Civil

H120®

AIRBUS HELICOPTERS
H120
EVERYTHING YOU NEED IN ONE HANDY LITTLE PACKAGE
The H120®, also known as the “Colibri” (Hummingbird), is a 1.7 ton, single-engine aircraft designed for mission flexibility. The only fully FAR/JAR 27 certified helicopter in its class, it features advanced technologies for simple, safe and cost-efficient operations, as well as easy maintenance. The H120’s state-of-the-art ergonomic cockpit, complete with a dual LCD-screen vehicle and engine multifunction display (VEMD®), greatly decreases the pilot’s workload, and its Turbomeca Arrius 2F engine offers very low fuel consumption.

The helicopter’s Spheriflex® main rotor head, all-composite blades and Fenestron® tail rotor increase safety, simplify maintenance tasks, and reduce the noise level to 6.7 dB below ICAO limits, making the H120 by far the quietest helicopter in its class.

The H120 can comfortably carry up to four passengers and one pilot, all on energy-absorbing seats. The wide cabin, generous visibility and large luggage compartment make this aircraft ideal for a variety of civilian and parapublic missions, including aerial work, law enforcement, training and passenger transportation.

The simple design of the H120 offers a new maintenance concept specially adapted for modern light-helicopter operations. Most of the maintenance tasks can be performed by the operators themselves with a limited need for specific tools. This independent maintenance has considerably reduced the operating costs of the aircraft.
Aerial Work

The H120 plays a large role in the Aerial work sector, thanks to its dependability, efficiency, quietness, comfort and safety. Designed with the word “adaptability” in mind, this aircraft will be able to perform whatever task your mission requires. The H120’s simplicity is the key to its versatility—easily configured and reconfigured, the helicopter comes with a large list of optional equipment for a variety of aerial work missions.
**Unparalleled mission flexibility**
The H120 offers state-of-art integrated technology that allows the pilot to concentrate solely on the mission itself. The aircraft’s exceptional visibility, impressive manoeuvrability and stability coupled with its VEMD® considerably reduce the workload, all while enhancing safety.

The cabin and the large baggage compartment can accommodate a variety of cargo and bulk loads, and the flat, unobstructed floor makes loading and unloading effortless. Its very low fuel consumption and ease of maintenance are why the H120 boasts the lowest operating cost in its class.

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**Optional Equipment**
- Cargo sling
- Electrical external mirror
- Windshield wipers
- Skis
- Wire strike protection system
- Sand filter
- Air conditioning
- Emergency floatation gear
Passenger Transportation

In the passenger transportation configuration, the H120 provides outstanding comfort in its spacious cabin – a highly appreciated feature of a light helicopter. In the extra-large cabin, four passengers and one pilot can travel at ease and in full security thanks to the energy absorbing seats, and the wide, unobstructed windows provide exceptional visibility.
The H120 is neighborhood friendly, thanks to its exceptional low sound level which doesn’t disturb when flying over urban areas.

The large baggage compartment is easily accessible from the rear and right-hand side and can hold up to five suitcases. There is also a possible access from the cabin thanks to a removable panel.

The H120 is also available in the exclusive Stylence® version, specially designed with corporate needs in mind.
Law Enforcement

The H120 is the perfect helicopter for law enforcement missions – it can get the job done while remaining cost-efficient. Thanks to its low empty weight and powerful engine, the helicopter can carry a wide variety of police equipment: forward looking infra-red (FLIR) cameras, search light, hailers, etc. Its high endurance capability and unmatched quiet technology (6.7 dB under ICAO limits) make it the perfect surveillance platform for police operations, ranging from traffic control to ground support. Some police forces have even dubbed the H120 as their “eye in the sky,” thanks to the air support provided for operations on the ground.
The bad guys don't stand a chance
This helicopter offers an unmatched visibility and a wide unobstructed flat floor cabin allowing room for both police forces and equipment. Its low vibration level provides outstanding comfort for long flights and allows for the installation of all types of police equipment and avionics necessary to accomplish the mission. And with its high manoeuvrability and dispatch reliability, the H120 can respond at a moment’s notice. Thanks to the integration of the latest technologies, the H120 has proven to be the safest, most efficient aircraft in its class for law enforcement missions.

Mission Capabilities
- Surveillance
- Crowd control
- Anti-terrorist support
- Firefighting support
- Drug enforcement and detection
- Aerial support to ground operations
- Border patrol

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Training

The H120 is a great helicopter for both initial and recurrent pilot training thanks to its compact size, reduced operating cost, ease of use, simple design and large cabin visibility. Equipped with the most advanced technologies and enhanced energy absorbing systems (seats, main structure, fuel tanks), the H120 can perform training missions in optimal safety conditions.
Simplicity without compromise
The H120 is certified for both left and right seat piloting. The pilot and co-pilot stations have exactly the same controls, enabling the instructor to take control of the helicopter whenever necessary. The modern and simple instrumentation is ideal for training sessions, but will also help pilots to easily fly other helicopters with similar ergonomic cockpit designs, which is a Airbus Helicopters’ family concept. This will help the trainee to become familiar with other high-tech helicopters.

Low operating costs
Thanks to its simple maintenance program and low fuel consumption, overall training costs remain low as well.

Easy handling for trainees
- Dual controls, twist-grip throttle, rotor brake
- Positive control response
- First limit indicator (T4, Torque, engine RPM reading)
- Performance computation (HOG, HIGE)
- Endurance calculation (optional)
HCare Service Offer

To contribute to helicopters’ availability optimization, Airbus Helicopters puts at operators’ disposal a robust worldwide-spread support and a wide choice of services that have been elaborated according to Customers operational return of experience from the field.

Airbus Helicopters is always seeking for better efficiency, and has made the choice to be present in every areas of the globe, with regional organization and industrial means, at the closest from operations.

To better answer the various mission needs we first have set-up a comprehensive material management offer:

- **HCare Easy**: On-catalogue services
- **HCare Smart**: Contractual By-the-Hour programs
- **HCare Infinite**: Complete support solutions

Within this offer, we have fine-tuned services to make them more suitable to H120.

Easy Repair & Easy Exchange ensure secured delivery dates and enhanced parts availability for a defined list of items, and give the flexibility of a by-event payment.

Smart PBH service, steps further in both parts availability and budget control by offering contractual and committed delivery times and hourly rate. Attractive conditions are proposed to increase competitiveness of such program, and allow operators to easily access the plan without immediate financial implication.

Our global distribution network, composed of Logistics platforms, regional and local inventories, ensures efficient and cost-effective deliveries anywhere, anytime.

Our Customer Centers manage customer relation on a daily basis, and answer to any operators’ request to make sure you will get full benefit from your helicopters.
They are equipped with latest generation installations, experienced and trained technician teams, capable to offer local helicopter maintenance solutions either in our workshops, or at your premises.

Our team of more than 150 qualified Tech-Reps provides on-site Technical Assistance, and perform On-the-Job Training to operators’ technicians for first-class maintenance operations.

Airbus Helicopters Technical Expertise organization answers to all technical requests, and support you with a 24/7 service around the clock. To optimize flight and maintenance operations, we offer local Training Centers with state-of-the-art means such as Full Flight Simulators (FFS) or Flight Navigation Procedure Trainers (FNPT), and full-scale mock-ups for technicians.

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Pilots’ proficiency can be enhanced within your flight environment thanks to pilots’ accompaniment and mission operational courses performed on-site.

Airbus Helicopters through its Connected Services opens a new way of interacting with its customers. Such solutions pave the way to faster and easier data exchange between the helicopter manufacturer and operators. This exchange highly contributes to continuously improves the support and performance of your helicopters.

We propose two suites of services:
- **HCare Flight**: support of Flight Operations
- **HCare Fleet**: support of Maintenance Operations

Whatever the time and wherever you are, access all services online just a click away.
Technology

The H120 integrates technologies more advanced than any other light single-engine helicopter in its class in the world. These advances help make the aircraft easier to fly, safer and more cost-effective. Designed with simplicity in mind, the H120 is one of the most user-friendly aircraft available. The H120 is the first single-engine helicopter to meet the requirements of the new JAR 27 safety regulations (crashworthy fuel systems, energy attenuating fuel structure and seats).
The Next Generation Technology, Today

New generation of Fenestron® tail rotor:
- Low sound level
- High ground clearance
- No servo controls (low costs)
- Safety on ground and in flight

The H120 is equipped with dual controls, a twist-grip throttle, rotor brake and a VEMD® indicating the torque, engine RPM and temperature limits.

Instrument panel:
Ergonomic and state-of-the-art, the instrument panel includes the VEMD® for the management and control of the main vehicle and engine parameters. The sophisticated VEMD® monitoring system decreases the pilot’s workload, allowing him to concentrate fully on the task at hand.

High performance composite rotor blades:
- No corrosion
- High resistance to damage

Articulated Spheriflex®-type rotor head:
- Ease of maintenance
- No lubrication

TURBOMECA Arrius 2F engine:
- Powerful
- Simple: 2 modules
- Proven design
- Low fuel consumption

Energy absorbing seats
Characteristics

The H120’s outstanding characteristics are the cumulative result of 50 years of experience in designing, manufacturing and supporting light single-engine helicopters.

To date, the 660 H120 helicopters delivered worldwide in 55 countries have completed nearly 1,000,000 flight hours.

**CAPACITY**

| Passenger transportation | 1 pilot + 4 passengers |

**WEIGHT**

| Maximum takeoff weight | 1,715 kg | 3,781 lb |
| Maximum operational weight in external load configuration | 1,800 kg | 3,968 lb |
| Useful load, standard configuration | 718 kg | 1,583 lb |
| Maximum cargo-sling load | 700 kg | 1,543 lb |
| Standard fuel tank | 321 kg | 707 lb |

**ENGINE 1 Turboshaft TURBOMECA ARRIUS 2F**

| Takeoff power | 376 kW | 504 shp |

**PERFORMANCE at MTOW, ISA, SL**

| Maximum speed (Vne) | 278 km/h | 150 kts |
| Rate of climb | 5.84 m/s | 1,150 ft/min |
| Service ceiling | 5,182 m | 17,000 ft |
| Hover ceiling OGE at takeoff power | 2,316 m | 7,600 ft |
| Maximum range without reserve at recommended cruise speed | 710 km | 383 NM |
| Endurance without reserve at 65kts | 4h19 |

**OPERATION LIMITATIONS**

| Maximum operating altitude | 6,096 m | 20,000 ft |
| Minimum temperature | - 40°C | - 40°F |
| Maximum temperature | ISA + 35°C(+ 95°F) limited to + 50°(+ 122°F) |

The data set forth in this document is for information purposes only, and may vary with conditions. For performance data and operating limitations, reference see approved flight manual and all appropriate documents. December 2010
Contacts
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