EC725  
DESIGNED FOR THE MOST DEMANDING MISSIONS  
A COMBAT PROVEN MULTI-ROLE HELICOPTER  

Introduced in 2005, the EC725 has proven itself in combat service worldwide: Afghanistan, Libya and Mali. An evolution from the experience gained with the Cougar family, the EC725 is the latest version of this medium lift (11-ton class) helicopter. The EC725 is equipped with:

• Two latest generation Turbomeca Makila 2A1 engines  
• A five-blade rotor providing high levels of maneuverability  
• A state-of-the-art glass cockpit and avionics  
• The most advanced Automatic Flight Control System.  

The EC725 excels in a full range of military missions:

• Special Operations  
• Combat Search and Rescue  
• Tactical transport  
• Casualty / medical evacuation.  

As well as in public service missions:

• Search and Rescue  
• Firefighting  
• Coast Guard  
• Exclusive Economic Zone (EEZ) protection.  

The EC725 - a truly multi-purpose, versatile military asset – has the capability to operate both from ships and from ashore.
The most demanding missions

Special Ops, Combat SAR and Personal Recovery missions require performance, precise navigation and survivability; qualities for which the EC725 is outstanding. The French Forces are successfully operating the EC725 in the harshest environments. The success of the EC725 demonstrated in Afghanistan and Libya, reflects its excellent capabilities as a Force Multiplier and the ability of this aircraft to offer decisive tactical advantage to any operator.
Mission Capabilities
- Ready for all environments
  - All weather, including in fully iced conditions
  - Day and night operable with state-of-the-art NVG compatibility
  - Sandy or maritime environments
- Outstanding range
  - 700 NM without refuelling
  - Air-to-air refuelling capability
  - Hover In-Flight Refuelling (HiFR)
- Cabin versatility
- Easy and Fast recovery Systems

Major mission equipment
- Multipurpose air intakes / sand filters
- Auxiliary Power Unit
- 990 liters (261 US gal) rear jettisonable fuel tank
- Flight Management System with Doppler, GPS and SAR modes
- Inertial Navigation System with embedded GPS
- Digital moving map displayed on any 6’x8’ LCD instrument panel
- TV + IR multi-sensor turret
- Personal Locator System
- Double Hoist, abseiling, fast roping systems
- Armament:
  - 7.62 mm machine gun in forward cabin windows
  - Two 180 round 20 mm gun pods
  - Two 19 - 2.75” rocket launchers
- Mission Planning System (Sirina), ideal for preparing missions quickly and precisely according to helicopter performances
Tactical Transport missions

The agility, high load capacity and easy cabin access of the EC725 combined with fast cruise speed and long range, make this aircraft the perfect tactical transport helicopter for troops and cargo, as well as for casualty evacuation.
Your satisfaction is our top priority

**Up to 29 cabin seats or**
up to 20 energy-absorbing wall mounted seats

**Easy cabin access**
- 2 large double central sliding cargo doors
- 2 large sliding windows, leaving the main cabin doors unobstructed

**Easy cockpit access**
- 2 individual hinged doors for crew

**Cargo transport**
**Configuration**
- Internal load: high density cabin floor 1,500 daN/m²
- External load: max sling capacity 4,750 kg / 10,470 lb

**Casualty / medical evacuation**
- 11 stretchers + 5 attendants or seated injured passengers
- 2 self-contained medical units with attendants

![29 cabin seats](image1)
![Sling capacity](image2)
Search & Rescue

Search and Rescue missions require a fast, high-performance helicopter able to function in both hot and cold environments. The EC725 offers superior performance, endurance, range and safety in all weather conditions. This helicopter can achieve the mission when others can’t deliver.
Always ready to go:
Demonstrated availability rate: 98 %

First to arrive on the scene
• Takeoff in less than 5 minutes
• High cruising speed with low vibration

Exceptional endurance
• A radius of action of more than 300 NM, extendable by in-flight refuelling or Hover In Flight Refuelling

Very low vibration levels
• Comfortable for crew and passengers
• Minimal airframe and equipment fatigue

SAR mission equipment
• Record-breaking 4-axis dual duplex digital Automatic Flight Control System including outstanding OEI management and Ground Speed mode
• Flight Management System with DOPPLER, GPS and SAR modes, Inertial navigation system with embedded GPS
• Search and weather radar
• TV/IR camera, eye-safe laser telemeter
• Double hoist with variable speed: 80 m (240 ft) - 272 kg (600 lb)
• Bubble window
• Emergency floatation certified up to sea state 6 level: Inflation in 4 sec, no altitude limitation for use, can remain armed throughout flight, inflation up to 150 kts to minimize pilot load in an emergency, inflation is automatic or monitored by the crew
• Energy absorbing seats for passengers
• Casualty carrying installation for stretchers
• 990 liters (261 US gal) rear jettisonable fuel tank
• Loud speaker + searchlight

Public Services
Firefighting
4,000 liters (1,057 US gal)
Water bombing kit
Coast Guard
Exclusive Economic Zone (EEZ) protection
Adaptability

The EC725 has been designed and is equipped for high survivability.
Protection
• Against 7.62 or 12.7 mm
• Crew cockpit protection: armoured and energy absorbing crew seats
• Armour plating in the cabin: either collective floor and walls or individual armour plating carpets

EC725 Survivability Equipment
• Radar warning receiver
• Missile approach warning system
• Laser warning receiver
• Chaff / Flare dispensers

Reduced Vulnerability
IR Suppressors
• IR signature divided by 10 Fuel tanks
• Self sealing and crashworthy fuel tanks
Multi Purpose Air Intakes
• Sand and ice protection
Blades multibox structure
• Bullet impact resistant

Main Gear Box dry run
Successfully completed (exceeds FAR/JAR29 requirements) without exemption, 52 Minutes dry run achieved

Crashworthy structure and energy absorbing seats
• Reinforced structural main frames
• High energy-absorption landing gear

Unrivalled redundancy in key systems to maintain full functionality despite significant battle damage
• Sensors/computer (dual duplex AFCS)
• Displays (five, all multi-functional)
• Dual engine-FADEC with backup
• Integrated Stand-by Instrument (ISI) with same display logic as main LCDs
Technology

The EC725 has been designed to comply with the latest JAR 29 amendments. It integrates all the latest technological innovations to comply with the most stringent technical and operational requirements for all types of missions. Thanks to the dual-channel FADEC, the TURBOMECA MAKILA 2A1 turboshaft engines deliver more power. The 5-blade rotor provides an exceptionally low vibration level, and the modular design of the mechanical assemblies allows for easier maintenance. This new generation helicopter also features significant advances in terms of man-machine interface ensuring the most important information arrives to the pilot for the most effective decision making process. The First Limit Indicator displays the available power in any condition and the power margin in AEO (All Engines Operative) and OEI (One Engine Inoperative) situations.
Modern technology allows for greater safety

Advanced Helicopter Cockpit Avionics System
- Four 6" X 8" LCD Multi Function Displays
- Two 4" X 5" LCD Vehicle Monitoring Displays
- One LCD Integrated Stand by Instrument for speed, altitude and gyro horizon backup
- 4-axis, dual duplex autopilot

Main Gear Box
- Increased power
- Demonstrated 30-minute dry run capability, cooling spray device compliant with JAR 29
- 5-blade Spheriflex® main rotor
- Blades with multibox structure, capable of flight in severe icing conditions.

Spheriflex® Fiberglass Rotor Head
- Excellent maneuverability
- Great stability
- Very low sound and vibration levels
- Rotor engagement in winds of up to 55 kts
- Easy to adjust

Monitoring System
Integrated maintenance assistance system (Health Usage Monitoring System) based on data recording and pro-active monitoring for flight safety enhancement.

2 TURBOMECA MAKILA 2A1
- Modular design for easy maintenance
- Blade shedding technology
- 2 dual channel FADECs, with automatic reconfiguration

Avionics
The EC725 is equipped with state-of-the-art avionics and communication systems, allowing all weather operations. The systems reduce crew workload while enhancing mission capability for more safety. At a glance, pilots have all navigation and piloting data and unpredictable information thanks to the Enhanced Ground Proximity Warning System and TCAS 2.
Support and Services

At Airbus Helicopters, supporting your helicopter operations with the highest level of excellence is our priority. We are dedicated to meeting our customers’ needs, whether it be maximizing combat readiness, ensuring public safety or saving lives. In order to provide customized services, we offer:

- A worldwide service network of 30 subsidiaries and participations, more than 100 distributors, representatives, training centers, repair and overhaul facilities and maintenance centers around the globe, as well as logistic hubs in France, Hong Kong and the USA.
- Customer Service Centers in Europe, Asia and the USA offering around-the-clock customer assistance, 7 days a week, 365 days a year to keep you in the skies.
- A wide array of service solutions to meet all your needs in terms of technical support, component repair and overhaul, spare parts support, technical publications and training at Airbus Helicopters facilities worldwide or at your own facilities.
Easy maintenance

Accessibility
• Built-in step
• Cowlings designed as working platforms

“Check Intervals”
Daily checks
• Before the first flight
• Turnaround
• After the last flight
Flight related checks
• 15 hours or 7 days

“Inspection intervals”
• Supplementary inspection: 100 hours
• Basic inspection: every 1,200 hours or 3 years
• Major inspection: only every 16 years

Reduced Manpower Required
• O & I level: 4 technicians per aircraft
• Replacement times of major assemblies

A World Renowned Training Academy
• Conversion and refresher courses for pilots and technicians
• Pilot training academy with state-of-the-art simulation (Full Flight Simulator)
• Standard training courses (type rating, emergency procedures, IFR, CRM, etc.)
• Mission training courses (NVG, deck operations, IFR, NOE, SAR, etc.)
• Training on-site at customers’ premises with detachment of instructor pilots or technicians
• Available EC725 training tools: CAI, VCPT, LTD

Flexible Customer Support
• A full range of service concepts from standard spares, maintenance, repair and overhaul to fully customized, comprehensive service packages

<table>
<thead>
<tr>
<th>Component</th>
<th>Technicians</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine</td>
<td>3 Tech.</td>
<td>30 min</td>
</tr>
<tr>
<td>Intermediate GB</td>
<td>2 Tech.</td>
<td>30 min</td>
</tr>
<tr>
<td>Tail GB/TRH</td>
<td>2 Tech.</td>
<td>1 h 30</td>
</tr>
<tr>
<td>Main Rotor Blade</td>
<td>3 Tech.</td>
<td>9 min</td>
</tr>
<tr>
<td>Main Rotor Head</td>
<td>3 Tech.</td>
<td>1 h 45</td>
</tr>
<tr>
<td>Tail GB/TRH</td>
<td>2 Tech.</td>
<td>1 h 30</td>
</tr>
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Characteristics

CAPACITY
Troop transport: 2 pilots + 1 chief of stick + 28 seats
VIP transport: 2 pilots + 8 to 12 passengers
Casualty evacuation: 2 pilots + up to 11 stretchers + 4 seats
Sling load: 4,750 kg / 10,472 lb

WEIGHT
Maximum take-off weight 11,000 kg 24,251 lb
MTOW in external load configuration 11,200 kg 24,690 lb
Empty weight 5,715 kg 12,600 lb
Useful load 5,285 kg 11,651 lb
MTOW in external load configuration 11,200 kg 24,690 lb
Maximum cargo-sling load 4,750 kg 10,472 lb
Standard fuel capacity 2,247 kg 4,954 lb

ENGINES 2 TURBOMECA MAKILA 2A1
Take-off power per engine 1,567 kW 2,101 shp

PERFORMANCE AT MAX. GROSS WEIGHT, ISA, SL
Maximum speed (Vne) 324 km/h 175 kts
Fast cruise speed (at MCP) 262 km/h 142 kts
Recommended cruise speed 262 km/h 142 kts
Rate of climb 5.4 m/s 1,064 ft/min
Service ceiling (Vz=0.508m/s = 100ft/mn) 3,968 m 13,019 ft
Hover ceiling OGE at ISA, MTOW, take-off power 792 m 2,600 ft
Maximum range without reserve at Economical Cruise Speed 909 km 491 NM
Endurance without reserve at 148 km/h-80 kts > 4 h 20 min

Glossary
AFCS: Automatic Flight Control System
AFDS: Automatic Flotation Deployment System
CVFDR: Cockpit Voice and Flight Data Recorder
DMC: Direct Maintaining Cost
EGPWS: Enhanced Ground Proximity Warning System
FLI: First Limit Indicator
FLIR: Forward Looking Infra Red
FMS: Flight Management System
GSPD: Ground Speed Mode
HFDM: Helicopter Flight Data Monitoring
HIRM: Human Machine Interface
HOMP: Helicopter Operations Monitoring Program
HUMS: Health and Usage Monitoring System
ICAO: International Civil Aviation Organization
LFR: Logistic Field Representative
MFD: Multi Function Display
MGB: Main Gear Box
OEM: Original Equipment Manufacturer
OGAP: Oil & Gas Availability Program
OGP: Oil and Gas Producers
PBH: Parts by the Hour
TCAS: Traffic Collision Avoidance System
19.50 m Rotor Rotating
63.98 ft

5.25 m
17.22 ft

13.15 m
10.33 ft dia

4.97 m
16.30 ft

2.00 m
6.56 ft

3.96 m
13.00 ft

2.12 m
6.95 ft

3.00 m
9.84 ft

4.97 m
16.30 ft

2.00 m
6.56 ft

3.96 m
13.00 ft

2.12 m
6.95 ft

3.00 m
9.84 ft

4.10 m
13.45 ft
THE VALUE OF EXPERIENCE
THE SUPER PUMA / COUGAR FAMILY

Worldwide Civil and Military Operations
The EC725 has evolved from the vast experience accumulated by some 100 Super Puma / Cougar operators; more than 900 helicopters have been ordered in 52 countries. The in-service Super Puma fleet has logged more than 4.8-million flight hours and the fleet leader has flown 41,800 hours.