

Falcon 6X

Technical information is based on preliminary data and is subject to change without notice



Cockpit layout

Structure and general details

- 1 Composite nosecone which opens by translating forward and up
- 2 Bird strike structure behind radar support bulkhead
- 3 Machined front-pressure bulkhead – aluminium alloy
- 4 EFV fairing
- 5 Two-piece windscreen with aluminium alloy frame
- 6 Fixed side cockpit windows
- 7 Semi-monocoque aluminium alloy fuselage structure with machined and built up frames
- 8 Two-crew flightdeck
- 9 Third crew member seat
- 10 Main entrance door and steps
- 11 Interior operating lever
- 12 Folding handrail
- 13 Telescopic rods
- 14 Cabin windows – acrylic
- 15 Ceiling window – acrylic
- 16 Crew toilet
- 17 Closet/entertainment cabinet
- 18 Galley
- 19 Passenger seats – two forward facing and two aft facing

- 44 Fin leading-edge – four aluminium alloy panels
- 45 Air inlet fairing – aluminium alloy
- 46 Fintip fairing – composite
- 47 Spring-loaded fairing – composite
- 48 Tailplane centre-box structure
- 49 Aft fuselage to fin attachment points
- 50 Attachment points for aft tailplane centre box
- 51 Tailplane outer box – composite
- 52 Tailplane tip – laminated plastic
- 53 Tailplane leading-edge – composite
- 54 Twin-spar elevators – composite
- 55 "Plano" wing-to-fuselage bolt attachment (multi-bolt) to centre-wing box structure

- 20 Console fold-down tables – two. Table on right side shown open and half folded on left side
- 21 Console storage for folded down flat screen HD displays
- 22 Cabin side panels
- 23 Entertainment controls
- 24 Sideledges with cupholders
- 25 Type three escape exit
- 26 Dual passenger seats – two forward facing and two aft facing
- 27 Electrically actuated dining/conference table
- 28 Credenza
- 29 Cabin dividers with glass panels
- 30 Three seat settees – both sides
- 31 Toilet and washroom entrance door slid back
- 32 Toilet and washroom
- 33 Vanity unit
- 34 Access door to baggage compartment
- 35 Baggage compartment door
- 36 Pressurised air conditioned baggage compartment
- 37 Baggage compartment liner
- 38 Machined rear-pressure bulkhead – aluminium alloy
- 39 Pylon – aluminium alloy and titanium
- 40 Telescopic ladder for access to baggage bay
- 41 Wing to fuselage body fairing – composite
- 42 Stub fin – aluminium alloy structure
- 43 Fin-box structure – aluminium alloy

- 56 Centre-wing box structure – aluminium alloy construction
- 57 Wing box structure – aluminium alloy construction
- 58 Machined aluminium alloy ribs
- 59 Front spar – machined light-alloy
- 60 Rear spar – machined light-alloy
- 61 Upper-surface machined skin panels with integral stringers
- 62 Lower-surface machined skin panels with integral stringers
- 63 Blended winglet – composite with metallic leading edge
- 64 Access door to forward equipment bay
- 65 Access door to aft equipment bay
- 66 Composite bulkhead/firewall – composite/titanium
- 67 Tailcone structure – composite
- 68 Localisation water tank

- ### Air conditioning
- A1 Heat-exchanger air scoop
 - A2 Outlet duct for air bleed supply for ECS
 - A3 ECS pack
 - A4 Hot air supply from engine
 - A5 Air supply from APU
 - A6 Cold air supply
 - A7 Hot air supply
 - A8 Depressurisation valves
 - A9 Interconnection ducts
 - A10 Air filter

- ### Controls (Fly by wire flight controls)
- C1 Sidestick
 - C2 Rudder pedals
 - C3 Inboard leading-edge slat – aluminium alloy
 - C4 Slat tracks
 - C5 Slat actuators
 - C6 Mid leading-edge slat – aluminium alloy

- C7 Outer leading-edge slat – aluminium alloy
- C8 Ailerons – machined aluminium alloy
- C9 Two airbrakes on each wing – aluminium alloy
- C10 Flaperons – aluminium alloy
- C11 Flap – aluminium alloy
- C12 Airbrake actuators
- C13 Aileron servo-actuator unit
- C14 Flaperon servo-actuator unit
- C15 Flap tracks
- C16 Electrically driven flap screwjacks
- C17 Flap-track fairings
- C18 Rudder servo-actuator unit
- C19 Elevator servo-actuator unit
- C20 Linear actuator for tailplane incidence
- C21 Scissors link for tailplane centre box structure
- C22 Rudder – composite

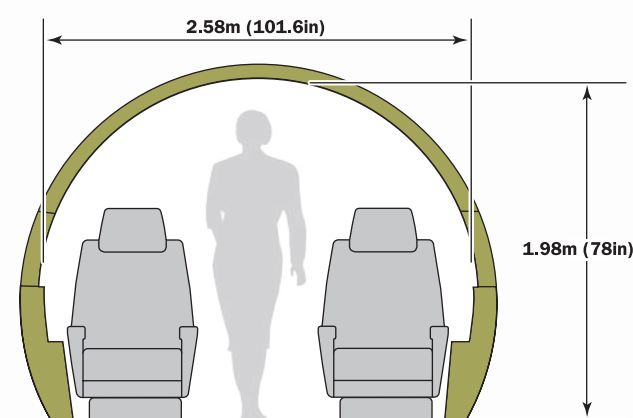
- ### Cockpit layout
- D1 Overhead panel
 - D2 Twin head-up display
 - D3 EASY flightdeck system
 - D4 Side consoles
 - D5 Central console
 - D6 Primary display units
 - D7 Multifunction display units
 - D8 Multifunction keyboards
 - D9 Reversion panel
 - D10 Cursor control device (CCD)

- ### Electrics and electronics
- E1 Smart probes – four
 - E2 External temperature probe
 - E3 Angle-of-attack transducer and vane
 - E4 Weather radar with 1.8in antenna
 - E5 Glideslope antenna
 - E6 CVR/DFDR unit
 - E7 Head up display (HUD) computer
 - E8 Enhanced flight vision system
 - E9 Avionics and electrical rack – right side
 - E10 Avionics equipment under forward fuselage (Shown removed from aircraft)
 - E11 Computerised information display
 - E12 CDVE rack (Shown removed from aircraft)
 - E13 GPS 1 antenna
 - E14 GPS 2 antenna
 - E15 DLP 1 antenna
 - E16 DLP 2 antenna
 - E17 XMW antenna
 - E18 TCAS 1 antenna
 - E19 ATCU antenna
 - E20 VDR 1 antenna
 - E21 ADF antenna
 - E22 LSS antenna
 - E23 ELT antenna
 - E24 Anti-collision beacons
 - E25 HF antenna inside fin leading edge
 - E26 VOR/LOC antenna
 - E27 Fintop camera
 - E28 Satellite TV antenna

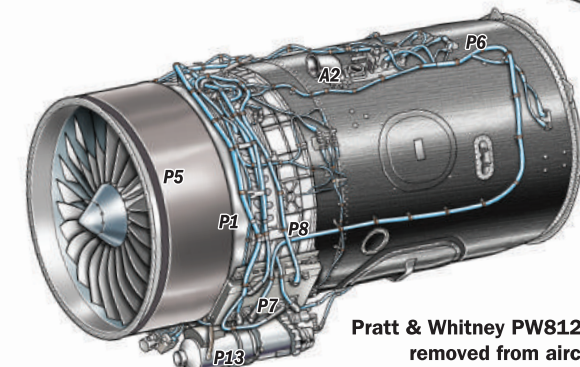
- ### Powerplant
- P1 Pratt & Whitney Canada PurePower PW812D powerplant
 - P2 Air-inlet assembly
 - P3 Upper cowl – composite
 - P4 Lower cowl – composite
 - P5 Fan case
 - P6 Bypass duct – composite
 - P7 Full authority digital engine control unit (FADEC)
 - P8 Intermediate case
 - P9 Front engine yoke – titanium
 - P10 Rear mounting bracket – resistant steel
 - P11 Pylon firewall – titanium
 - P12 Thrust reverser – target type
 - P13 Electrical generator and other accessories
 - P14 Auxiliary power unit (APU)
 - P15 APU air inlet
 - P16 APU exhaust duct
 - P17 APU access door

- ### Fuel system
- F1 Forward fuel cell
 - F2 Rear fuel cells
 - F3 Left-hand wing and rear fuel cells for left hand engine
 - F4 Right-hand wing and wing box tank for right hand engine
 - F5 Wing gauges
 - F6 Fuel transfer line
 - F7 Engine supply line
 - F8 Vent lines
 - F9 Vent ports
 - F10 Gravity filter
 - F11 Outboard fuel cell
 - F12 OBIIGGS

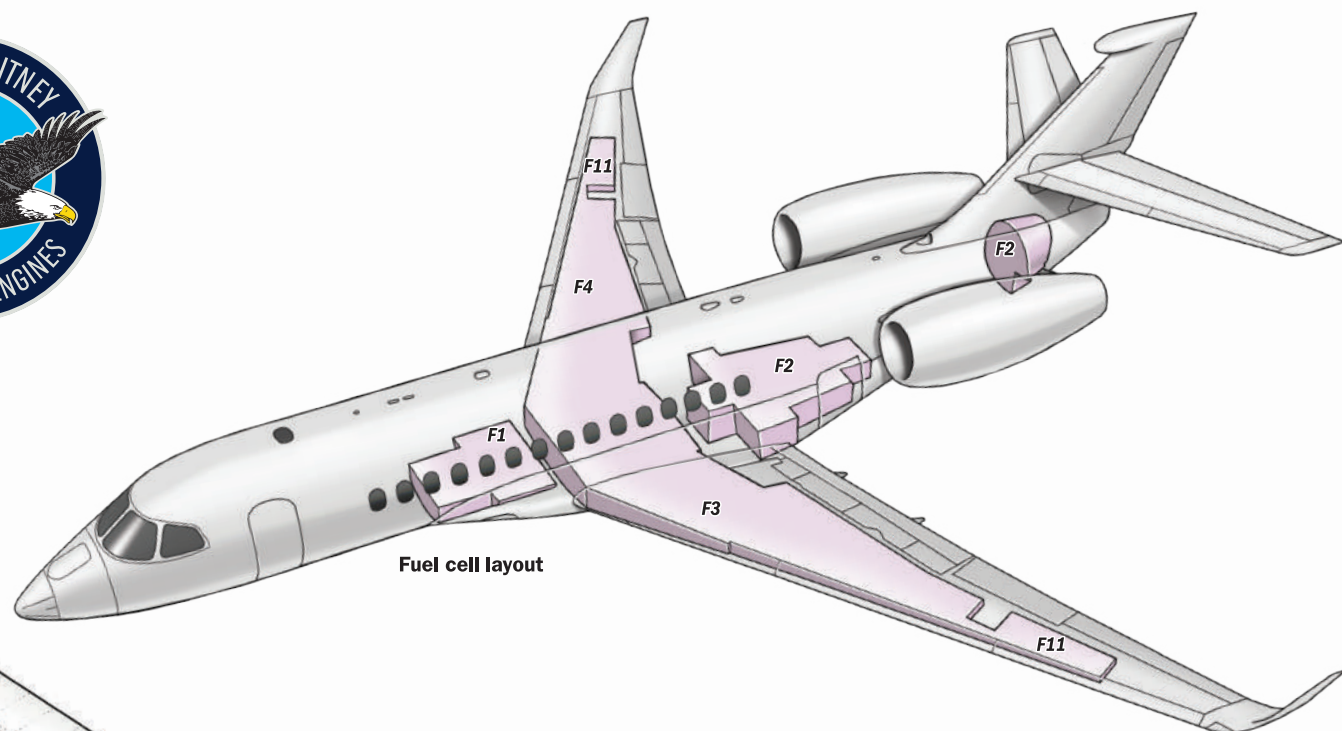
- ### Undercarriage and hydraulics
- U1 Hydraulically actuated forward retracting nose landing-gear, twin wheels
 - U2 Hydraulically actuated sideways retracting main landing-gear, twin wheels
 - U3 Main landing gear outer door
 - U4 Main landing gear inner door – shown in up position
 - U5 Hydraulic tank
 - U6 Thrust reverser hydraulic accumulator



Cabin cross-section detail



Pratt & Whitney PW812D engine removed from aircraft



Fuel cell layout

Tim Hall FRAeS
St Cloud
Paris



Collins
Aerospace

The help of Dassault staff members Vadim Feldzer and Thomas Razier has been instrumental in the preparation of this cutaway

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