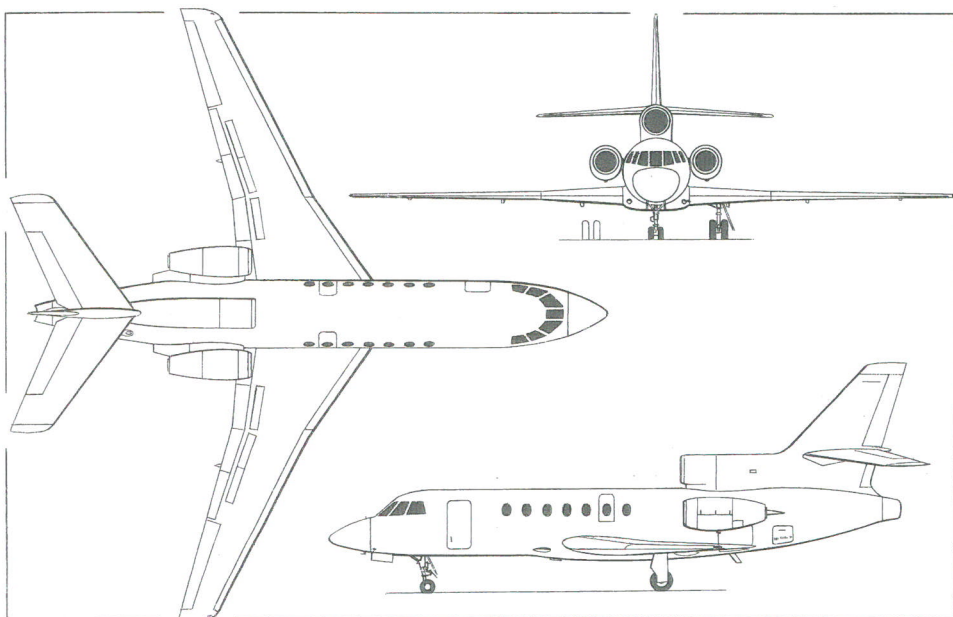
LANDING GEAR: Retractable tricycle type by Messier-Dowty, with twin wheels on each unit. Hydraulic retraction, main units inward, nosewheels forward. Nosewheels steerable ±60° for taxiing, ±180° for towing. ABS wheels, brakes and braking system. Mainwheel tyres size 26x6.6 (14 ply) or 26x6.6R14 tubeless, pressure 14.55 bar (211 lb/sq in). Nosewheel tyres size 14.5x5.5-6 (14 ply) tubeless, pressure 9.31 bar (135 lb/sq in). Four-disc brakes designed for 400 landings with normal energy braking. Minimum ground turning radius (about nosewheels) 13.54 m (44 ft 5 in).

POWER PLANT: Three Honeywell TFE731-40 turbofans, each rated at 16.46 kN (3,700 lb st) at ISA + 17°C in Falcon



Dassault Falcon 50EX long-range business jet

NEW/0547119



Dassault Falcon 50 long-range three-turbofan business transport (Jane's/Dennis Punnett)

50EX. Two engines pod-mounted on sides of rear fuselage, third attached by two top mounts. Thrust reverser on centre engine. Fuel in integral tanks, with capacity of 5,787 litres (1,529 US gallons; 1,273 Imp gallons) in wings and 2,976 litres (786 US gallons; 655 Imp gallons) in fuselage tanks. Total fuel capacity 8,763 litres (2,315 US gallons; 1,928 Imp gallons). Single-point pressure fuelling. Intertechnique fuel distribution and gauges.

ACCOMMODATION: Standard accommodation for two crew and nine passengers. In typical arrangement, cabin is divided into a forward section with four armchairs and two fold-out tables, and a rear section with three-seat sofa (convertible into a single bed) and two armchairs separated by a fold-out table; two galleys at forward end of cabin, toilet at rear. Alternative layouts to customer choice, with accommodation for a maximum of 19 passengers. Cabin and rear baggage compartment are pressurised and air conditioned; Barber-Colman temperature controls. Access is by separate door on port side.

SYSTEMS: Air conditioning system utilises bleed air from all three engines or APU. Maximum pressure differential 0.63 bar (9.14 lb/sq in). Pressurisation maintains a maximum cabin altitude of 2,440 m (8,000 ft) to a flight altitude of 14,935 m (49,000 ft). Two independent Messier-Bugatti and Vickers-Storer hydraulic systems, pressure 207 bar (3,000 lb/sq in), with three engine-driven pumps and one emergency electric pump, actuate primary flying controls, flaps, slats, landing gear, wheel brakes, airbrakes and nosewheel steering. Plain reservoir, pressurised by bleed air at 1.47 bar (21 lb/sq in). 28 V DC electrical system, with a 9 kW 28 V DC Auxilec starter/generator on each engine and two 23 Ah batteries. Labinal electrical harnesses. Wing leading-edge, centre engine S-duct and engine nacelles have engine bleed air anti-icing. Automatic emergency oxygen system. Honeywell 36-150 APU standard.

AVIONICS: *Comms:* Dual Rockwell Collins VHF and mode S transponders; dual Rockwell Collins HF-9000 HF transceivers with Selcal; Teledyne Controls MagnaStar or Honeywell Flitephone 800 radiotelephones; cockpit voice recorder and ELT standard.

Radar: Rockwell Collins TWR 850 Doppler turbulence detection weather radar.

Flight: Dual Rockwell Collins VIR-432 VOR, ADF-462 and DME-442. Rockwell Collins APS-4000 autopilot, ADC-850C air data systems, dual Honeywell FHS-6100 with integrated GPS receiver, Honeywell EGPWS and dual Honeywell Laseref III laser gyro inertial reference systems standard. Dual Universal UNS-1C FMS optional, replacing GNS-XES.

Instrumentation: Rockwell Collins Pro Line 4 (EFIS-4000) four-tube EFIS; Thales three-tube LCD engine indicating electronic display (EIED).

DIMENSIONS, EXTERNAL:

Wing span	18.86 m (61 ft 10½ in)
Wing chord (mean)	2.84 m (9 ft 3¾ in)
Wing aspect ratio	7.6
Length: overall	18.52 m (60 ft 9¼ in)
fuselage	17.66 m (57 ft 11 in)
Height overall	6.98 m (22 ft 10¼ in)
Tailplane span	7.74 m (25 ft 4¼ in)
Wheel track	3.98 m (13 ft 0¼ in)
Wheelbase	7.24 m (23 ft 9 in)



Typical Dassault Falcon 50EX interior
(Bud Shannon/Dassault)

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Passenger door: Height	1.52 m (4 ft 11½ in)
Width	0.80 m (2 ft 7½ in)
Height to sill	1.30 m (4 ft 3¼ in)
Emergency exits (each side, over wing):	
Height	0.92 m (3 ft 0¼ in)
Width	0.51 m (1 ft 8 in)
Baggage door: Height	0.73 m (2 ft 4¾ in)
Width	0.99 m (3 ft 3 in)

DIMENSIONS, INTERNAL:

Cabin, incl forward baggage space and rear toilet:	
Length	7.16 m (23 ft 6 in)
Max width	1.86 m (6 ft 1¼ in)
Max height	1.80 m (5 ft 10¼ in)
Volume	20.2 m³ (712 cu ft)
Baggage space	0.71 m³ (25.0 cu ft)
Baggage compartment (rear)	3.26 m³ (115 cu ft)

AREAS:

Wings, gross	46.83 m² (504.1 sq ft)
Horizontal tail surfaces (total)	13.35 m² (143.69 sq ft)
Vertical tail surfaces (total)	9.82 m² (105.70 sq ft)

WEIGHTS AND LOADINGS:

Weight empty, equipped	9,603 kg (21,170 lb)
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Basic operating weight	9,888 kg (21,800 lb)
Baggage capacity (rear)	1,000 kg (2,205 lb)
Max payload: normal	1,710 kg (3,770 lb)
with max fuel	1,170 kg (2,579 lb)
Max fuel	7,040 kg (15,520 lb)
Max T-O weight: standard	18,007 kg (39,700 lb)
optional	18,497 kg (40,780 lb)
Max ramp weight: standard	18,098 kg (39,900 lb)
optional	18,497 kg (40,780 lb)
Max zero-fuel weight	11,600 kg (25,570 lb)
Max landing weight	16,200 kg (35,715 lb)
Max wing loading	384.5 kg/m² (78.75 lb/sq ft)
Max power loading	365 kg/kN (3.58 lb/lb st)

PERFORMANCE:

Max operating Mach No. (MMO)	0.86
Max operating speed (VMO):	
at S/L	350 kt (648 km/h; 402 mph) IAS
at FL237	370 kt (685 km/h; 425 mph) IAS
Max cruising speed	M0.85 or 487 kt (902 km/h; 560 mph)
Normal cruising speed	M0.80 or 459 kt (850 km/h; 528 mph)
Long-range cruising speed at FL350	M0.75 (430 kt; 797 km/h; 495 mph)
Approach speed, eight passengers and NBAA IFR reserves	107 kt (198 km/h; 123 mph)
Initial cruising altitude	12,497 m (41,000 ft)
Max certified altitude	14,935 m (49,000 ft)
Time to climb to FL410	23 min
FAR Pt 25 balanced T-O field length, S/L, ISA with eight passengers and max fuel	1,490 m (4,890 ft)
FAR Pt 91 landing distance at MLW with eight passengers and NBAA IFR reserves	666 m (2,185 ft)
Range with eight passengers and NBAA IFR reserves:	
at M0.80	3,025 n miles (5,602 km; 3,481 miles)
at M0.75	3,285 n miles (6,083 km; 3,780 miles)

OPERATIONAL NOISE LEVELS:

T-O	83.8 EPNdB
Approach	95.2 EPNdB
Sideline	92.0 EPNdB

UPDATED

DASSAULT FALCON 900

Spanish Air Force designation: T.18

TYPE: Long-range business tri-jet.

PROGRAMME: Falcon 900 announced 27 May 1983; first flight of prototype (F-GIDE *Spirit of Lafayette*) 21 September 1984, second aircraft (F-GFJC) 30 August 1985; flew non-stop 4,305 n miles (7,973 km; 4,954 miles) Paris to Little Rock, Arkansas, September 1985; returned Teterboro, New Jersey, to Istres, France, at M0.84; French and US certification March 1986, including status close to FAR Pts 25 and 55 for damage tolerance of entire airframe.

Prototype Falcon 900 in use as testbed (first flight 12 April 1994) for new laminar flow wing section intended to provide significant reductions in drag. New section installed as sleeve on inner wing and designed to demonstrate hybrid laminar flow with boundary layer suction via seven channels in laser-drilled titanium skin over some 10 per cent chord of upper wing surface. Following test programme, modified aircraft has returned to Dassault Falcon Service to validate laminar flow capability under normal commercial operating conditions. The 250th Falcon 900 series aircraft was delivered in mid-2000.

CURRENT VERSIONS: **Falcon 900B:** French and UK certification received end 1991; complies with FAR Pt 36 Stage III and ICAO 16 noise requirements; approved for Cat. II approaches, for operations from unpaved fields; re-engined with TFE731-5BR-1C turbofans, to give 5.5 per cent power increase; initial cruising altitude 11,855 m (39,000 ft) and NBAA IFR range increased by 100 n miles (185 km; 115 miles); retrofit offered to existing operators. Supplanted by Falcon 900C.

Falcon 900C: Announced 26 June 1998. Combines airframe, engines and cabin of 900B with Honeywell Primus 2000 avionics of 900EX, but without autothrottles; 900B F-WWFP/F-GRDP (c/n 169) served as prototype for certification; first flown 17 December 1998; deliveries began in December 1999 (c/n 180 to Sony Aviation Corp in USA), replacing 900B on production line. French DGAC certification achieved 15 June 1999, with FAA certification following on 26 August 1999.

Detailed description applies to Falcon 900C, except where indicated.

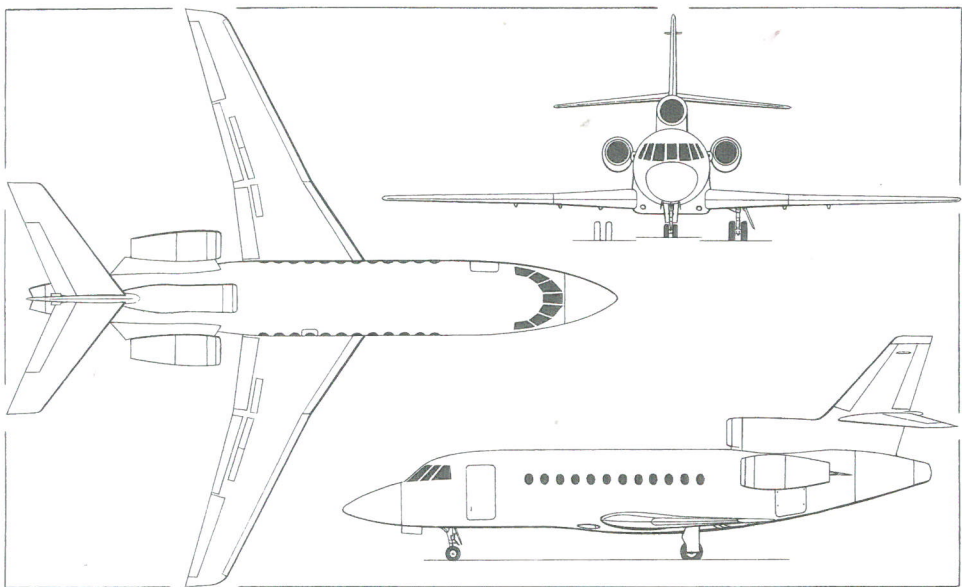
Falcon 900EX: Long-range development of 900B, announced October 1994. Re-engined with 22.24 kN (5,000 lb st) (ISA+17°C) Honeywell TFE731-60 turbofans, to give 5.8 per cent increase in retained thrust at 12,200 m (40,000 ft) and more than 8 per cent improvement in cruise specific fuel consumption. Engine nacelles, pylons, thrust reversers and portions of centre engine S-duct redesigned; maximum fuel capacity increased to 11,865 litres (3,134 US gallons; 2,610 Imp gallons) by addition of centre-fuselage tank of 591 kg (1,303 lb) capacity and tank in rear fuselage, capacity 240 kg (530 lb).

Upgraded standard avionics comprise fully integrated Honeywell Primus 2000 suite with five-tube 20 × 17.75 cm (8 × 7 in) colour EFIS; one engine



Falcon 50EX flight deck (Bud Shannon/Dassault)

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Dassault Falcon 900C (three Honeywell TFE731 turbofans) (Jane's/Dennis Punnett)

instrument display; three IC-800 integrated avionics computers; dual FMZ-2000 flight management systems with a third optional; dual fail-operational autopilots; T-O to landing autothrottle; Honeywell EGPWS; dual Laseref III inertial reference systems with third optional; Primus colour weather radar; optional single or dual 12-channel GPS, multichannel satcom, communications management unit (CMU) and Flight Dynamics HGS-2850 head-up display. Dassault EASy integrated flight deck with four 330 × 254 mm (13 × 10 in) active matrix liquid crystal displays (AMLCDs) to be introduced on 900EX from 2003. First flight with EASy cockpit was made by F-WNCD (c/n 97) on 22 February 2002.

Risk-sharing partners, representing 20 per cent of total development investment, are Honeywell (engines and primary avionics), SABCA (centre engine intake cowlings), Hellenic Aircraft Industries (rear fuselage fuel tank), Latécoère (T5 fuselage section and engine pylons), and Alenia (nacelles and centre engine thrust reverser).

Prototype (F-WREX) rolled out 13 March 1995; first flight 1 June 1995; flew Luton, England, to Las Vegas, Nevada, non-stop on 24 September 1995, completing the 4,700 n mile (8,704 km; 5,409 mile) flight in 11 hours 40 minutes including 30 minutes hold for air traffic delays; DGAC certification 31 May 1996; FAA approval granted 19 July after 350-hour flight test programme; first customer delivery to Anheuser-Busch Companies Inc (N200L) 1 November 1996; production aircraft delivered to Little Rock, Arkansas, for outfitting.

Japan MSA: Two Falcon 900s for long-range maritime surveillance entered service with the Japan Maritime Safety Agency September 1989; US search radar, special communications radio, operations control station, U-125A-style search windows and drop hatch for sonobuoys, markers and flares.

CUSTOMERS: Total 201 Falcon 900s and 124 Falcon 900EXs delivered to completion centres by 31 March 2003. Government/VIP versions operated by Algeria, Australia, Belgium, Equatorial Guinea, France, Gabon, Italy, Malaysia, Nigeria, Russia, Saudi Arabia, Spain, Syria and United Arab Emirates. Production totalled 20 in 1998, 24 in 1999, 29 (six 900C and 23 900EX) in 2000, 27 (six 900C and 21 900EX) in 2001, 21 (four 900C and 17 900EX) in 2002, and four (two 900C and two 900EX) in the first three months of 2003.

COSTS: Standard equipped 900C US\$27.81 million (2001); 900EX US\$31.19 million (2001).

DESIGN FEATURES: Larger cross-section and cabin length than Falcon 50; added economy and further power increase of engines achieved by mixer compound nozzle tailpipe, mixing cold and hot flows.

Wing adapted from Falcon 50 but increased span and area, and optimised for M0.84 cruise; compound leading-edge sweep (24° 50' to 29° at quarter-chord); dihedral 0° 30'.

FLYING CONTROLS: Fully powered flying controls with artificial feel and variable-incidence tailplane as for Falcon 50; full-span slats and double-slotted Fowler flaps; three-position airbrakes.

STRUCTURE: Design and manufacture computer assisted; damage-tolerant structure; extensive use of carbon fibre and aramid (Kevlar); Kevlar radome, wingroot fairings and tailcone; secondary rear cabin pressure bulkhead allows access to baggage in flight and additional protection against pressure loss. Nosewheel doors of Kevlar; mainwheel doors of carbon fibre. Kevlar air intake trunk for centre engine, and rear cowlings for side engines. Carbon fibre central cowl around all three engines.

New horizontal tail surface featuring cast titanium central box with resin transfer moulding composite spars and carbon fibre skin panels, resulting in a 13.6 kg (30 lb) reduction in weight, certified by the DGAC in December 1999 and introduced as standard on Falcon 900C and 900EX from December 2000 deliveries.

LANDING GEAR: Retractable tricycle type by Messier-Bugatti, with twin wheels on each unit. Hydraulic retraction, main units inward, nosewheels forward. Oleo-pneumatic shock-absorbers. Mainwheels fitted with Michelin radial tyres size 29×7.7-15, pressure: 900C 13.60 bar (197 lb/sq in), 900EX 13.80 bar (200 lb/sq in). Nosewheel tyres size 17.5×5.75R8, pressure: 900C 10.20 bar (148 lb/sq in), 900EX 10.90 bar (158 lb/sq in). Hydraulic nosewheel steering (±60° for taxiing, ±180° for towing). Messier-Bugatti triple-disc carbon brakes and anti-skid system. Minimum ground turning radius (about nosewheels) 14.55 m (47 ft 8 3/4 in).

POWER PLANT: Three Honeywell TFE731-5BR-1C turbofans, each rated at 21.13 kN (4,750 lb st) at ISA + 10°C. Thrust reverser on centre engine. Fuel in two integral tanks in wings, capacity 3,428 litres (906 US gallons; 754 Imp

gallons) and 3,437 litres (908 US gallons; 756 Imp gallons; forward fuselage tank, capacity 2,061 litres (544 US gallons; 453 Imp gallons), and rear fuselage tank capacity 1,899 litres (502 US gallons; 418 Imp gallons), for total fuel capacity of 10,825 litres.

ACCOMMODATION: Type III emergency exit on starboard side of cabin permits wide range of layouts for up to 19 passengers. Flight deck for two pilots, with central jump-seat. Flight deck separated from cabin by door, with crew wardrobe and baggage locker on either side. Galley at front of main cabin, on starboard side opposite main cabin door. Passenger area is divided into three lounges. Forward zone has four 'sleeping' swivel chairs in facing pairs with tables. Centre zone is dining area, with two double seats facing a transverse table. On starboard side, storage cabinet contains foldaway bench, allowing five to six persons to be seated around table, while leaving emergency exit clear. In rear zone, inward-facing three-seat settee on starboard side converts into a bed. On port side, two armchairs are separated by a table. At rear of cabin, a door leads to toilet compartment, on starboard side, and a second structural plug door to large rear baggage area. Baggage door is electrically actuated.

Other interior configurations available. Alternative eight-passenger configuration has bedroom at rear and three personnel seats in forward zone. A 15-passenger layout divides a VIP area at rear from six (three-abreast) chairs forward; full fuel can still be carried with 15 passengers. The 18-passenger scheme has four rows of three-abreast airline-type seats forward, and VIP lounge with two chairs and settee aft. Many optional items, including additional windows, front toilet unit, video system with one or more monitors, 'Airshow 200' navigation display system, compact disc deck, aft cabin partition, one or two couches in aft cabin convertible to bed (s), storage cabinet in baggage hold, aft longitudinal table, individual listening devices for passengers, lifejackets and rafts.

SYSTEMS: Air conditioning system uses engine bleed air or air from Honeywell GTCP36-150 APU installed in rear fuselage. Softair pressurisation system, with maximum differential of 0.64 bar (9.3 lb/sq in), maintains sea level cabin environment to height of 7,620 m (25,000 ft), and cabin equivalent of 2,440 m (8,000 ft) at 15,550 m (51,000 ft). Cold air supply by single oversize air cycle unit. Two independent hydraulic systems, pressure 207 bar (3,000 lb/sq in), with three engine-driven pumps and one emergency electric pump, actuate primary flying controls, flaps, slats, landing gear retraction, wheel brakes, airbrakes, nosewheel steering and thrust reverser. Bootstrap hydraulic reservoirs. DC electrical system supplied by three 9 kW 28 V Auxilec starter/generators and two 23 Ah batteries. Heated bleed air anti-icing of wing leading-edges, intakes and centre engine duct; electrically heated windscreens. Eros (SFIM/Intertechnique) oxygen system.

AVIONICS: Comms: Honeywell Primus 2000 as core system.

Radar: Honeywell Primus 870 colour weather radar.

Flight: Dual autopilot. Honeywell FMZ-2000 FMS with two AZ-840 micro air data systems and two Laseref III LINS; Rockwell Collins dual VIR-432 VOR/ILS marker receiver, dual ADF-462 and DME-442; Honeywell AA-300 radar altimeter and IC-800 autopilot; and Honeywell EGPWS.

Instrumentation: Honeywell Primus 2000 five-tube EFIS, comprising two MFDs, two PFDS and one EIED, each measuring 203 × 178 mm (8 × 7 in). Flight Dynamics HGS-2850 head-up guidance system optional.

DIMENSIONS, EXTERNAL:

Wing span	19.33 m (63 ft 5 in)
Wing chord: at root	4.08 m (13 ft 4 3/4 in)
at tip	1.12 m (3 ft 8 in)
Wing aspect ratio	7.6
Length overall	20.21 m (66 ft 3 3/4 in)
Fuselage: Max diameter	2.50 m (8 ft 2 1/2 in)

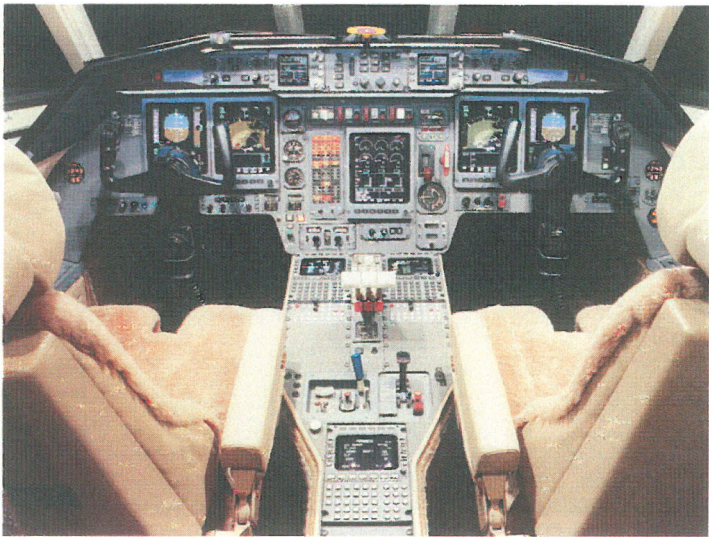


Typical cabin layout of a Falcon 900EX (Bud Shannon/Dassault)

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Flight deck of Falcon 900EX (Bud Shannon/Dassault)

0110860



Height overall	7.55 m (24 ft 9¼ in)
Tailplane span	7.74 m (25 ft 4¾ in)
Wheel track	4.45 m (14 ft 7¼ in)
Wheelbase	7.90 m (25 ft 11 in)
Passenger door: Height	1.72 m (5 ft 7¾ in)
Width	0.80 m (2 ft 7½ in)
Height to sill	1.64 m (5 ft 4½ in)
Emergency exit (overwing, stbd):	
Height	0.92 m (3 ft 0¼ in)
Width	0.53 m (1 ft 8¼ in)
Baggage door: Height	0.75 m (2 ft 5½ in)
Width	0.95 m (3 ft 1½ in)

DIMENSIONS, INTERNAL:

Cabin, excl flight deck, incl toilet and baggage compartments: Length	10.11 m (33 ft 2 in)
Max width	2.34 m (7 ft 8¼ in)
Width at floor	1.91 m (6 ft 3¼ in)
Max height	1.88 m (6 ft 2 in)
Volume	35.8 m³ (1,264 cu ft)
Rear baggage compartment volume	3.6 m³ (127 cu ft)
Flight deck volume	3.8 m³ (132 cu ft)

AREAS:

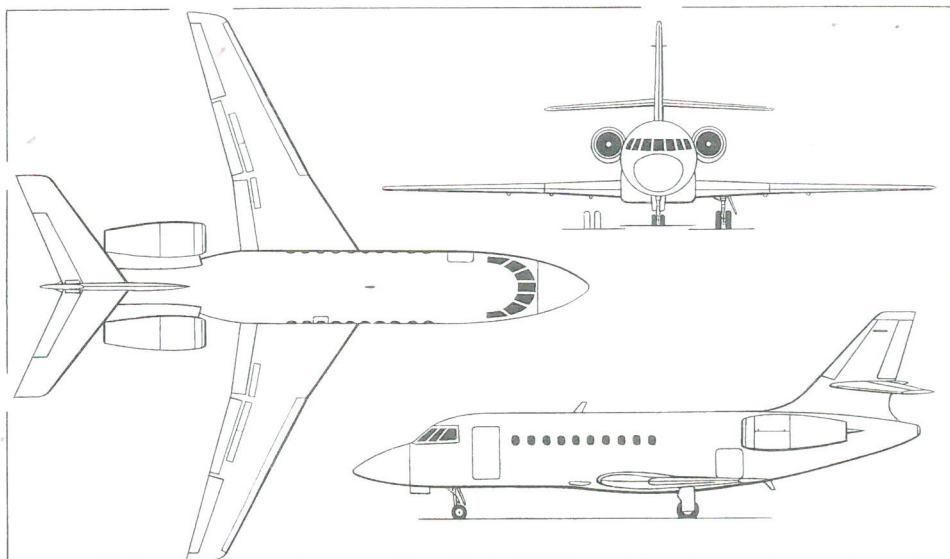
Wings, gross	49.00 m² (527.4 sq ft)
Vertical tail surfaces (total)	9.82 m² (105.7 sq ft)
Horizontal tail surfaces (total)	13.35 m² (143.7 sq ft)

WEIGHTS AND LOADINGS:

Weight empty, equipped (typical):	
900EX	10,829 kg (23,875 lb)
Basic operating weight: 900C	10,977 kg (24,200 lb)
900EX	11,204 kg (24,700 lb)
Max payload: 900C	1,823 kg (4,020 lb)
900EX	2,796 kg (6,164 lb)
Payload with max fuel: 900C	1,059 kg (2,335 lb)
900EX	1,270 kg (2,800 lb)
Max fuel: 900C	8,693 kg (19,165 lb)
900EX	9,525 kg (21,000 lb)
Max ramp weight: 900C standard	20,729 kg (45,700 lb)
900C optional	21,183 kg (46,700 lb)
900EX standard	22,000 kg (48,500 lb)
900EX optional	22,317 kg (49,200 lb)
Max T-O weight: 900C standard	20,640 kg (45,500 lb)
900C optional	21,092 kg (46,500 lb)
900EX standard	21,909 kg (48,300 lb)
900EX optional	22,226 kg (49,000 lb)
Max landing weight:	
900C, 900EX standard	19,050 kg (42,000 lb)
900EX optional	20,185 kg (44,500 lb)
Normal landing weight, eight passengers and fuel reserves: 900C	12,639 kg (27,865 lb)
900EX	12,846 kg (28,321 lb)
Max zero-fuel weight:	
900C standard	12,800 kg (28,220 lb)
900C optional	14,000 kg (30,865 lb)
900EX	14,000 kg (30,865 lb)
Max wing loading:	
900C standard	421.2 kg/m² (86.27 lb/sq ft)
900C optional	430.5 kg/m² (88.17 lb/sq ft)
900EX standard	447.1 kg/m² (91.58 lb/sq ft)
900EX optional	453.6 kg/m² (92.91 lb/sq ft)
Max power loading:	
900C standard	326 kg/kN (3.19 lb/lb st)
900C optional	333 kg/kN (3.26 lb/lb st)
900EX standard	328 kg/kN (3.22 lb/lb st)
900EX optional	333 kg/kN (3.27 lb/lb st)

PERFORMANCE (at AUW of 12,250 kg; 27,000 lb, except where indicated):

Max operating speed (V _{MO}): 900C, 900EX:	
at S/L	M0.87 (350 kt; 648 km/h; 403 mph IAS)
between FL100 and FL250	M0.84 (370 kt; 685 km/h; 425 mph IAS)
Max cruising speed:	
900C, 900EX	M0.84 or 481 kt (891 km/h; 554 mph)



Dassault Falcon 2000 twin-engine business transport (Jane's/Dennis Punnett)

Normal cruising speed:	
900C, 900EX	M0.80 or 459 kt (850 km/h; 528 mph)
Long-range cruising speed:	
900C, 900EX	M0.75 or 430 kt (796 km/h; 495 mph)
Approach speed, eight passengers and NBAA IFR fuel reserves:	
900C	107 kt (199 km/h; 124 mph)
900EX	109 kt (202 km/h; 126 mph)
Stalling speed:	
900C, 900EX, clean	106 kt (196 km/h; 122 mph)
900C, 900EX, landing configuration	85 kt (158 km/h; 98 mph)
Initial cruising altitude:	
900C, 900EX	11,885 m (39,000 ft)
Max certified altitude:	
900C, 900EX	15,550 m (51,000 ft)
FAR Pt 25 balanced T-O field length at standard max T-O weight: 900C	1,504 m (4,935 ft)
900EX	1,590 m (5,215 ft)
FAR Pt 91 landing distance:	
with NBAA IFR reserves:	
900C with eight passengers	716 m (2,350 ft)
900EX with eight passengers	724 m (2,375 ft)
Range with NBAA IFR reserves:	
900C with five passengers at M0.75	4,000 n miles (7,408 km; 4,603 miles)
at M0.80	3,830 n miles (7,093 km; 4,407 miles)
900EX with eight passengers:	
at M0.84	3,810 n miles (7,056 km; 4,384 miles)
at M0.80	4,335 n miles (8,028 km; 4,988 miles)
at M0.75	4,500 n miles (8,334 km; 5,178 miles)

OPERATIONAL NOISE LEVELS:

T-O: 900C, 900EX	79.8 EPNdB
Approach: 900C	91.7 EPNdB
900EX	92.3 EPNdB
Sideline: 900C	91.2 EPNdB
900EX	90.5 EPNdB

UPDATED

DASSAULT FALCON 2000

TYPE: Business jet.

PROGRAMME: Announced Paris Air Show 1989 as Falcon X; follow-on to Falcon 20/200; launched as Falcon 2000 on



Typical cabin of a Falcon 2000 (Bud Shannon/Dassault)

0110861

4 October 1990, following first orders; Alenia joined as 25 per cent risk-sharing partner February 1991, with responsibility for rear fuselage section and engine nacelles; selection of CFE738 engine announced 2 April 1990; first flight (F-WNAV) 4 March 1993; one prototype only; third airframe (F-WWFA) was second to fly, on 10 May 1994; ferried 'green' to US subsidiary Dassault Falcon Jet Corporation at Little Rock, Arkansas, 13 July 1994 for completion as US demonstrator, and set two world speed records 31 October to 1 November 1994 flying Los Angeles (Chino) to Bangor, Maine, in 4 hours 36 minutes 27 seconds and Bangor to Paris in 5 hours 26 minutes 12 seconds; Dassault demonstrator, second airframe (F-WNEW), flew 11 July 1994.

JAA certification to JAR 25 obtained 30 November 1994, at which time five aircraft (prototype, two demonstrators and two customer aircraft) had accumulated 1,055.5 flight hours; FAR Pt 25 and FAR Pt 36 Stage 3 noise levels certification 2 February 1995; first delivery (F-WNEW/ZS-NNF to South African customer) 16 February 1995. Approved to operate into London City Airport during 1996. Commonwealth of Independent States certification 14 April 1997. HGS-2850 HUD first flown in prototype 8 December 1995; initial JAA certification granted 30 August 1996, followed by approval for low-visibility take-offs (down to 91 m; 300 ft RVR) and hand-flown Cat. II and Cat. IIIa instrument approach approved by FAA 30 July 1997. Full JAA certification 16 December 1997; FAA certification 18 May 1998.

CURRENT VERSIONS: **Falcon 2000**: Initial production version. As described.

Falcon 2000EX: Extended-range version. Development began October 1999; announced at the NBAA Convention in New Orleans, 10 October 2000. Prototype (c/n 01/F-WMEX) rolled out 19 July 2001 and first flown 25 October 2001; two aircraft (F-WMEX and c/n 02/F-W66A). Completed 568 hours of flight testing in 242 flights, culminating in JAA and FAA certification on 25 March 2003; first three 'green' production airframes delivered to Little Rock completion centre in January 2003, with first customer deliveries of outfitted aircraft expected in the second quarter of 2003 (Pro Line avionics). EASy flight deck available from second quarter of 2004. Falcon 2000EX manufactured in parallel with Falcon 2000.

New features include two Pratt & Whitney Canada PW308C turbofans, with FADEC, each rated at 31.1 kN (7,000 lb st) for take-off at ISA +15°C; Nordam advanced single pivot (ASP) thrust reversers; revised fuel system with 2,045 kg (4,508 lb) increase in usable fuel capacity to 9,414 litres (2,487 US gallons; 2,071 Imp gallons; strengthened main landing gear with heavy-duty braking system and Falcon 900EX nose landing gear; and new



Dassault Falcon 900EX business jet

NEW/0547126

bleed air system. The first 40 Falcon 2000EXs will retain the current Collins Pro Line 4 avionics suite, but aircraft delivered from March 2004 will be equipped with Dassault EASy flight deck with four-tube flat panel displays based on those of the Honeywell Primus Epic modular avionics system and designated **Falcon 2000EX EASy**; first flight with EASy cockpit F-WXEY) 29 January 2003.

CUSTOMERS: The 206th Falcon 2000 was delivered to the USA for outfitting on 10 December 2003. Production totalled 20 in 1997, 15 in 1998, 34 in 1999, 26 in 2000, 35 in 2001, 35 in 2002 and three in the first three months of 2003. Falcon 2000 No. 159/N259QS, delivered to Executive Jet on 11 September 2001, was also 1,500th Falcon/Mystère business jet produced by Dassault. Total of 72 Falcon 2000s, and 28 Falcon 2000EXs, plus 25 Falcon 2000EXs on option, ordered by Executive NetJets and NetJets Middle East fractional ownership programmes in Europe, Middle East and USA, of which 38 were in operation by October 2002. Royal Australian Air Force ordered three in 2000 to replace five leased Falcon 900s. Total market estimated at more than 300 in 10 years.

COSTS: Basic price 2000 US\$20.6 million (2001); 2000EX US\$24 million (2000).

DESIGN FEATURES: Same fuselage cross-section as Falcon 900, but 1.98 m (6 ft 6 in) shorter. Falcon 900 wing with modified leading-edge and no inboard slats; sweepback at quarter-chord 24° 50' to 29°.

STRUCTURE: Largely as for Falcon 900. Rear fuselage, including engine pods and pylons, by Alenia and Piaggio; thrust reversers by Dee Howard. Agreement reached in early 2002 for production of fuselage components of 2000EX by Chengdu Aircraft of China. New horizontal tail surface featuring cast titanium central box with resin transfer moulding composite spars and carbon fibre skin panels, resulting in a 13.6 kg (30 lb) reduction in weight, certified by the DGAC in December 1999 and introduced as standard from December 2000 deliveries.

LANDING GEAR: Retractable tricycle type; mainwheels retract inwards, nosewheel forwards. Main tyres 26x6.6R14 (14 ply) tubeless; nose 14.5x5.5R6 tubeless. Tyre pressures: 2000 main 13.6 bar (197 lb/sq in), nose 11.1 bar (161 lb/sq in); 2000EX main 15.1 bar (219 lb/sq in), nose 12.6 bar (183 lb/sq in). Steerable nosewheel (±60°). Minimum turning radius on ground 15.03 m (49 ft 3¼ in).

POWER PLANT: Two GE/Honeywell CFE738-1-B turbofans, each rated at 26.3 kN (5,918 lb st) at ISA + 15°C. Usable fuel capacity 6,865 litres (1,814 US gallons; 1,510 Imp gallons). Dee Howard clamshell-type thrust reversers certified by FAA and JAA during 1995.

ACCOMMODATION: Up to 19 passengers and two flight crew; standard passenger accommodation is four seats in forward lounge and four seats and a two-person sofa in aft lounge. Pressurised, flight accessible baggage compartment at rear of cabin.

AVIONICS: Rockwell Collins Pro Line 4.

Comms: Dual com/nav; dual TRD-94D Mode-S transponders; dual RTU-4420 radio tuning units; Rockwell Collins HF-9000 transceiver.

Radar: Rockwell Collins WXR-840 colour weather radar standard; TWR-850 Doppler weather radar optional.

Flight: Rockwell Collins FMS-6100 flight management system and Cat. II autopilot standard. Rockwell Collins dual DME-442, dual ADF-462; dual AHRS and dual digital air data computers linked to dual-channel integrated



Dassault Falcon 2000EX deliveries began in 2003

NEW/0547120

avionics processor system (IAPS). Dual Honeywell Laseref III, Honeywell EGPWS, IRS, second FMS (with GPS), flight data recorder, traffic alert and collision avoidance system (TCAS) and GPWS all optional.

Instrumentation: Rockwell Collins Pro Line 4 four-tube EFIS-4000. Sextant Avionique three-tube engine indicating electronic display (EIED); Flight Dynamics HGS-2850 HUD.

Mission: Optional satcom antenna in fin tip pod.

Data below apply to Falcon 2000 and 2000EX unless otherwise indicated.

DIMENSIONS, EXTERNAL:

Wing span	19.33 m (63 ft 5 in)
Wing chord (mean)	2.89 m (9 ft 5¼ in)
Wing aspect ratio	7.6
Length overall	20.22 m (66 ft 4 in)
Height overall	7.06 m (23 ft 2 in)
Wheel track	4.45 m (14 ft 7¼ in)
Wheelbase	7.39 m (24 ft 3 in)
Passenger door: Height	1.72 m (5 ft 7¾ in)
Width	0.80 m (2 ft 7½ in)
Baggage door: Height	0.775 m (2 ft 6½ in)
Width	0.75 m (2 ft 5½ in)
Emergency exits (Type III): Height	0.92 m (3 ft 0¼ in)
Width	0.53 m (1 ft 8¾ in)

DIMENSIONS, INTERNAL:

Cabin: Length	7.98 m (26 ft 2¼ in)
Width: max	2.34 m (7 ft 8¼ in)
at floor level	1.91 m (6 ft 3¼ in)
Max height	1.88 m (6 ft 2 in)
Volume	29.0 m³ (1,024 cu ft)
Baggage volume: standard	3.7 m³ (131 cu ft)
optional	5.4 m³ (191 cu ft)

AREAS:

Wings, gross	49.02 m² (527.6 sq ft)
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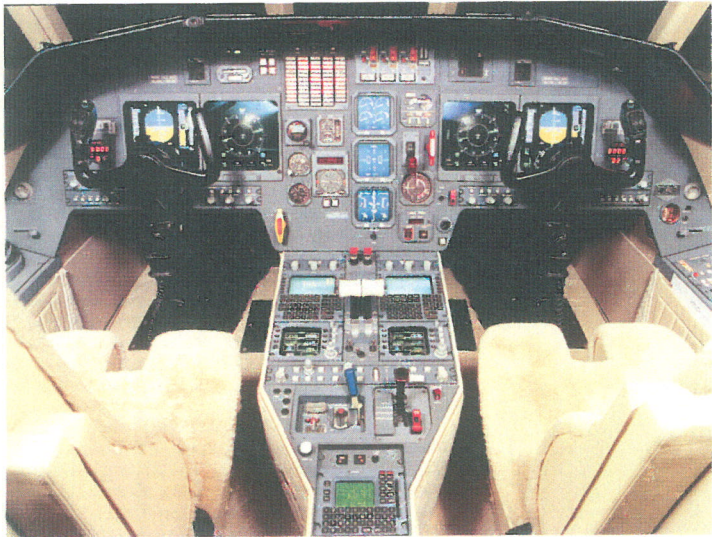
WEIGHTS AND LOADINGS:

Weight empty, equipped: 2000	9,405 kg (20,735 lb)
2000EX	10,142 kg (22,360 lb)
Basic operating weight: 2000	9,798 kg (21,600 lb)

Max payload: 2000	3,202 kg (7,060 lb)
Max fuel weight: 2000	5,513 kg (12,154 lb)
2000EX	7,557 kg (16,660 lb)
Max ramp weight: 2000: standard	16,329 kg (36,000 lb)
optional	16,647 kg (36,700 lb)
2000EX: standard	18,824 kg (41,500 lb)
optional	19,232 kg (42,400 lb)
Max T-O weight: 2000: standard	16,238 kg (35,800 lb)
optional	16,556 kg (36,500 lb)
2000EX: standard	18,733 kg (41,300 lb)
optional	19,142 kg (42,200 lb)
Max landing weight: 2000	14,970 kg (33,000 lb)
2000EX	17,826 kg (39,300 lb)
Max zero/fuel weight	13,000 kg (28,660 lb)
Max wing loading: 2000:	
standard	331.3 kg/m² (67.85 lb/sq ft)
optional	337.8 kg/m² (69.18 lb/sq ft)
2000EX: standard	384.0 kg/m² (78.65 lb/sq ft)
optional	392.3 kg/m² (80.36 lb/sq ft)
Max power loading: 2000 standard	
optional	308 kg/kN (3.02 lb/lb st)
2000EX: standard	314 kg/kN (3.08 lb/lb st)
optional	302 kg/kN (3.49 lb/lb st)
309 kg/kN (3.03 lb/lb st)	

PERFORMANCE:

Max operating Mach No. (Mmo)	0.85-0.86
Max operating speed (Vmo)	350-370 kt (648-685 km/h; 403-425 mph) IAS
Max cruising speed	
M0.84 or 481 kt (891 km/h; 554 mph)	
Normal cruising speed	
M0.80 or 459 kt (850 km/h; 528 mph)	
Long-range cruising speed	
M0.75 or 430 kt (796 km/h; 495 mph)	
Approach speed: 2000	109 kt (202 km/h; 125 mph)
2000EX	112 kt (207 km/h; 129 mph)
Initial cruising altitude: at M0.80	12,497 m (41,000 ft)
at M0.75	13,106 m (43,000 ft)
Max certified altitude	14,330 m (47,000 ft)



Current instrument panel of Falcon 2000

0110862



Dassault EASy flight deck for Falcon 2000EX

0110863

For details of the latest updates to *Jane's All the World's Aircraft* online and to discover the additional information available exclusively to online subscribers please visit jawa.janes.com