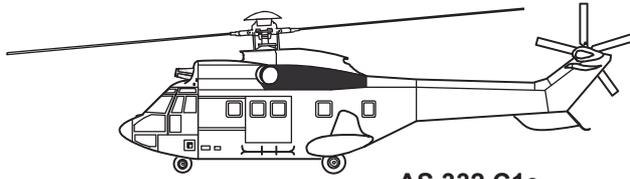




EC725

Technical Data
2014

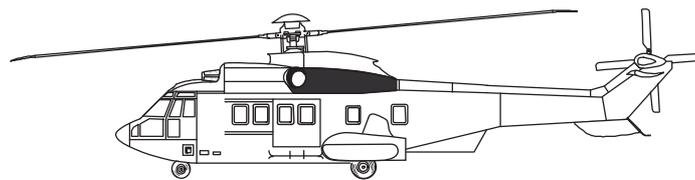
SUPER PUMA
(Civil Version)



AS 332 C1e

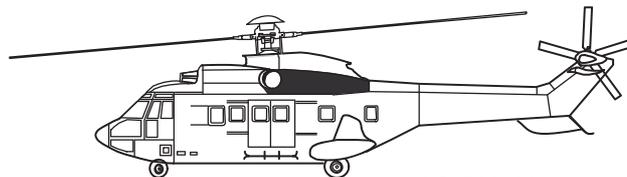


AS 332 L1e



EC 225

COUGAR
(Military Version)



AS 532 ALe



EC725

3 Baseline Aircraft Definition

GENERAL

- Crashworthy design fuselage including cockpit and cabin
- Composite material intermediate structure
- Polyurethane white paint and Dinol AV30 re-inforced anti-corrosive treatment
- Mono-coque tail boom with tail rotor protection and stabilizer
- Front part of the tail boom arranged as a storage compartment
- Fuselage upper part used as transmission deck
- Multipurpose sponsons with crashworthy self-sealing fuel tanks
- Fuselage lower part fittable with floatation gear
- Engine cowlings serving as a work platform when in the open position
- High energy absorption, retractable, tricycle landing gear with trailing-arm main landing gear and castoring nose wheel unit
- Built-in jacking and towing points
- Footsteps for climbing to the transmission deck, the cockpit and the cabin
- Provisions for attaching gripping points
- 4 built-in attachment points for lateral external loads
- Structural and electrical capabilities for axial armament
- Fixed parts of armour plating for pilots
- Cable cutter
- Fixed parts for 3.8 tons cargo sling
- Fixed parts for electrical dual hoist (115V AC)
- Fixed parts for external mirrors
- Interior paint : night blue
- Exterior paint: the fuselage is painted following customer paint scheme (polyurethane finish)
- Active Vibration Control System

COCKPIT

- 2 pilot and copilot crashworthy seats adjustable in height and fore-and-aft, complete with safety belts and extensible shoulder harnesses
- 1 third crew man jump-seat with a 3 point extensible safety harness
- 3 sun visors
- Dual flight control
- Steadying rods at pilot station
- Engine controls
- Master armament switch
- Master cut-off switches
- Rotor brake control
- Landing gear control
- Differential wheel brakes at pilot and copilot stations
- 2 map cases on pilot and copilot doors
- 1 Flight Manual
- Instrument panel and cockpit painted in black
- 1 hand fire extinguisher
- De-iced pilot and copilot windshield panes with wiper
- De-iced cockpit center pane with wiper
- 2 hot air diffusers
- 3 windshield pane demisting ramps
- 4 adjustable ventilation outlets
- Windshield washer
- 2 jettisonable doors and door-stops
- Enlarged cockpit footsteps
- Cockpit green tinted upper panes
- Five 28 V receptacles
- Access to cabin with partitioning curtain

INSTRUMENTS

- 4 multifunction 6" x 8" landscape LCD displays
- 2 display and autopilot control panels
- 1 Integrated Standby Instrument (ISI) for airspeed, altimeter and gyro-horizon back-up display
- 1 redundant Vehicle Monitoring System (VMS) with one redundant Aircraft Management Computer (AMC) and two 4" x 5" LCD displays
- 1 stop watch
- 2 triple tachometers
- 1 warning panel
- 1 fuel circuit control and monitoring panel with 2 fuel content displays
- Emergency Locator Transmitter
- 1 radio altimeter displayed on multifunction LCDs
- 1 AC/DC control box
- 1 engine starting panel
- 1 landing gear position control and monitoring panel
- 2 heated pitot heads and 6 static vents
- 1 ventilation/heating system control
- Instruments units available in English (Altimeter in feet and Airspeed indicator in kts)
- 1 digital intercommunication system – 2 control boxes
- 1 radio management system, with 2 CDU
- 1 VOR/ILS/ADF/MKR receiver
- 1 VOR/ILS/MKR receiver
- 1 DME receiver (twin channel)

CABIN

- Re-inforced floor fitted with 15 cargo tie-down rings, capable of accommodating various types of seat and cabin additional fuel tanks available on option
- 2 sliding double doors and front sliding windows
- 2 observation bubble windows on double cabin sliding doors
- Cabin green tinted windows
- 8 jettisonable windows (including 4 on the sliding doors)
- 1 rear step door
- 1 hand fire-extinguisher
- Upholstery (dark padded cloth)
- Heating and ventilation (upper outlets adjustable for direction and flow, plus bottom adjustable for flow)
- Floor hatch for cargo sling pole
- Fixed parts for 28 troop seat installation
- Structural provisions for casualty installation
- Cabin door handles

POWER PLANT

- 2 Turbomeca Makila 2A1 1776 kW (2382 shp) maximum emergency power, blade shedding, turbines engines in two separate groups with own starting, feeding, lubricating, and cooling systems
- 2 redundant full digital FADEC including a O.E.I. training mode
- 1 fuel system of 2,880 litres (760 US gal.) usable capacity comprising 9 self sealing and crashworthy tanks, arranged in 2 groups, 4 booster pumps, 3 transfer pumps and a low/high fuel warning system. The pipes are of the crashworthy type.
- Provisions for ferrying fuel tanks
- Hover In Flight pressure Refueling (HIFR)
- 2 engine bay fire-detection systems
- 1 two-cylinder selective fire-extinguishing system
- 2 chip detectors
- Multipurpose engine air intakes (anti-sand and anti-ice filters)
- 1 engine flushing device without removal of cowlings
- 1 cycle counting system
- Fixed parts for infra-red suppressors

TRANSMISSION SYSTEM

- 1 main gearbox (MGB) on flexible mountings with 3 chip detectors one of which with fuzz burner, oil sight gauge, oil temperature and pressure sensors and torque-meter pick-ups, 2 lubrication pumps and independent circuits
- 1 intermediate gearbox with magnetic plug, oil sight gauge and temperature sensor
- 1 tail gearbox with magnetic plug, oil sight gauge and temperature sensor
- 1 main gearbox oil cooling system
- 1 main gearbox oil emergency cooling system
- 1 MGB total loss of oil spray device
- 1 rotor brake
- 2 MGB bay fire detection circuits
- MGB max. oil temperature warning
- MGB mini oil pressure warning
- TGB maxi oil temperature warning

ROTORS AND FLIGHT CONTROLS

- 1 articulated main rotor with 5 composite-material blades equipped with gust and droop stops
- 1 anti-torque rotor with 4 composite-material blades
- 1 flying control system, fitted with 4 dual-body servo-units (3 on the cyclic and collective pitch channels and 1 on the anti-torque rotor pitch control channel) with 2 chamber per body
- Fixed parts for main rotor blade folding system
- 1 dual/duplex digital autopilot associated with 2 flight data computers and back-up capabilities

ELECTRICAL INSTALLATION

- Two 30/40 kVA, 115/200 V, 400 Hz alternators
- One 43 amp.-hr cadmium-nickel battery
- 2 transformer-rectifiers of 200 Amps each
- One 4 amp.-hr stand-by battery
- One 26 V, 400Hz transformer
- 1 cockpit lighting system including :
 - green pedestal and overhead panel integrated lighting
 - integrated instrument panel lighting (NVG compatible)
 - White general lighting (NVG compatible)
 - 1 white extension lamps (NVG compatible)
 - 2 white map lights
 - 1 storm light
- 1 cabin lighting system equipped with 6 LED Dome lights (NVG compatible)
- 1 cabin lighting system equipped with 4 NVG compatible lights
- 6 receptacles for ancillaries (28 V, 15 amp.)
- 1 receptacle for ancillaries (28 V, 25 amp.)
- 2 external power receptacles (AC and DC)
- One 600 W landing light with variable intensity
- 1 infra-red landing light with variable intensity
- 3 position lights
- 1 anti-collision light (NVG compatible)
- 4 NVG compatible formation lights

HYDRAULIC GENERATION

- 2 independent hydraulic systems :
 - the LH system feeds one of the servo-unit bodies, the autopilot, the landing gear control, the rotor brake and wheel brakes
 - the RH system feeds the other body of the servo-units
- Hydraulic ground couplings
- 1 DC auxiliary electropump on stand-by for the LH system and for supplying sufficient hydraulic pressure for movement of the controls on the ground before starting in high winds
- 1 stand-by electropump for complete lowering of the landing gear
- Provisions for hydro-electric group installation

AIRBORNE KIT ¹

- 6 static vent blanks
- 2 pitot head covers
- 1 engine air-intake protection cover
- 2 engine tail-pipe blanks
- 4 mooring rings
- 2 rough-weather mooring fittings (included on the aircraft)
- 1 access ladder
- 1 data case
- 3 jacking ball-joints
- Main blade tie-down
- Fuel bleed line
- 1 stowing bag for the airborne kit

¹ Weight not included in baseline aircraft empty weight.



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