



Civil

EC225



STATE OF THE ART AND EXPERIENCED

Tailored for the most demanding operators, the EC225® is an 11-ton helicopter integrating all of the latest technological innovations.

The two Turbomeca MAKILA 2A1 engines, the main gear box and the 5-blade rotor give this machine the power for a high payload, a long range and a fast cruise speed, along with flight endurance that exceeds 5 hours and 30 minutes. Most of all, this aircraft meets the latest CS-29 amendments, including the 30-minute dry run demonstration for the main gear box.

In addition, the EC225 offers comfort for passengers and crew. It features a very large useful volume and accommodates various seating arrangements. Low vibration and sound levels give passengers the impression of flying in a commercial jet.

Remaining highly versatile thanks to these characteristics, this new generation aircraft continues to carry out a wide range of missions, from oil & gas transportation and Search and Rescue operations, to executive and VIP transportation.



Oil & Gas Missions

The EC225[®] is the preferred choice of oil & gas operators. Integrating the latest technologies, this new-generation aircraft leads the field in terms of flight safety. The helicopter is designed with flaw-damage-tolerant components (rotor and fuselage), while its state-of-the-art avionics system considerably reduces the pilot's workload, thus enhancing safety. Comfort and sound levels likewise meet today's highest standards.

The EC225 complies with the latest JAR29 amendments. Moreover, the aircraft's role change capacity from passenger transportation to light Search and Rescue (SAR) is quick and easy due to:

- Space provision and basic wirings for SAR mission equipment
- Cabin floor with integrated rails





Optional pod for additional fuel tanks or luggage compartment



ADELT (Automatically Deployable Emergency Locator Transmitter for Helicopters)

An unequalled level of safety

Certified for flights in known icing conditions, the EC225 unites modern technologies to reach unequalled levels of safety:

- 30-minute dry run main gear box
- self deployable emergency floatation device
- TCAS II (Traffic Collision and Avoidance System) linked to the Autopilot

The wide air-conditioned cabin can comfortably accommodate up to 19 passengers on new energy - absorbing seats in staggered configuration, allowing for more shoulder space between passengers.

In the event of an emergency, the large windows push out easily to allow fast egress and thus efficient access to integrated life-rafts. To increase baggage space, extra-large lateral sponsons can be added.

Search and Rescue

Saving lives in the most difficult Search and Rescue (SAR) situations requires a fast and high-performance rotorcraft. Airbus Helicopters' all-weather EC225 is just the machine for the job. It is the only new-generation helicopter designed for all manner of SAR and coastguard missions.

Whether operating in arctic or equatorial conditions, the EC225 offers superior performance, safety, endurance and range. It provides an ideal platform for both survivors and crew with its low vibration levels and exceptional comfort. Equipped with cutting-edge technology such as an outstanding human-machine interface and automatic flight control system (AFCS), the EC225 offers pilots everything they need at their fingertips to perform precise, safe and successful missions. And because the EC225 requires minimal maintenance, pilots can perform cost-effective missions, again and again, with absolute confidence.





FLIR



Bubble window

The proven all-weather Search and Rescue helicopter. The choice of demanding operators.

The EC225 is equipped with state-of-the-art technology such as navigation precision equipment (sensors, inertia reference system, etc.) and detection devices (FLIR, RADAR).

The rotorcraft's high-level stability enables efficient hoisting operations. It can be equipped with a rotor de-icing system to fly in all-weather conditions and still offers a contained landing footprint.

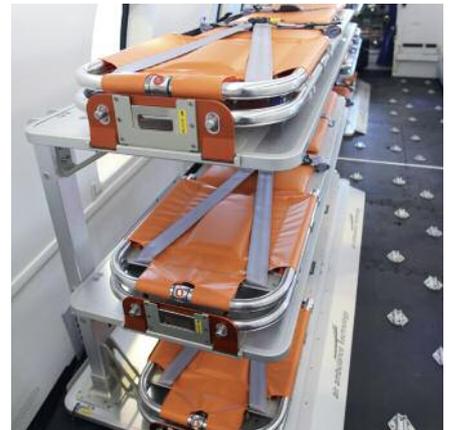


Searchlight TRAKKA

Unique SAR capabilities

- Fully automatic transition to hover
- Less than 1 m hover accuracy with redundant sensors (dual GPS or Inertial navigation System)
- Unique automatic fly-away in case of engine failure during hoisting





Typical SAR capacity

- 6 seats and provision for a medical wall with up to 3 stretchers

SAR Crew

- 2 pilots
- 1 operator for console and winch
- 1 paramedic rescue diver
- 1 attendant



Firefighting

Thanks to its incredible versatility and load transport capacity, the EC225 can support fire ground units, offering quick reaction in the most delicate situations.

Water Bombing

The first and largest internal kit for rotorcraft developed by Airbus Helicopters to fight fires.

The retractable pump and internal water tank (vessie) allow water drops throughout the full flight domain while ensuring the safest operating conditions.

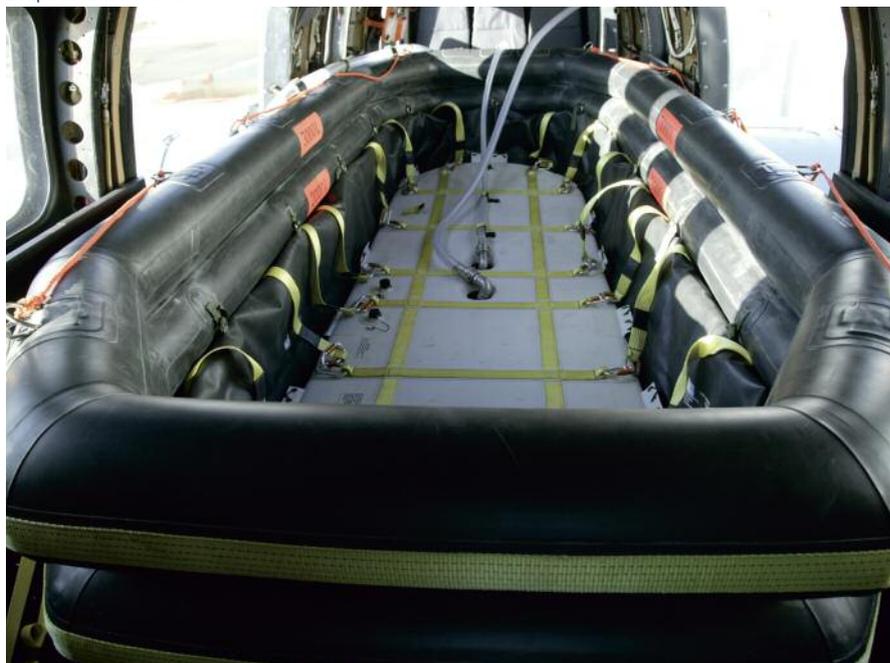
Certified since 2008



Drops in four seconds



Pump operable in very shallow water, filling in 90 seconds



4,000-liter cabin kit (4,000 kg / 8,818 lb)

Aerial Work

With superior lifting-power capacity, endurance and maneuverability, the EC225 is always up for the most rigorous hot and high missions and sling work. Thanks to the helicopter's state-of-the-art vehicle management system (VMS), pilots can concentrate fully on the mission ahead. During sling load transportation, the aircraft's 4-axis autopilot and landing gear design maintain exceptional stability. Armed with powerful engines and hook capacity, the EC225 makes heavy lifting look easy, while certified equipment and proven procedures ensure the highest levels of safety.





From pruning and air-crane missions, to worker and equipment transportation...

Maintaining and repairing the national grid is a major responsibility that involves a wide variety of demanding helicopter missions, including:

- Human external cargo (HEC) or insulator cleaning systems to maintain or repair power lines – even on live wires – while avoiding blackouts
- Pylon assembly in mountainous areas (minimizing the human footprint by avoiding road construction in the wilderness)
- Cable laying for a growing electrical grid once pylons are built
- Other aerial work activities such as team transportation, loading, pruning, etc.

The EC225 can perform “class C” aerial work missions.



Executive and VIP Transportation

Airbus Helicopters has built a worldwide reputation in the design and production of executive helicopters. Many heads of state and corporate executives select the Super Puma family for its outstanding qualities. The EC225 continues this tradition while offering a higher speed, longer range and increased comfort. The vibration level has been significantly reduced thanks to the new 5-blade rotor and state-of-the-art active-vibration control system. The enhanced soundproofing and the efficient air conditioning system give passengers the impression of being on board a business jet.





Outstanding comfort

The spacious cabin (15.50 m³ / 547 ft³) lends itself particularly well to the transportation of executives. Various layouts are possible with front and rear lounges, galleys and bathrooms for carrying 8 to 12 passengers.



Training

With more than 50 years of experience, Airbus Helicopters' training centers provide the most comprehensive, coherent and high quality rotorcraft training in the world for pilots and technicians, both civilian and military.

A wide selection of training courses is available, from qualification training, allowing operators to comply with regulatory requirements, to the more mission-oriented services training, which is tailored to the customers' operational needs.

All training centers are approved by the local airworthiness authorities (EASA, FAA, DGAC, LBA, CAA, etc.), and the courses likewise comply with their requirements. In addition, Airbus Helicopters is certified ISO 9001:V2000 and regularly audited by independent organizations such as Véritas and AFAQ, among others.





Airbus Helicopters training centers provide a wide range of courses and services, from basic training up to preparation for the most sophisticated civil and military missions.

As part of the full range of service offers, Airbus Helicopters also plays an active role in helicopter pilot development through its Ab Initio programs.



Modern training means

- Computer-assisted instruction (CAI) software, SmartBoard compatible
- Computer-based training (CBT) software
- New virtual cockpit procedures trainer (VCPT): 3D cockpit simulation on any PC or laptop for task training in virtual reality
- Helicopter underwater escape trainer (HUET)

Ultra-realistic simulators

- Level D qualified EC225 Full Flight Simulator (FFS)
- Dual-qualified FFS: Level B and flight training device (FTD) level 3

Support & 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 flight revenues, 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 90 maintenance, repair and overhaul facilities, 25 training centers, and seven interconnected logistics hubs, covering 148 countries
- Customer Service Centers in Europe, Asia and the United States 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 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





Maintenance made easy

The Super Puma family has accumulated more than 4.3 million flight hours of experience around the world and under all weather conditions, even in the most demanding maritime environments. The result is a proven and acknowledged maintenance experience, on which Airbus Helicopters developed the EC225 maintenance program that gives the operator greater flexibility to schedule inspections. This new scheduling enables operators to forecast their costs more precisely and better manage their activity.

The EC225 maintenance program has evolved to a clear simplification of inspection types.

Operators are free to organize periodic maintenance planning according to their own activity.

- No mechanic check necessary before 5 flight hours or 7 days. Pilots can perform the pre-flight or inter-flight checks themselves.
- Reduction in the number and the type of inspections.
- Different operations can be grouped together and performed at a fixed date.
- Only periodical inspections every 100 hours and 1,200 hours or 3 years.
- General overhaul is replaced by a special corrosion inspection after 15 years.
- Current Super Puma operators can utilize around 70% of their tools on the EC225. Some other tools can be adapted.
- Regarding avionics, the amount of built-in tests and the provided documentation allow the operators to perform trouble-shooting by themselves without the need of specific tooling.
- Avionics maintenance units (ground station) can be provided or are an available option for data downloading and easier troubleshooting.

The entire EC225 maintenance documentation entire EC225 maintenance documentation is available on CD-ROM.



Technology

The EC255 has been designed to comply with the latest CS-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.

In addition, 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 for greater safety



Main Gear Box

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

Advanced Helicopter Cockpit Avionics

- 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

The AFCS provides outstanding precision and stability; its "high" modes integrate the engine limitations in all AEO and OEI situations.

It also allows flight in all SAR patterns and automatic approaches following IFR procedures, as well as fully automatic hovering capture from VNE to 0 kts/100 ft.

Spheriflex® Fiberglass Rotor Head

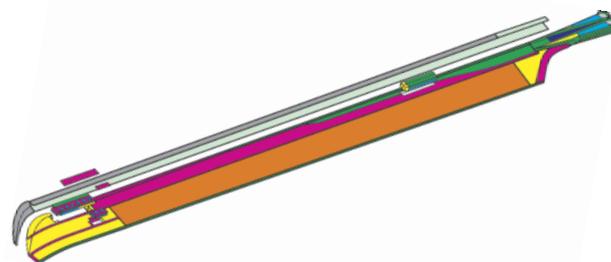
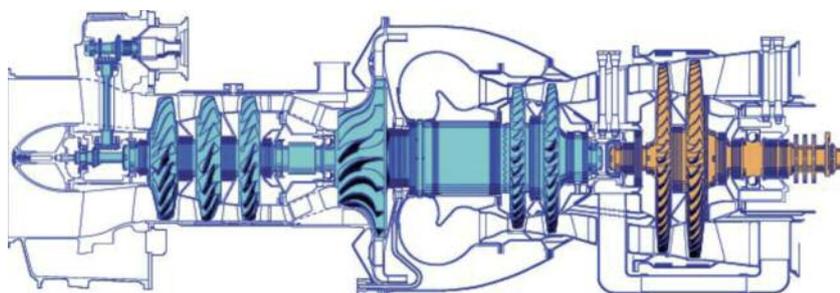
- Excellent maneuverability
- High stability
- Very low sound and vibration levels
- Rotor engagement in winds of up to 55 kts
- Easy adjustment

Monitoring System

Integrated maintenance assistance system (Health Usage Monitoring System) based on data recording and proactive 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 EC225 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.

Characteristics

Even more power

The EC225 offers high operational availability and payload, long range and fast speeds.

PASSENGER TRANSPORTATION

Passenger transport	2 pilots + 19 passengers with comfort seats
SAR	2 pilots + 4 crew with comfort seats + up to 20 pax or 3 stretchers
Executive / VIP	2 pilots + 8 to 12 passengers

WEIGHT

Maximum takeoff weight	11,000 kg	24,251 lb
Maximum takeoff weight with external load	11,200 kg	24,690 lb
Useful load, standard configuration	5,457 kg	12,030 lb
Sling load	4,750 kg	10,472 lb
Std & central energy absorbing fuel tanks (2,908 l)	2,297 kg	5,064 lb
Pod fuel tanks (600 l)	474 kg	1,045 lb

2 TURBOMECA MAKILA 2A1 TURBOSHAFT ENGINES

Maximum emergency power (OEI 30 sec)	1,776 kW	2,382 shp
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PERFORMANCE

Maximum speed (Vne)	324 km/h	175 kts
Fast cruise speed (at MCP)	262 km/h	142 kts
Maximum range with standard + central tanks + pod	1,135 km	613 NM
Maximum endurance (standard + central tanks + pod)	5h 38 min	

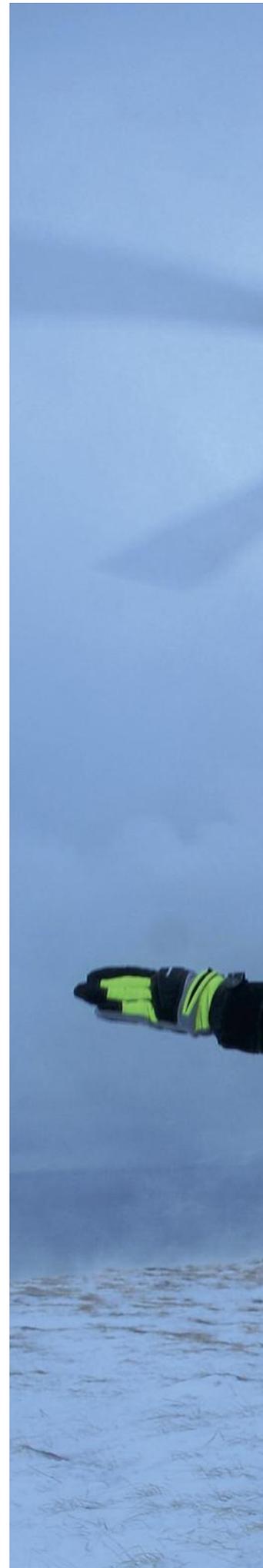
OPERATIONAL LIMITATIONS

Maximum altitude (in flight)	6,095 m (Pressure Altitude)	20,000 ft (Pressure Altitude)
Minimum temperature (basic)	-30°C /	- 22°F
Minimum temperature with extreme cold weather kit	-40°C /	- 40°F
Maximum temperature	ISA + 40 °C / (limited to 50 °C)	ISA + 104°F / (122°F)

The data set forth in this document is for information purposes only, and may vary with conditions. For performance data and operating limitation references, refer to the approved flight manual and all appropriate documents.

Glossary

ADELTA: Automatically Deployable Emergency Locator Transmitter
 AEO: All Engines Operative
 AFCS: Automatic Flight Control System
 FADEC: Full Authority Digital Engine Control
 FLIR: Forward Looking Infrared
 GPS: Global Positioning System
 IFR: Instrumental Flight Rules
 MCP: Maximum Continuous Power
 OEI: One Engine Inoperative
 SAR: Search and Rescue
 TCAS: Traffic Collision and Avoidance System
 VNE: Never Exceed Speed
 VMS: Vehicle Management System







THE VALUE OF EXPERIENCE

The Super Puma Family
Worldwide Civil and Military Operations



The EC225 has evolved from the vast experience accumulated by some 100 Super Puma operators; some 900 helicopters have been ordered in 52 countries. The in-service Super Puma fleet has logged more than 4.8-million hours and the fleet leader has flown 41,800 hours.

Contacts

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