

BASELINE AIRCRAFT DEFINITION

The helicopter in the definition, presented hereafter, meet the certification standards for day and night VFR, Category A equivalent operations, set by the following airworthiness authorities: EASA. This list is not restrictive and the status of approval by other airworthiness authorities must be checked. Additional equipment item may be required by the relevant operational regulation (most of them are available in catalogue). According to the type of operations considered (single or two-pilot IFR), this definition must be supplemented in agreement with the regulation in force.

GENERAL

- The AS355 NP[®] is certified with a pilot being on the right side
- The baseline aircraft is delivered with right side controls and fixed parts of the removable dual controls (the removable parts of removable dual controls are optional)
- Fuselage comprising the cabin and 3 luggage holds, with floor tie-down nets and access doors
- Tail boom with stabilizer, anti-torque rotor and fin with tail skid
- Low skid landing gear with single footstep (on right and on left side), capable of taking handling wheels
- Lifting points
- Mooring fixtures
- External paint: fuselage painted in 1 to 3 colours according to standard paint schemes. Unless modified by optional item, the main rotor head cover and the skid landing gear are painted in grey.
- Internal paint: grey (prevailing colour)
- Interior signs and markings: available in English

CABIN

- Cabin floor in light-alloy sheet-metal with tie-down rings
- 2 pilot and copilot high-back energy-absorbing seats, adjustable in reach, removable, complete with cushions, safety belts and shoulder harnesses
- 2 two-place rear bench-seats, foldable separately, complete with cushions, safety belts and shoulder harnesses
- 2 pilot and copilot jettisonable doors each fitted with a sliding window and with improved side-visibility window
 - 1 RH large front door
 - 1 LH front door
- Rear right door-extension for passengers and cargo
- 1 rear left sliding door
- Locks on every access to cabin and luggage compartments
- Lock on fuel cap
- 2 tinted upper panes
- 1 ceiling housing the ventilation ducts, fuses and controls (ventilation controls, rotor brake and fuel cut-off)
- Cabin heating
- Demisting system for front windscreens
- Ram air ventilation duct
- Fixed parts for pilot and copilot windshield wipers
- 1 pilot document holder
- 1 fire-extinguisher
- 1 Flight Manual: available in English
- Interior harmony according to definition in force

INSTRUMENTS

- 1 airspeed indicator
- 1 altimeter
- 1 vertical speed indicator
- 1 triple tachometer (N rotor - free turbines 1 & 2)
- 1 clock
- 1 warning panel
- 1 magnetic compass
- 1 heated pitot head
- 1 external side slip indicator
- 1 ICS connection to audio warning issued from VEMD[®]
- 1 LCD Dual screen Vehicle and Engine Multifunction Display (VEMD[®]) providing the following information:
 - First limitation indicator (FLI)
 - ◆ torquemeter (Engines 1 & 2 output torque)
 - ◆ exhaust gas temperature (Engines 1 & 2 TOT)
 - ◆ gas generator tachometer (Engines 1 & 2 N1, delta N1)
 - Engines 1 & 2 oil temperatures and pressures
 - Fuel pressures and quantities
 - Fuel flow and estimated remaining time to fly (option fuel flow meter needed)
 - Ammeter and voltmeter
 - Outside Air Temperature (OAT)
 - Enhanced usage monitoring functions
 - ◆ IGE/OGE performance calculations
 - ◆ engines cycles counting
 - ◆ OEI duration
 - ◆ limits overriding display and storage
 - VEMD[®] and peripheral maintenance information
 - Data downloading capability (software and connection wire as option)

AVIONICS

- 1 gyro-horizon
- 1 gyro-compass with
- 1 horizontal Situation Indicator
- 1 turn and bank indicator
- 1 VHF/VOR/LOC/GS
- 1 VHF/VOR/LOC/GS/GPS
- 1 transponder (mode S)
- 1 altitude encoder
- 1 Emergency Locator Transmitter
- 1 ICS + passenger interphone

POWER PLANT

- 2 Turboméca ARRIUS 1A1 turbine engines, developing 415 kW (564 ch – 556 shp) max. emergency power (one engine inoperative), complete with starting, fuel supply, fuel reheating, digital engine control (DEC) with manual back-up governing, overspeed protection, in-flight restart systems and fitted with 2 chip detectors
- 2 fuel systems including 2 independent tanks of 730 litres (193 US gal.) total capacity
- 2 engine lubrication and oil cooling systems
- 1 fire detection system per engine
- 2 air-intake protective grids
- 2 torque-measurement pick-ups
- Engines fire-extinguishing system

TRANSMISSION SYSTEM

- 1 main gearbox, anti-vibration mounted, with oil sight gauge, chip detector, oil temperature and pressure switches, port for endoscope and self-sealing valve for oil sampling and draining
- 1 combination box
- 1 main gearbox oil cooling system
- 2 engines to main gearbox coupling shafts
- 1 rotor brake
- 1 main rotor high and low r.p.m. warning device
- 1 tail drive carried by 6 anti-friction bearings
- 1 tail gearbox with oil sight gauge, chip detector and port for endoscopic inspection

ROTORS AND FLIGHT CONTROLS

- 1 main rotor with 3 composite-material blades around a STARFLEX[®] head fitted with spherical thrust bearings
- 1 anti-torque rotor with 2 composite-material blades
- 3 dual-body main rotor hydraulic servo units
- 2 independent hydraulic generation systems
- 1 tail rotor hydraulic servo-unit and a load compensation system

ELECTRICAL INSTALLATION

- Two 150 A, 28 V DC starter-generators, supplying two independent bus bars
- One 15 A.h cadmium-nickel battery
- 1 ground power receptacle
- 3 position lights (LED)
- 1 flashing anti-collision light (LED)
- 1 LH landing light (swivelling in elevation and azimuth)
- 1 RH fixed landing light
- 2 cabin dome lights
- 1 integrated instrument-panel lighting system
- Integrated lighting in central console
- 1 emergency and reading map light
- 1 cockpit fuses panel
- One 28 V DC cabin power outlet

AIRBORNE KIT (*)

- 2 pitot head covers
- 2 static vent blanks
- 1 radiator air-intake cover
- 2 engine air-intake covers
- 2 tail-pipe covers
- 2 twin-wheel units c/w hydraulic jacking system
- 1 lifting ring
- 2 upper mooring rings
- 3 main-blade socks
- 1 tail rotor locking device
- 1 document holder
- 1 airborne kit stowage bag

(*) (weight not included in standard aircraft empty weight)