

1 Baseline Aircraft Definition

GENERAL

- Energy absorbing fuselage
- Tail boom with fixed horizontal stabilizer and two end-plates
- Upper deck with fittings for main gearbox, engines, hydraulic and cooling system
- Cowlings for main transmission and engines
- Skid-type landing gear with skid protectors, capable of taking ground-handling wheels
- Long boarding steps, LH and RH
- Cold weather kit
- Built-in maintenance steps and grips
- Interior painting according to RAL7047 (telegrey 4)
- Exterior painting (single color)

COCKPIT, CABIN AND CARGO COMPARTMENT

- One-level cabin and cargo compartment floor with integrated rails
- Glazed canopy
- Two hinged cockpit doors with sliding window
- Map case in pilot's door
- Two wide passenger sliding doors
- Two rear hinged clam-shell doors
- Longitudinally adjustable energy absorbing pilot and copilot seats with head rest and 4-point safety belts with automaticlocking system; seat color grey or blue
- Cabin boarding grips (LH and RH)
- Interior paneling with integrated basic sound insulation
- Flight controls (pilot side)
- Engine twist grip controls at pilot's collective pitch lever
- Instrument panel with extension on pilot's side and glare shield
- Ram-air for cockpit
- Electrical ventilating system for cockpit
- Headset holder in the cockpit, rotatable
- Portable fire extinguisher
- Stowage net for first aid kit at the LH rear clam-shell door
- First aid kit^a
- Flash light (torch)
- 4 mobile tie-down rings
- Slant panel
- Center console
- Windscreen wiper for pilot and copilot
- Door open warning

a. First aid kit complies with German regulation rules 1. DV LuftBO paragraph 5(2). Type of operation, procedures or regulations may require a different/specific first aid kit.

BASIC INSTRUMENTATION

CENTRAL PANEL

- Central Panel Display System (CPDS) consisting of two LCD displays
 - Cautions and Advisories Display (CAD) with digital indication of:
 - Caution and advisory information
 - Fuel quantity indication
 - Vehicle and Engine Multifunction Display (VEMD) with digital indication of:
 - Engine parameters (engine oil pressure, engine oil temperature)
 - FLI (First Limit Indicator) for TQ, TOT, $\Delta rN1$ as analogue display
 - Main gear box parameters (oil pressure, oil temperature)
 - Dual amperemeter for generator; ampere meter for battery
 - Dual voltmeter
 - Outside Air Temperature (OAT)
 - Mast moment indication
- Back-up conventional instruments (2")
 - Clock
 - Stand-by-horizon
 - Triple (rotor and engines) RPM-indicator

- Warning unit
 - Engine fire warning with fuel emergency shut-off
 - Warning lights
 - Aural warning (for each warning, rotor RPM, fire warning)
 - Fire extinguishing system warning
 - Master caution light
- Main switch panel
 - DC power control
 - VARTOMS control
 - Start switches
- Magnetic compass

AIR DATA

- Dual pitot static system (electrically heated pitot tube and static port)
- 2 ADC MEGHAS sensors

STANDARD INSTRUMENTS (SINGLE PILOT)^a

- Air speed indicator (3")
- Vertical speed indicator (3")
- Encoding altimeter (3")
- Artificial horizon (4")
- Gyro magnetic heading with horizontal situation ind. (3")

a. If glass cockpit instrumentation is chosen as optional equipment, these standard instruments are deleted (function included in MEGHAS) and an altimeter (2") and an airspeed indicator (2") as back-up instruments are added.

POWER PLANT

- Two TURBOMECA ARRIEL 1E2 turbine engines, complete with starting, fuel supply and control systems
- Crash resistant fuel system
- Two independent oil cooling and lubrication systems of the engines
- Fire detection and extinguishing system
- VARTOMS (Variable Rotor speed and Torque Matching System)
- Overspeed control
- Cycle counter

TRANSMISSION SYSTEM

- Main transmission including an independent redundant lubrication system and monitoring sensors
- Rotor brake system
- Tail rotor transmission and intermediate transmission with splash lubrication, magnetic plug and oil level sight gauge

ROTOR AND FLIGHT CONTROLS

- Hingeless main rotor (System Bölkow) with 4 glass and carbon fiber reinforced blades with erosion protection strip
- Semi-rigid tail rotor with 2 twisted glass fiber reinforced blades of new technology with erosion protection strip
- Basic provisions for an easy integration of a balancing system
- Dual hydraulic boost system for cyclic and collective blade control of the main rotor
- Single hydraulic boost system for yaw control
- Stability Augmentation System (SAS) for tail rotor
- Main and tail rotors tip painting (yellow)

ELECTRICAL INSTALLATION

- Power generation system:
 - Two starter/generators (2 x 200 A, 28 VDC)
 - Nickel-Cadmium battery, (24 V, 27 Ah), rear installation
 - External power connector (STANAG 3302)
- Power distribution system:
 - Two primary busbars
 - Two essential busbars
 - Two shedding busbars
 - Two non-essential busbars (50 A) - for optional equipment only
 - Battery bus
 - One utility receptacle in cargo compartment (28VDC, 15A)
- Lighting:
 - Anti-collision warning light (red flashing)
 - Fixed landing light (250 W)
 - Three position lights (red, green, white)
 - Adjustable instrument lighting
 - One utility light in the cockpit
 - Lights in the cabin and cargo compartment
 - Boarding illumination
 - Emergency lights
- Radio:
 - Two radio master switch

GROUND HANDLING KIT^a

- Two ground-handling wheels
- Basic aircraft covers (short time)
- Oil drain hoses
- Keys for cockpit doors, cabin doors, baggage compartment doors and tank flap (one-key system)
- Battery key
- Lifting points
- Compass compensation key
- Fuel drain device

a. Weight not included in the standard helicopter empty weight

DOCUMENTATION (in English)

- One Flight Manual^a
- One Pilots-Checklist, revision service for five years^b
- One Logbook^b (only paper, CD-ROM on demand)
- One Historical Record^b (only paper, CD-ROM on demand)
- One CD-ROM^{a b} incl. AMM^c, SDS^c, WDM^c, IPC, MSM
- One add. Master Servicing Manual (MSM)^{a b} on paper
- One Service Bulletin Catalogue (SB)^{a b} per contract, on paper
- One List of Applicable Publications (LOAP)^{a b}, on paper
- One Avionics Manual (for avionics installed by EUROCOPTER Deutschland GmbH)^{b c} (on paper)
- One CD-ROM ECMM (Electronic Component Maintenance Manuals) for vendor manuals
- Engine Documentation^b, furnished by supplier, including:
 - Maintenance Manual
 - Illustrated Parts Catalogue (IPC)

a. Revision service included as long as the aircraft is operational

b. Weight not included in the standard helicopter empty weight

c. Customized documentation