

EC130 B4







EC130 B4 Space and Silence

The new-generation EC130 B4 is a light, single-engine helicopter with all the latest technology and a roomy, modular cabin that can seat 1 pilot plus 7 passengers. Its Fenestron® tail rotor and automatic control of rotor RPM result in a significantly reduced operating noise level. Reliable power is provided by the Turbomeca Arriel 2 turbine engine including a dual-channel FADEC (Full Authomatic Digital Engine Control) with a third independant back-up channel. Integrated VFR equipment coupled with a Global Positioning System (GPS) are standard for day and night missions. All EC130 B4 systems are very easy to maintain. Thanks to its great visibility, quietness, comfort, performance and safety, this flexible helicopter has become a key member of Eurocopter's Ecureuil product line. The EC130 B4 is particularly adapted to passenger transportation, as well as to EMS, law enforcement and utility missions.

Business and Private Aviation Missions

Travellers enjoy a restful journey thanks to an incredibly low internal noise level, exceptional visibility and an efficient air conditioning system. The Fenestron® tail rotor makes the aircraft extremely discreet when flying over urban areas. This user-friendly helicopter is pleasant and easy for the pilot to manage. The new generation piloting aids, such as the Vehicle and Engine Multifunction Display (VEMD®), reduces the pilot's workload considerably, thus enhancing flight safety.





Exceptional visibility

High Tech comfort

The EC130 B4 can carry 1 pilot and up to 6 passengers in high-tech comfort with face-forward energy-absorbing seats.
A large sliding door and the long boarding steps on both sides allow an easy cabin access.





Tourism Mission

The EC130 B4, with its Fenestron® tail rotor, is one of the most silent helicopters flying nowadays, setting the standard for tour operations worldwide. Its very low noise level is 7 dB below the ICAO requirement and below the limits defined by the Grand Canyon National Park. The only noise you will hear will be the sigh of wonderment from passengers enjoying the spectacular view offered by the vast viewing surfaces.

The wide, unobstructed cabin with all forward-facing seats can accommodate 1 pilot and up to 7 passengers and provides excellent visibility.







The sound of silence

The EC130 B4 incorporates all the latest state-of-the-art technologies, materials, systems and avionics. This new generation aircraft benefits from the proven experience of the Ecureuil family, resulting in an exceptionally high rate of availability. Passengers can enjoy the spectacular view, and are comfortably seated on a raised "theatre-style" platform in the rear. The forward-facing, energyabsorbing seats provide passengers with ample legroom. The low internal noise and the efficient air conditioning system contribute to making the journey unforgettable.



EMS Mission

The quick and easy engine start-up sequence and the high performance of the EC130 B4 ensure rapid and efficient interventions when saving a life. Its manoeuvrability enables the pilot to land in very confined areas. The VEMD® decreases pilots' workload, enabling them to carry out critical missions in optimal safety. The Fenestron® ensures safety in flight when manoeuvring close to obstacles and for personnel and patients on the ground.





Made for the mission

Thanks to its exceptional cabin size and dedicated medical configuration, the EC130 B4 is considered worldwide as the reference. The wide, unobstructed cabin with its large sliding doors enables easy loading and unloading of patients with a rapid access for medical personnel. Doctors and paramedics have plenty of space to take care of patients during the flight. The extremely low internal noise level and the flat cabin floor offer a suitable environment to install fragile and bulky medical equipment.



With the fuel tank conveniently located at the rear of the cabin, the EC130 B4 is able to offer additional adjustable energy-absorbing seats to accommodate 1 or 2 stretchers and 2 medical attendants.

Law Enforcement Missions

The EC130 B4 is ready in no time for all types of law enforcement operations, thanks to its quick automatic engine start-up sequence, excellent performance and rate of availability obtained through an easy and affordable maintenance concept. The spacious, unobstructed cabin provides exceptional visibility and sufficient space to install all necessary equipment. And its incredibly discrete noise level (7 dB under ICAO limits) allows pilots to conduct efficient surveillance operations.



Discreet protection

With the VEMD®, pilots can focus solely on their target, thus enhancing flight safety.
The EC130 B4's cockpit has enough space for the installation of a fully-integrated observer's tactical instrument and equipment console.







Utility Mission

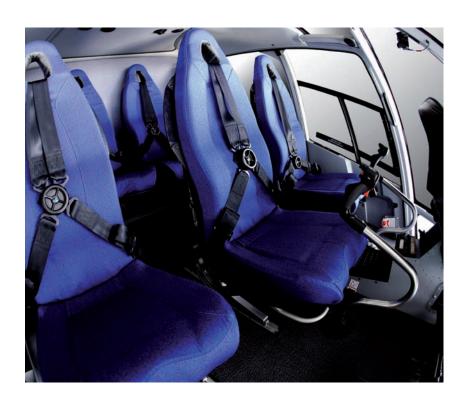
The EC130 B4 offers many possibilities to operators thanks to its wide, unobstructed, flat-floor cabin that can contain an array of equipment to provide outstanding mission flexibility. The exceptional cabin size makes the EC130 B4 the perfect choice for private or cargo transportation.



The Alouette III successor

The high performance of the EC130 B4 allows for easy sling operations. The pilot seated at the left hand energy-absorbing seat has a very good visibility for long line operations. Thanks to the VEMD®, pilots can concentrate more on their missions: an aural warning inform them when the engine is reaching its first limitation. During sling load transportation, the EC130 B4 is very stable thanks to its large cabin, the design of its landing gear and the large horizontal stabilizer.

The Fenestron® ensures safety for personnel on ground and prevents the aircraft from hitting obstacles when landing or maneuvering.





Mission Capabilities:

- Parachute dropping
- Cargo load operations
- Freight transportation
- Aerial photography.



Support and Services

Eurocopter is committed to supporting your Eurocopter product with the same level of excellence that you have come to expect from our aircraft themselves. We are dedicated to looking out for the best interests of our customers, whether this be maximizing flight revenues, In order to provide the individualized attention our customers require, we offer:

- A worldwide service network of 25 subsidiaries and participations, along with more than 100 distributors, representatives, training centers, repair and overhaul facilities, and maintenance centers, 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 worldwide customer assistance, seven days a week, 365 days a year.
- A world of services to meet customers' needs in terms of technical support, component repair and overhaul services, parts and spares support, technical publications and training—at our facilities, or yours.





Easy Maintenance

The EC130 B4's simple design, the use of composite materials and the experience drawn from the mature Ecureuil family all contribute to considerably reduce maintenance costs and a high level of availability. All the advanced technologies that have been integrated in this new generation helicopter help pilots with their daily maintenance tasks: maintenance data edited by the VEMD®, etc.

The EC130 B4 has been designed with a full "Integrated Logistic Support" process: support activities have been taken into account during the design and development phase.

- Low maintenance cost: simple and easy to maintain
- Maximum Availability: most of maintenance tasks possible by the operator
- Convenient customer service network
- Innovative maintenance with the full integrated services (SatisFly Service)

Maintenance Approach

- Service Life Limit
- On-condition
- Time Between Overhaul



Scheduled maintenance

- Limited only to 3 types of inspections: projected workload confirmed by practice
- Complementary inspection-> every 100 hours or every 12 months
- Basic inspection -> every 500 hours or every 24 months
- Major inspection -> every 12 years

Maintenance tooling

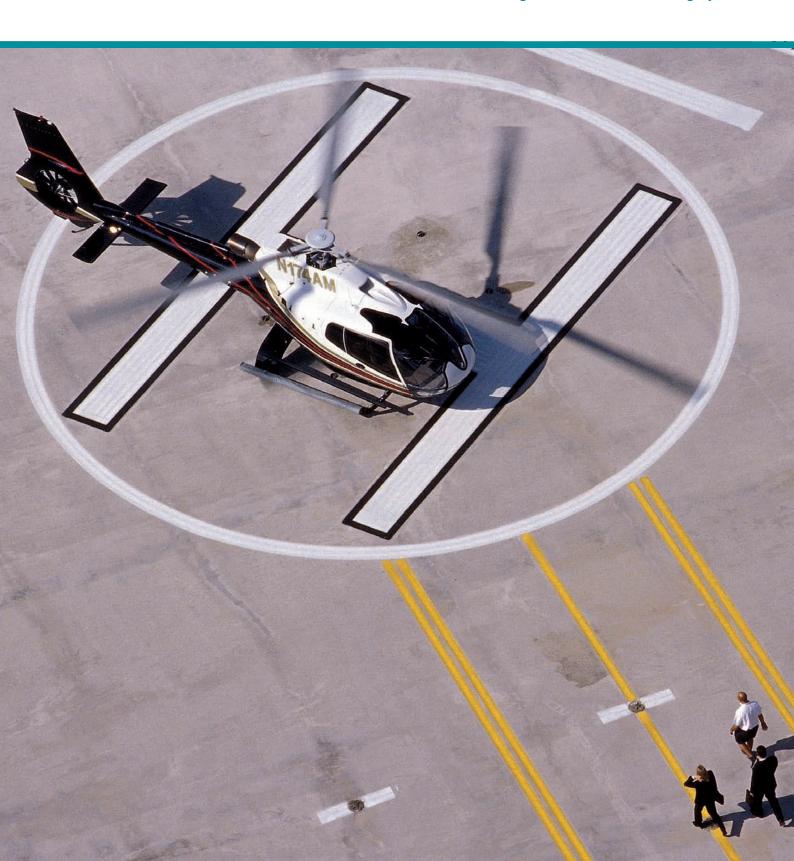
- No test benches required
- Limited number of tools for scheduled maintenance





Technology

The EC130 B4 benefits from the proven experience of the Ecureuil family. It integrates Eurocopter's most advanced technology: a new tailboom with the latest generation Fenestron®, a dual-channel FADEC unit with a third independent channel for engine control, an automatic variable main rotor speed system to reduce external noise, and a dual hydraulic system based on the experience of the AS355 N. It is fully equipped with a VFR day and night navigation system (standard "ready to fly" package) associated with a VEMD® integrated instrument panel and a GPS map display. All these innovations make the EC130 B4 the safest and the most high-tech aircraft in its category.









STARFLEX® Main rotor head

This proven and reliable component has an automatic variable speed control system that systematically adapts the rating of the main rotor to the flight phase in order to reduce the external noise level, without jeopardizing available power.

Composite main rotor blades

- Highly resistant to impact damage
- Corrosion resistant.

Vehicle and Engine Multifunction Display (VEMD®)

Full Duplex equipment that allows at one glance a display of self-monitoring main engine and vehicle parameters on a full color LCD display and decreases pilot's workload. VFR day radio-communication and navigation package including GPS, in the standard aircraft ("ready to fly" concept). The EC130 B4 is also capable of night VFR operations as equipped.



TURBOMECA ARRIEL 2

FADEC (Full Authority Digital Engine Control) including a dual channel to control the fuel supply to the engine providing the necessary amount of fuel for its operation.

- a third automatic channel independent from the 2 others
- No pilot action necessary.



A quiet Fenestron®

- Efficient
- Powerful (lateral flight at 47 kts demonstrated)
- Low vulnerability
- High level of safety for ground personnel
- Very low external noise signature
- Easy maintenance.



Standard energy-absorbing seats

for all crew and passengers

Exclusive landing gear

improves aerodynamic effects and prevents ground resonance (pattented design)



Characteristics High performance

The EC130 B4's component commonality with Eurocopter light helicopter range ensures a reliable, high performance aircraft. Its proven technology and simple design provide operators with an extremely high rate of availability.



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Capacity			
Passenger transport	1 pilot + 6 passengers in standard or Stylence® configuration		
	1 pilot + 7 passengers in "medium density" version		
Casualty evacuation	1 pilot + 1 or 2 stretchers + 2 medical attendants		
	2 pilots + 1 stretcher + 2 medical attendants		
Cargo carrying	1 pilot + 3.7 m3 (130.7 ft3) load	1 pilot + 3.7 m3 (130.7 ft3) load in cabin	
Weights			
Maximum take-off weight	2,427 kg	5,351 lbs	
Maximum take-off weight with external load	2,800 kg	6,172 lbs	
Empty weight, standard aircraft	1,379 kg	3,040 lbs	
Useful load	1,048 kg	2,311 lbs	
Maximum cargo swing load	1,160 kg	2,557 lbs	
Standard fuel capacity	426 kg	939 lbs	
Power plant (ISA, SEA LEVEL)	1 TURBOMECA ARRIel 2 t	1 TURBOMECA ARRIel 2 turbine engine	
Take-off power	632 kW	847 shp	
Maximum Continuous Power	543 kW	728 shp	
Performance at Max. TAKE-OFF WEIGHT (ISA, SEA LEVEL)			
Maximum speed (Vne)	287 km/h	155 kts	
Fast Cruise speed at MCP	240 km/h	130 kts	
Rate of climb	9.0 m/s	1,770 ft/min	
Service ceiling	4,770 m	15,655 ft	
Hover ceiling OGE at take-off power	2,535 m	8,325 ft	
Operation Limitations			
Maximum operating altitude	7,010 m	23, 000 ft (PA)	
Minimum temperature	- 40° C	- 40 ° F	
		ISA + 35° C (limited to + 50° C) / ISA +95° F (limited to 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 see approved flight manual and all appropriate documents.



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