



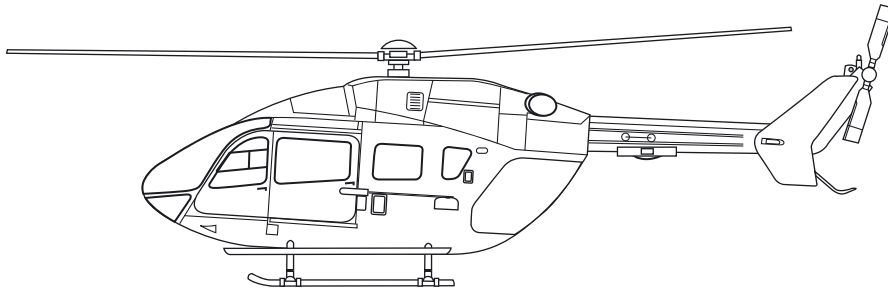
# EC145e

Technical Data  
2015

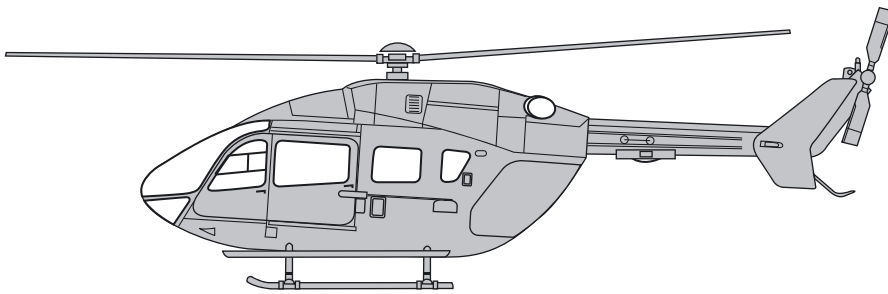


**AIRBUS**  
HELICOPTERS

**EC145**  
(Civil Version)



**EC145**



**EC145e**

### 3 Baseline Aircraft Definition

#### GENERAL

- Energy absorbing fuselage
- Tail boom with fixed horizontal stabilizer and two endplates
- 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
- 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
- Sliding window on pilot door
- Map case in pilot's door
- Two wide passenger sliding doors with window of push-out type
- Two rear hinged clam-shell doors
- Longitudinally adjustable energy absorbing pilot seat with head rest and 4-point safety belt with automatic locking system; seat color grey or blue
- Cabin boarding grips (LH and RH)
- Interior paneling
- 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
- 1 flashlight (torch)
- Slant panel
- Center console
- Windscreen wiper for pilot and copilot
- Door open warning

#### 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, ΔN1 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 in)
  - Clock
  - Stand-by-horizon
  - Triple (rotor and engines) RPM-indicator
  - Air speed indicator
  - Altimeter
- 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

#### 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 rotor blade 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 comp. (28 VDC, 20 A)
- 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 switches

## GROUND HANDLING KIT<sup>a</sup>

- 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<sup>a b</sup> (on paper)
- One Pilots Checklist<sup>c</sup> (on paper)
- One Master Minimum Equipment List (MMEL)<sup>a</sup> (on paper)
- One Logbook (on paper, CD-ROM on demand)
- One Historical Record (on paper, CD-ROM on demand)
- Technical Documentation<sup>ad</sup> incl. AMM, SDS, WDM, IPC, MSM, CECG, SRM online via KEYCOPTER<sup>®</sup> portal
- Service Bulletin Catalogue (SB) online via T.I.P.I
- One List of Applicable Publications (LOAP)<sup>a</sup> online via KEYCOPTER<sup>®</sup> portal
- One Avionics Manual<sup>e</sup> (for avionics installed by Airbus Helicopters) (on CD-ROM)
- One CD-ROM ECMM<sup>c</sup> (Electronic Component Maintenance Manuals) for vendor manuals
- One Engine Documentation<sup>f</sup> (on paper or CD-ROM), furnished by supplier, including:
  - Maintenance Manual
  - Illustrated Parts Catalogue (IPC)

- a. Revision service included as long as the aircraft is operational  
 b. One Flight Manual included in the standard helicopter empty weight  
 c. Revision service for 3 years  
 d. Customized AMM, SDS, WDM and IPC versions available on request  
 e. Customized documentation  
 f. Revision service for 5 years



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