3 Baseline Aircraft Definition

GENERAL
- Fuselage comprising cabin and baggage hold
- Baggage hold with floor tie-down net (LH and RH side)
- Tail boom with stabilizer fitted with 2 lateral fins and a shrouded tail rotor built into the vertical fin
- Retractable bicycle landing gear with axially lockable casting nose wheel unit, assisted differential brakes on pilot's and copilot's stations and parking brake
- 3 heated pilot heads
- 6 built-in foot-steps (3 on each side) for access to transmission deck
- Anti-corrosion protection
- Structural reinforcements for 1,600 kg (3,527 lb) cargo sling
- Structural reinforcements for external hoist
- Jacking, hoisting, mooring and gripping points
- Interior colour: light grey
- Exterior colour:
  - the fuselage is painted as per standard colour chart (scheme and colours, gloss or matt polyurethane finish, white + 2 colours), unless modified by option
  - the landing gears are light blue
  - the transmission deck (MGB & tail rotor drive shaft) are white
  - the main rotor and tail rotor cover are grey
  - the main rotor blades are kaki and the tail rotor blades are black

COCKPIT / CABIN
- 1 multipurpose cabin
- 2 removable pilot and copilot energy attenuating high backrest seats, adjustable in reach and height, each fitted with a 5 points harness
- 1 glass windshield
- 2 hinged pilot and copilot doors, jettisonable with tinted windows, allowing access to cockpit and front passenger row, each fitted with a sliding window
- 2 jettisonable tinted windows located between cockpit and cabin doors
- 2 passenger sliding doors with jettisonable tinted windows
- 2 externally mounted cockpit and cabin footsteps on each side
- 2 tinted upper panes
- Cabin upholstery
- Dual flight controls
- Fuel shut-off controls
- 1 rotor brake control
- 1 heating / demisting / ventilation system
- 2 windshield wipers
- 1 portable fire-extinguisher in cockpit
- 2 illuminated chart holders
- 2 headset hooks
- Stowage place in the doors for flight documents
- 1 flight manual

INSTRUMENTS
- 2 Primary Flight Displays (PFD)
- 2 Navigation Displays (ND)
- 1 dual screen Vehicle and Engine Management Display (VEMD®) providing the following information:
  - First Limitation Indicator (FLI): limitation related to the first power limitation: NG, T4, TRQ
  - Engine oil temperature/pressure indicator
  - Hydraulic pressure
  - Ammeter and voltmeter
  - OAT
  - Enhanced usage monitoring functions
  - Engine cycle counting
  - Automatic engine check
- 1 Caution Advisory Display (CAD) providing the following information:
  - Caution advisory display (amber, green and blue messages)
  - Fuel quantity
  - Fuel pressure
  - O/n (backup mode)
- 2 Instrument Control Panels (ICP)
- 1 mission display 10.4"
- 1 stand-by gyro-horizon
- 1 stand-by anemometer
- 1 stand-by altimeter
- 1 stand-by magnetic compass
- 1 stand alone DME indicator
- 1 landing gear position selector and indicator
- 2 stop watches
- 1 triple tachometer for rotor and engine 1 and 2 free turbine r.p.m.
- 1 tachometer for rotor on copilot's side
- 1 warning panel (red alarms)
- 2 master alarm lights
- 2 manoeuvre limit lights
- 2 "L/G not extended" warning lights
- 1 Automatic Pilot Mode Selector (APMS)
- 1 Reconfiguration Control Unit (RCU)
- 1 fuel circuit control and inspection panel
- 1 AHRS control box
- 1 overhead panel including an engine control panel, 2 dual fire extinguishing controls for engine bays, 1 dual fire extinguishing control for baggage hold and 1 electrical control panel
- 1 brake hydraulic circuit pressure gauge on pilot side floor
- 2 Attitude and Horizontal Reference Systems (AHRS)
- 2 Air Data Computers (ADC)
- 1 radar altimeter (radar altitude displayed on NDs)
- 1 nose mounted radome with the following avionics modules:
  - 2 Flight Data Computer Modules (FDCM)
  - 1 Automatic Pilot Module (APM)
  - Spare for 1 Miscellaneous Flight Data Acquisition Unit (MFDUA++)
POWER PLANT

- 2 Turbomeca ARRIEL 2C2 turbine engines with dual channel Full Authority Digital Engine Control (FADEC) system, and fitted with 4 tip detectors cabled with a warning light on warning panel.
- The Digital Engine Control Unit (FADEC) provides the following main functions:
  - Variable rotor speed governing
  - O/EI training mode
  - Automatic starting sequence
  - Each engine is equipped with an anti-icing fuel system (effective down to O.A.T. = -20°C)
  - Automatic (FADEC) controlled engine governing in back-up mode
- 1 fuel system including 6 tanks split into 2 groups, with a total usable capacity of 1,257 litres (332 US gal), 4 immersed canister booster pumps, 1 transfer pump and low level fuel indication
- 2 engine lubrication and oil cooling systems
- 1 fusel burner system on engine lubrication system
- 2 engine fire detection and extinguishing systems
- 2 engine anti-icing air-intake grids
- 2 phase angle torquemeter sensors
- Single side engine flushing port (without cowling removal)
- Single side fuel filler with door

TRANSMISSION SYSTEM

- 1 main gearbox with oil level sight, magnetic plug, oil pressure and temperature sensors, 1 dual-pump lubrication system, thermal-switch, 2 rotor tachometer sensors, access ports for endoscope and oil sampling, and 2 chip detectors wired to the Caution Advisory Display
- 2 free wheels integrated to the main gearbox
- 1 main gearbox oil cooling system
- 2 engine / main gearbox coupling shafts
- 1 tail rotor drive shaft
- 1 rotor brake
- 1 tail gearbox with oil level sight and 1 chip detector wired to the Caution Advisory Display

ROUTERS AND FLIGHT CONTROLS

- 1 main rotor with:
  - 5 glass / carbon-fibre blades
  - 1 SPHERIFLEX® rotor head fitted with lower gust and droop stops
  - 1 rotor mast fitted with rotor r.p.m. phonic wheel
  - 1 FENESTRON® type tail rotor with 10 composite material blades built into the vertical fin
- 1 flight control system, fitted with 3 dual-chamber / dual-body main servos-units (on cyclic and collective pitch channels) and 1 dual-chamber / dual-body rear servo-unit (on tail rotor pitch control channel)
- 1 Dual Digital Automatic Flight Control System (4-axis type) including upper modes

ELECTRICAL INSTALLATION

- Power generation system:
  - 2 starter / generators (160 Amp, 28 V DC)
  - 43 Amp / hr nickel-cadmium battery with temperature sensor and warning light
  - 1 external 28 V DC power connector
  - 1 additional maintenance ICS jack in the ground power receptacle compartment
- Power distribution system:
  - 2 primary bus bars
  - 2 essential bus bars
  - 2 high load bus bars (80 A) – for optional equipment only
  - 1 battery bus
  - 2 breaker panels in radome
- 1 breaker panel in cockpit
- Lighting:
  - 1 double red and white tail fin anti-collision light
  - 1 LH side retractable landing light (450 W)
  - 1 RH side retractable swivel light (450 W)
  - 3 position lights (red, green, white)
  - Adjustable instrument lighting
  - 2 utility lights in the cockpit
  - 1 instrument light for flight in stormy conditions
  - Overhead lights in cabin and cargo compartment
  - 2 x 28 V DC power outlets in cabin
  - 1 emergency battery for automatic lighting of the cabin central overhead lights and call signs

HYDRAULIC GENERATION

- 2 independent hydraulic systems feeding the servo-units, landing gear actuation system and assisted brakes
- 1 self-sealing hydraulic ground coupling
- 1 stand-by hydraulic system with electro-pump for emergency activation of the landing gear and for hydraulic assistance on ground (engines not running)

AIRBORNE KIT 1

- 3 pitot head covers
- 2 static vent plugs
- 2 engine air-intake covers
- 2 engine exhaust pipe covers
- 7 mooring rings
- 2 rough weather tie-down rings
- 2 gripping rings
- 1 main blades tie-down kit
- 1 set of jacking pads
- 1 fuel tanks bleed tool
- 1 data case
- 1 airborne kit stowing bag

¹ Weight not included in standard aircraft empty weight.