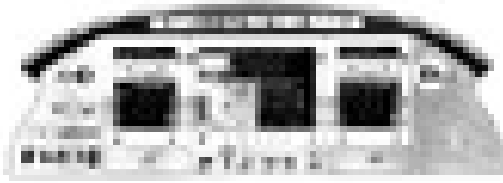


Eclipse 500



Instrument panel

- 24 Two-piece, machined clamshell main entry door – 0.6 x 1.19m. Upper door opens first and is dampened by a gas cylinder. Two cables support the lower door. There are two integral steps that automatically extend when the lower door is opened
- 25 Slow away keyboard
- 26 Six 36 x 26cm acrylic plug-type cabin windows. Each window has a retractable pleated window blind
- 27 Full adjustable cockpit seats (two off) able to withstand 26g dynamic forward loads
- 28 Passenger seats (three off) able to withstand 21g dynamic forward loads
- 29 Seat tracks attach to four longitudinal keels in the cabin
- 30 Work table with cup holders
- 31 Three storage pouches on lower sidewall – two on right
- 32 Baggage area(0.73m³) passenger seats fold down to provide easier access to baggage area. A lavatory with a curtain can be fitted as an option in this area

- 37 Machined aft pressure bulkhead
- 38 Vertical tail assembly has machined ribs that are riveted to the skins
The assembly is riveted to the canted forward and aft frame/spars.
Built as subassembly by Hampson
- 39 Access into rear equipment bay
- 40 Three-piece composite wing to fuselage fairings
- 41 Aluminium alloy construction engine pylons with composite skins
- 42 Forward engine beam – aluminium alloy
- 43 Rear engine beam – aluminium alloy
- 44 Machined aluminium alloy dorsal deck
- 45 Plug type elliptical emergency hatch – 67 x 50cm
- 46 Composite tail cone
- 47 Composite dorsal fin
- 48 Composite leading edge fairing
- 49 Fin to tailplane attachment points
- 50 Tailplane assembly has machined and built-up aluminium alloy ribs with machined front and rear spars. These components are riveted to the aluminium alloy top and bottom skins.
Built as subassembly by Hampson
- 51 Tailplane leading edge – aluminium alloy
- 52 Fin top fairing – composite
- 53 Forward wing to fuselage attachment point
- 54 Main wing to fuselage attachment point
- 55 Rear wing to fuselage attachment point
- 56 Fairing support structure – aluminium alloy
- 57 Wing built as subassembly by Fuji Heavy Industries

Structure and general

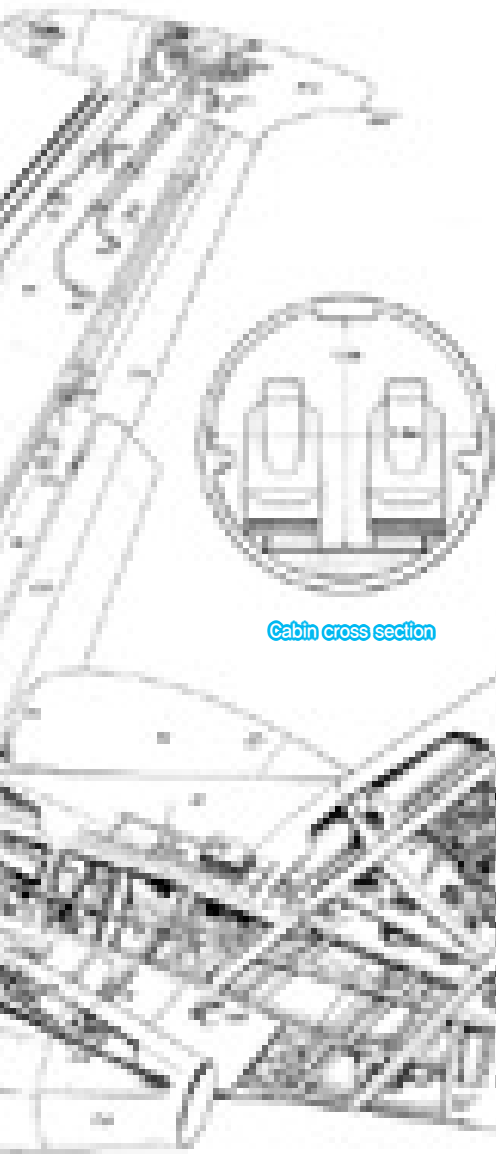
- 1 Radome of glassfibre with lightning diverter strips
- 2 Wheel well structure – aluminium alloy
- 3 Forward equipment bay
- 4 Access panel for forward equipment bay
- 5 Nose assembly of aluminium alloy – supports nose landing gear, equipment deck, radar installation and cheek formers. Built as subassembly by Ehaer
- 6 Machined forward pressure bulkhead
- 7 Pressurised cabin assembled from four subassemblies – right-hand upper skin, left-hand upper skin, lower skin and cockpit friction stir welded assemblies. The subassemblies are riveted to each other and to the forward and aft pressure bulkheads
- 8 Failsafe two-piece curved acrylic plug type electrically heated windscreen
- 9 Acrylic plug-type cockpit side windows
- 10 Two-crew cockpit
- 11 Glare shield
- 12 Primary flight displays
- 13 Multifunction displays
- 14 Autopilot control panel
- 15 ELT remote switch annunciator
- 16 Oxygen control
- 17 Com select
- 18 Cabin air control
- 19 Circuit breakers
- 20 Landing gear control
- 21 Ice protection control
- 22 Exterior and interior lighting control
- 23 Throttle quadrant with thrust levers, flaps and rudder trim controls

- 33 Composite interior cabin side panels
- 34 Fuselage frames and stringers are friction stir welded to the aluminium alloy skins.
- 35 Composite floor panels
- 36 Aft fuselage/vertical tail assembly.
The aft fuselages machined stringers are friction stir welded to the aft fuselage skins. The assembly is then riveted to the aft pressure bulkhead and the vertical tail assembly

- 58 Machined and built-up aluminium alloy ribs
- 59 Front machined aluminium alloy spar
- 60 Aft machined aluminium alloy spar
- 61 Machined stringers
- 62 Machined upper wing skin – stringers are friction stir welded to skin
- 63 Machined lower wing skin – stringers are friction stir welded to skin
- 64 Wing access panels
- 65 Wing leading edge – aluminium alloy
- 66 Wing trailing edge panels – aluminium alloy
- 67 Tip tanks – composite outer shell
- 68 Internal tip tank structure – machined aluminium alloy

Air conditioning and anti-icing

- A1 Vapour cycle system(VCS) compressor wheel well air inlet
- A2 VCS
- A3 Receiver dryer/VCS pressure sensor
- A4 Windscreen defog vents
- A5 Forward air distribution



Cabin cross section

- C7 Rudder cable routing
- C8 Aileron linkage
- C9 Aileron pushrods and bellcranks
- C10 Aileron actuating bellcrank
- C11 Single spar aileron with built-up and machined ribs riveted to skins – all components aluminium alloy. Aileron trim is provided by a spring connected to the aileron bell crank
- C12 Single spar flap with aluminium alloy built up and machined ribs. Assembly riveted to aluminium alloy skins
- C13 Steel flaptracks – six off
- C14 Electro-mechanical smart flap actuators – four off
- C15 Control cable pulleys
- C16 Elevator cable routing
- C17 Elevator/rudder control quadrant
- C18 Actuating linkage to rudder
- C19 Electrical actuator for rudder trim
- C20 Twin spar rudder with machined and built up ribs riveted to skins – aluminium alloy construction
- C21 Push rod for elevator
- C22 Elevator actuating bellcrank
- C23 Electrical actuators for elevator trim
- C24 Single spar elevator with machined and built-up ribs riveted to skins – aluminium alloy construction
- C25 Elevator trim tabs
- C26 Rudder trim tabs
- C27 Servos

Avionics and electrical

- E1 Weather radar
- E2 Glideslope and localiser antenna
- E3 Electrically heated pitot heads – three off

- E18 Generator control unit
- E19 ELT
- E20 External power connector
- E21 White rear anti-collision light
- E22 White rear position light
- E23 Wingtip position and white anti-collision lights
- E24 Static discharge wicks
- E25 Landing lights both sides
- E26 Wing inspection light – left hand side only

Fuel system

- F1 Two integral wing tanks with a total capacity of 871 litres
- F2 Gravity filler points
- F3 Capacitance probes – 14 off
- F4 Fuel tank vent line
- F5 Flapper valves
- F6 Overboard vent
- F7 Vent float valve
- F8 Vent line
- F9 Vent line
- F10 Flapper valve
- F11 Drain valve
- F12 Fuel strainer
- F13 Fuel vent expansion bay

Powerplant

- P1 Pratt & Whitney Canada PW610F turbofan engine flat rated at 900lb(4 kN) take-off thrust at sea level
- P2 Exciter box
- P3 Composite inlet duct
- P4 In-board apron part of nacelle
- P5 Lower access panel for access to accessory gearbox and starter-generator
- P6 Nacelle(composite construction) with upper and lower lift off panels
- P7 Pre-flight door for access to oil sight gauge and oil filter on accessory gear box
- P8 Engine mixer
- P9 Polished aluminium alloy engine inlet
- P10 Rear engine mounting point
- P11 Front engine mount
- P12 Combination composite engine nozzle and tailcone
- P13 Fire-suppression system

Undercarriage

- U1 Nose landing gear doors – two side doors open only on opening and retraction of nosegear, the third door is open when the nosegear is down(aluminium alloy)
- U2 Steerable nose landing gear
- U3 5.00 x 5 eight-ply tyre
- U4 Electrical actuator for main gear
- U5 Main gear
- U6 18 x 5.5R8 eight-ply radial tyres
- U7 Main landing gear door – aluminium alloy
- U8 Wheelwell

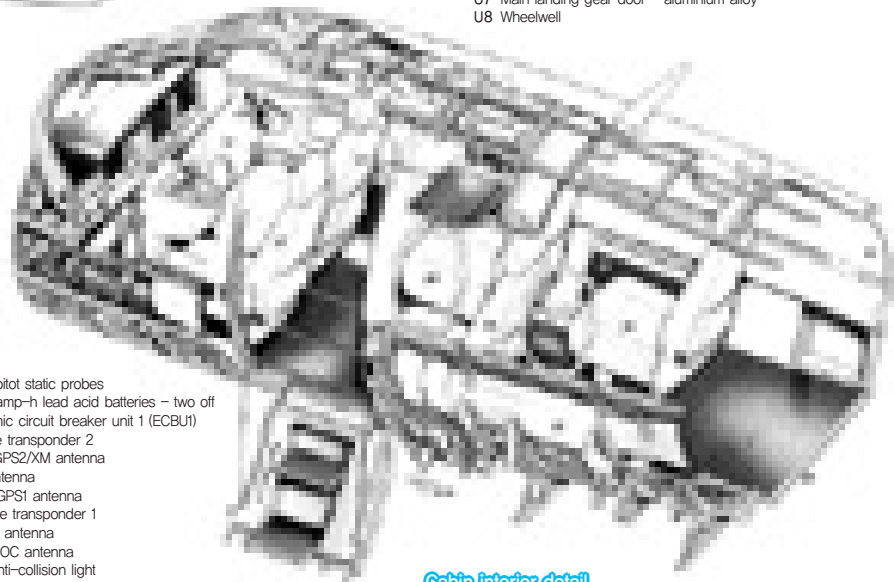
Tim Hall FRAeS
Albuquerque
New Mexico

- A6 Warm air supply duct to cabin
- A7 Cold air supply duct to overhead gaspers
- A8 Warm air supply duct for cabin
- A9 Aft evaporator and fans
- A10 Cockpit warm air foot vents
- A11 Cabin warm air foot vents
- A12 Left bleed air/muffler duct
- A13 Right bleed air/muffler duct
- A14 Bleed air supply subsystem
- A15 Primary outflow valves – two off
- A16 NACA ducts on pylon
- A17 Pneumatic boot de-icing on wing leading edge
- A18 Pneumatic boot de-icing on tailplane leading edge
- A19 Electrical de-ice on windscreen
- A20 Bleed air anti-ice duct for engine inlet
- A21 Oxygen cylinder
- A22 Pilot's emergency oxygen mask – two off. Passengers dropdown masks in cabin overhead console
- A23 Cockpit air vents

Flying Controls

- C1 Rudder pedals
- C2 Side sticks
- C3 Mechanical linkage for side stick
- C4 Rudder cable routing
- C5 Elevator cable routing
- C6 Elevator cable routing

- E4 Three pitot static probes
- E5 24v 22amp-h lead acid batteries – two off
- E6 Electronic circuit breaker unit 1 (ECBU1)
- E7 S mode transponder 2
- E8 VHF2/GPS2/XM antenna
- E9 DSU antenna
- E10 VHF1/GPS1 antenna
- E11 S mode transponder 1
- E12 Iridium antenna
- E13 VOR/LOC antenna
- E14 Red anti-collision light
- E15 Aft power distribution centre
- E16 Avio processing centre – left
- E17 APC – also includes FADEC



Cabin interior detail