Civil H135



# A VERSATILE PLATFORM, PARTICULARLY TAILORED FOR STRINGENT HIGH & HOT ENVIRONMENTS



Airbus Helicopters' lightweight, twin-engine H135® evolution remains top of its class with its distinct combination of optimum performance levels and new, highly attractive features.

Benefiting from an optimized main rotor, engine software modifications and a new lateral air intake, the H135 provides additional payload and delivers best-in-class performance in all engines operative (AEO), one-engine inoperative (OEI), and Cat. A operations throughout the flight envelope. It offers extended mission capability even in the most demanding environments.

No tradeoff has been made between safety and performance. The state-of-the-art cockpit environment has been further enhanced to meet the most challenging customer requirements while continuously providing the highest possible safety levels.

The H135 is an extremely flexible platform adaptable for a variety of missions. It remains a reference in emergency medical services (EMS) and law enforcement missions and its variety of aircraft configurations allow unique adaptability in a range of dedicated missions such as utility/aerial work, oil & gas, commercial transport and training.

# The reference helicopter for EMS, perfectly designed for disaster management and SAR missions

The H135 brings added confidence during rapid deployment of personnel, offering high capability and versatility to meet time-critical operational requirements. Its design incorporates a lightweight cockpit layout, compact dimensions and remarkable performance with excellent outside visibility as well as a modular, flexible cabin arrangement.

Quick and easy patient loading is ensured via the large sliding doors on either side or the rear clamshell doors – even when rotors are running. During winch operations, patients can be easily transferred into the hovering helicopter. The H135's external sound signature – far below the strictest regulatory specifications – allows operations in close approach to hospitals, often situated in urban areas.



### **Primary EMS missions**

Wherever the injured need urgent help, the H135 can land. Its high skid landing gear and compact design allow touchdowns in very confined areas or on unprepared terrain. The helicopter can make pinpoint landings close to the patient with optimum safety as a result of its out-of-reach main rotor and protected Fenestron® tail rotor.

The H135 offers ample room for up to two crew members, three medical seats and one stretcher. A second stretcher can be installed within seconds.



Rear access



Landing in confined areas

### **Secondary EMS Missions**

The H135 was designed in close cooperation with medical professionals and rescue experts. It offers:

- A modular design adaptable to different users' needs
- A cabin suited for the installation of medical devices and equipment
- In-flight resuscitation (CPR) and endotracheal intubation capabilities
- A cabin-accessible baggage compartment
- A new hygienic, easy-to-clean floor (option)
- Rear or side stretcher loading
- An Anti-Resonance Isolation System (ARIS), ensuring low vibration levels and a smooth ride.

Optional mission equipment such as the autopilot, digital moving map and weather radar support the pilot during IFR flights and enhance overall flight safety. "Flying intensive care stations" and incubators are also available on a modular basis.



### **Disaster management and SAR**

The H135 has excellent slope landing capabilities and can perform rapid interventions in high-risk situations, adverse weather, catastrophes and disasters, as well as emergencies such as floods, earthquakes, landslides and heavy snowfalls.

## **Law Enforcement Missions**

Whatever the operation requires, the H135 is up to the challenge. With its compact size and shrouded tail rotor, the H135 can land in confined areas with little disturbance. It's wide, unobstructed cabin offers increased visibility for effective day and night observation missions. The helicopter's flexibility, low external sound signature, reduced maintenance and operational costs and a higher availability rate make it a perfect platform for daily police operations.





External loudspeakers





SWAT team transportatior



OS



Rappelling system



Search light with laserpointer



NVG capabilities



Operator's console



Hoist at the left or right side

### A unique efficiency multiplier

As a true workhorse, the H135 is perfectly suited to the following law enforcement activities:

- Observation and airborne surveillance
- Command, control and communications with down link capabilities
- Pursuit and criminal chasing
- Border patrol
- Anti-smuggling and anti-drug
- Counter terrorism
- Police escort
- Rapid insertion / extraction of special equipment and units

With its variety of available equipment, the H135 is well-tailored for the requirements of police forces around the world. The cockpit and cabin are night vision goggle (NVG) compatible, and can be configured with a state-of-the-art avionics glass cockpit integrating a dual GTN 750 GPS with touch screen capabilities (option). This considerably reduces pilot workload, allowing them to focus on performing the mission safely. The helicopter's unobstructed cabin, with its flat floor and multipurpose rails, allows for quick and easy conversions to suit mission requirements. A low sound signature reduces the H135's impact in urban operations and furthers its effectiveness in security missions.

# Oil and Gas missions

The H135's excellent outside visibility, exceptional maneuverability, long-range capability, twin-engine OEI and Cat A performance, high safety level and easy cabin access suit this helicopter for demanding oil & gas operations. The rotorcraft's simple design enables fast and easy maintenance to ensure optimal dispatch availability and reduced operating costs.



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### Safety

The H135's proven technology coupled with the full provisions offered provides the highest possible safety levels for demanding offshore missions - even in adverse weather conditions:

- Dual Garmin GTN750 with a newly designed Human Machine Interface (HMI) - option
- Light Aircraft Recording System an improved flight analysis tool
- Weather & search radar
- Emergency floats
- Automatic external life raft compatible with emergency floats EASA PART CAT
- New class D certified external hoist
- High energy-absorbing fuselage and seats as well as crash-resistant fuel cells

The H135 delivers excellent one-engine inoperative (OEI) hover performance, which ensures optimal safety in case of an engine failure.

### **Comfort in mind**

The H135's spacious cabin offers outstanding visibility to both the pilot and its passengers. The latter will appreciate the ample legroom and low in-flight vibration levels.

In the standard configuration, the aircraft can accommodate up to six passengers with one or two pilots.





# **Utility/aerial work missions**

With its two powerful Cat. A, Fadec controlled engines, a cabin with sliding doors, high external cargo hook and small ground footprint, operators can employ the H135 for numerous utility/aerial work applications.



# Enhanced mission capability

### A comfortable and versatile cabin

- Excellent outside visibility for pilots and passengers
- Space to accommodate long or bulky freight
- An unobstructed flat floor with integrated multi-purpose rails, which can be fitted with passenger seats or used for carrying mission equipment or heavy loads.

### **Efficient winching operations**

Fitted with an external hook system certified to meet Class D requirements in accordance with the latest EASA regulations, the hoist has an increased lifting capability of 272 kg (600 lb) and a cable length of 90 m.

### **Affordable**

The H135 has the lowest direct operating cost in its class, resulting in one of the lowest cost twin-engine helicopters to operate!

### Perfectly suited to a number of different utility operations:

- Sling load operation
- Hoisting
- Cargo transportation
- Power line inspections
- Wind turbine maintenance and inspections
- Harbor pilot transportation
- Fire fighting

### Safety

- The shrouded Fenestron® tail rotor ensures low vulnerability to environmental hazards when maneuvering close to terrain and increases safety for ground personnel
- The H135's high set main rotor only requires oncondition maintenance and provides agility and very high clearance for enhanced safety on the ground
- Increased Cat A and OEI performance.





# Commercial aviation transport (CAT)

H135 passengers enjoy an exceptionally fast and smooth ride. The high set main rotor and the shrouded tail rotor enhance in-flight and on-ground safety. The large side sliding doors enable passengers to easily board and disembark. In addition, the helicopter's rear clamshell doors facilitate simple luggage storage. The H135 offers excellent external visibility during flight — passengers can sit back and soak up the extraordinary view. With its low sound and vibration levels, the atmosphere is both pleasant and restful for passengers and crew.



# Designed for those who require the best





### Stylence®

The Stylence configuration includes a 5-seat Stylence solution. The elegant interior design with stylish seats and cabinets creates an exclusive ambience. The top-quality leather coupled with the high-tech materials such as carbon fiber and aluminum alloy ensure a lightweight and modern appearance.

The new design includes highly effective soundproofing, automatically-controlled air-conditioning system and provides further reductions in vibration level maximizing comfort for the passenger.



### Corporate version upon request

The H135 Corporate configuration offers comfortable, classic surroundings for optimum working conditions. Genuine leather and real wood combined with highly accurate production methods ensure a lightweight interior that maximizes the helicopter's range.

This configuration can comfortably accommodate up to six passengers plus a pilot, providing ample leg room space. An optional version accommodates seven passengers and a pilot.

### L'Hélicoptère par Hermès



L'Hélicoptère par Hermès unites superior taste, advanced engineering and design resulting from a truly unique collaboration combining Airbus Helicopters' engineering excellence and the exquisite know-how of Hermès' designers and craftsmen. The key concept of l'Helicoptère par Hermès is that the passenger is all important.

The aircraft exterior and tasteful cabin reflect the quality and finesse of Hermès' craftsmen and offer the passenger comfort, refinement and functionality.

# **Training missions**

The H135 is the perfect helicopter for pilot training due to its maneuverability, high visibility and low vibration levels. In addition, it is equipped with the most advanced technologies available to help instructors perform training missions in optimal safety conditions.

The aircraft is easy to fly, requires minimal maintenance and provides low fuel consumption, meaning low operating and overall training costs. It is a well-suited platform for:

- Basic training
- Advanced training
- Mission training
- Recurrent training





### Designed to make training easy

- State-of-the-art cockpit avionics, with an intuitive Human Machine Interface (HMI) reducing trainees workload allowing them concentrate on the mission at hand
- Outstanding visibility in the cockpit
- Outstanding pilot handling qualities
- Highest safety standards: High set main rotor and Fenestron® for optimum safety both on-ground and in-flight
- Outstanding level of crashworthiness
- A one-engine inoperative (OEI) training mode allowing realistic single engine emergency procedures whilst maintaining optimum safety for the crew and aircraft
- A Light Aircraft Recording System, combining cockpit imaging and flight data recording to optimize the after flight debriefing while increasing safety
- Cost-effective solution for recurrent training thanks to the wide choice of equipment available providing "multirole capability"
- Optimized maintenance costs due to an "on condition maintenance" logistics concept

### **Training**

- In addition to the type rating offered within the Standard Conditions of Sales, Mission-oriented training programs based on specific operations are available such as:
  - Safety and survival module - Survival and rescue training
- Training sessions can include the use of advanced training tools and devices up to full flight simulators positioned around the world
- · Trainees can also benefit from selftraining tools - Computer Based Training (CBT) - to train anywhere, anytime.







# **Support and services**

At Airbus Helicopters, supporting your helicopter operations with the highest level of excellence is our priority. We deploy all necessary means to answer our customers' needs whether it be ensuring public safety and saving lives, or maximizing flight revenues. Our customer support team keeps you flying with 24/7 availability.





### **Easy maintenance**

The H135 rotorcraft's evolved maintenance plan, and extended schedule inspections leads to a drastic reduction in the helicopter's required overall maintenance.

Operators benefit from:

- Lower maintenance costs
- Higher helicopter availability

### **Scheduled maintenance**

- Intermediate inspection: extended to 500 hours
- Periodical inspection: extended to 1,000 hours

### Comprehensive basic support

From the moment of purchase, Airbus Helicopters offers:

- Customer service center access
- Initial parts provisioning
- Technical publications
- Technical support
- On-site technical assistance
- Type rating for pilots and technicians
- A comprehensive original equipment manufacturer (OEM) warranty



### Additional services

### Field service

Our field technicians are equipped with the latest diagnosis technology, and are trained and qualified according to the most demanding qualification regulations.

### Extended repair & overhaul services

A large repair & overhaul network with one single interface to manage maintenance, based on a unique technical know-how and first-class engineering made up of trained and highly qualified technicians.

### Tailored services solutions

Consulting services such "collaborative supply chain" solution

- Reactive transportation service capable of fast-paced worldwide delivery
- By-the hour programs to exchange failing parts within a short contractual lead time, improving aircraft availability and optimizing the inventory, while closely monitoring the budget

### Supply chain optimization

- A single interface for the management of both spare parts and repair & overhaul orders
- An advanced planning system to perform fine-tuned forecasting
- A worldwide distribution network



# **Technology**

The H135, featuring Airbus Helicopters' latest technological developments such as an advanced cockpit design, modern avionics, the Fenestron® anti-torque device and a bearing-less main rotor system, provides outstanding performance and maneuverability. Quiet and cheaper to operate than any other twinengine helicopter in its class, the helicopter is also equipped with safety equipment such as energy-absorbing fuselage and passenger and crew seats, along with crash-resistant fuel cells.



# Advanced technology and design

### **Engines**

Operators can choose between two engines options. Both feature a Full Authority Digital Engine Control (FADEC) system for optimized engine performance and safety:

• Turbomeca Arrius 2B2plus



• Pratt & Whitney Canada PW206B3.



### The FADEC

The optimized FADEC software of the H135 offers increased engine performance at less altitude density. The FADEC also greatly simplifies engine control and ensures:

- Top performance in all conditions
- Engine protection
- Engine monitoring.

### New and improved systems

New lateral air intakes compatible with the inlet barrier filter (IBF) reduce installation losses while increasing the engine efficiency.

- Ventilation
- Air conditioning
- Medium height landing gear.

### Large choice of cockpit configurations



- Fully-integrated Thales Avionics glass cockpit using LCD-based multifunction display panels
- Central Panel Display System (CPDS) that incorporates a Vehicle and Engine Multifunction Display (VEMD®) and a Caution and Advisory Display (CAD)
- Possibility to install an advanced, fully-integrated Automatic Flight Control System (AFCS).

### A quiet Fenestron®



This shrouded tail rotor:

- Provides high efficiency
- Ensures low vulnerability when maneuvering close to terrain
- Is safe for ground personnel
- Has a low external sound signature.

### Four-bladed hinge-less and bearing-less main rotor



The H135's main rotor, which only requires on-condition mainte-nance, provides agility and very high clearance for enhanced safety on ground.

The 20 cm. increased main rotor diameter provides more lift at constant engine power.



### Cabin

- Unobstructed cabin and cargo compartments
- Volume of 5.9 m³ (208.35 cubic ft)
- Flat floor from the cockpit to the rear clamshell doors
- Excellent accessibility from all sides: two hinged cockpit doors, two wide sliding dors and two rear-hinged clamshell doors.

### **Characteristics**

The H135's high endurance and extended range allow operators to meet any mission requirement. It can carry more payloads over longer distances than any twin-engine aircraft in its class, and offers excellent one-engine inoperative (OEI) performance even at high altitudes and in hot climates.

Benefitting from years of experience, an in-service fleet of more than 1,000 helicopters, and 2,600,000 flight hours, the maintenance plan has been improved and scheduled inspections extended.

### PASSENGER TRANSPORTATION

I AGGENGEN THANG	UITIATION					
Police / Utility / Offshore		VIP			Hermes	
Pilots	Passengers	Pilots	Passengers	Pilots	Passengers	
1	6/7	1	5/6	1	5	
2	5/6	2	4/5	2	4	
EMS / Disaster Man	agement					
Pilots		Patients		Crew		
1		1		up to 4		
1		2		up to 3		
2		1		up to 3		
2		2		up to 2		
DIMENSIONS						
Length (rotor rotating)			12.26 m		40.2 ft	
Fuselage length			10.20 m		33.5 ft	
Height			3.51 m		11.5 ft	
Width (without blades)			3.16 m		10.4 ft	
Main rotor diameter			10.40 m		34.1 ft	
Main rotor ground clearance			2.4 m		7.9 ft	
WEIGHT						
Maximum takeoff weight			2,980 kg 6,570 lb			
Empty weight, standard configuration			1,482 kg		3,267 lb	
Useful load, standard configuration			1,498 kg 3,3		3,303 lb	
Maximum cargo-slin	g load		1,300 kg		2,866 lb	
Standard fuel capacity			560 kg		1,235 lb	
ENGINE						
2 turboshaft engines			Turbomeca A	rrius 2B2 <sup>plus</sup>	or Pratt & Whitney PW206B3	
Cat. A VTOL, SL				2,980 kg / 6,570 lb		
ALT limited for Cat. A operations			Clear heliport	3,655 m DA or PA / 12,000 ft DA or PA		
			Restricted or elevat	ted heliport 2,43	B5 m DA or PA / 8,000 ft DA or PA	
AT SL, ISA, Max. gro	oss weight					
Maximum speed (VNE)		259 km/h		140 kts		
Fast cruise speed			252 km/h		136 kts	
OEI Rate of climb (65KIAS), MCP			2 m/s		400 ft/min	
Hover ceiling IGE ISA +20			3,048 m		10,000 ft	
Hover ceiling OGE ISA +20			2,134 m 7,000 f			
Maximum range at re	ecommended cruise	speed				
(without fuel reserve)				609 km	329 NM	
OPERATION LIMITAT	IONS					
Maximum operating altitude			6,095 m 20,000		20,000 ft	
Minimum temperature			- 35°C		-31°F	
Minimum temperatu Maximum temperatu				- 55 0	011	

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.







### **Contacts**

For more information, please contact: sales-promotion@eurocopter.com



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