HELICOPTERS

Offshore Wind Energy

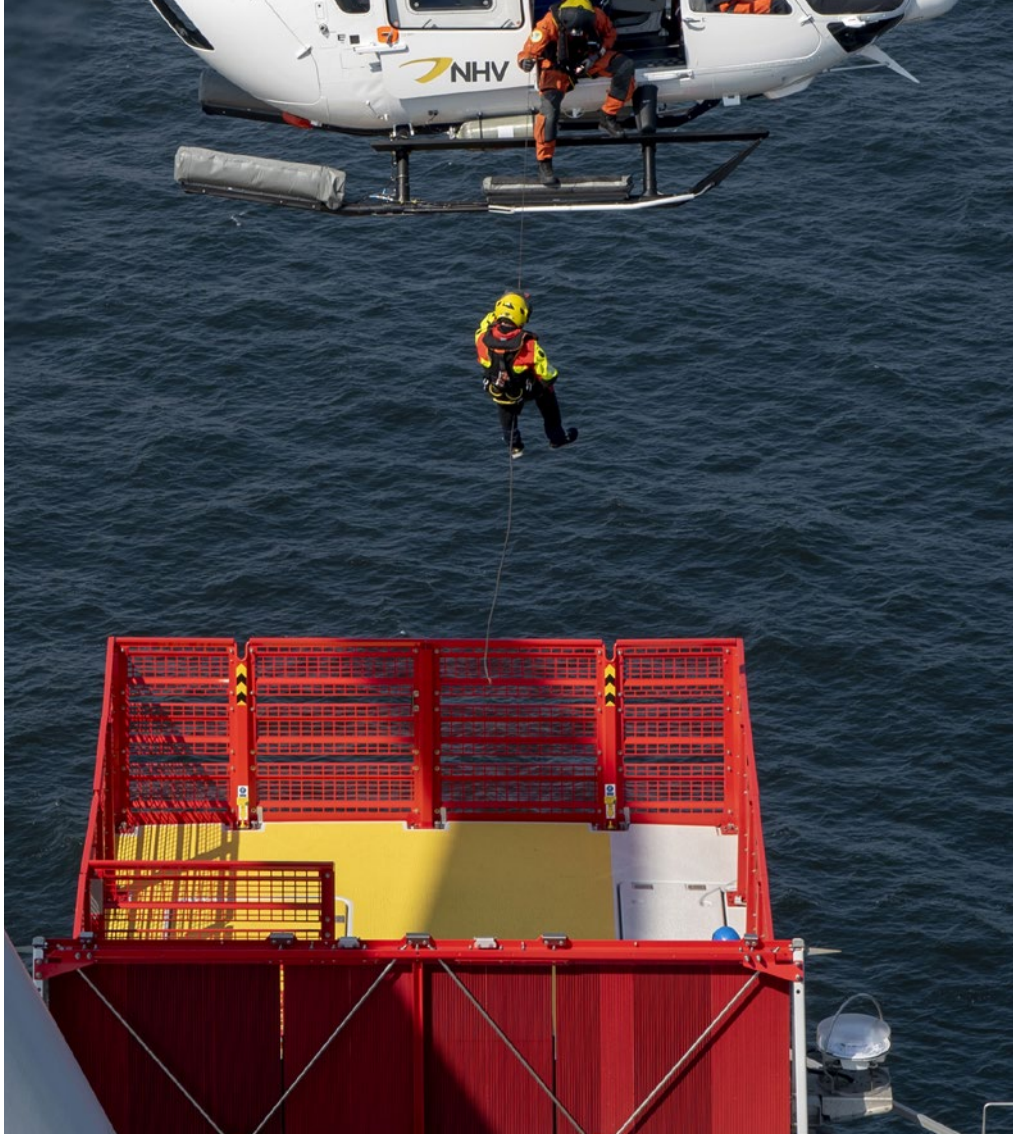
AIRBUS

HELICOPTERS

TO HELP MASTER THE EVERYDAY OFFSHORE WIND INDUSTRY CHALLENGES

The offshore wind energy industry is forecasted to experience significant growth over the coming years. With a predicted rise in the number and size of offshore turbines, and the distances of these sites from land, wind farm operators are increasingly faced with important challenges concerning transportation, rescue and maintenance operations.

To meet these new requirements, more and more wind farm operators are turning to helicopters, which offer a reliable, cost-effective and safe solution.



With several decades of experience in providing mission-ready, fully-equipped helicopters around the world, Airbus understands the distinct needs of its customers for a wide array of missions, with notable success in hoisting, rescue and crew transfer operations.

THE HELICOPTER ADVANTAGE

THE HELICOPTER ADVANTAGE

SAFE AND EASY ACCESS TO WIND TURBINES

A safe and reliable solution

All Airbus helicopters employ the very latest technologies to ensure optimal safety levels.

Helicopters can go above (literally) and beyond maritime conditions

Accessing wind turbines is quick and efficient, allowing for more operational availability in conditions ranging from calm sea to sea state 6.

Strategically position crew members where you need them most

The accuracy, stability and precision of hover flights are truly unique to helicopters and allow you to strategically position crew members in any circumstance.

RAPID RESPONSE TIME

Reduced transfer time

With the capability to cover more than 40 nautical miles in approximately 20 minutes, a helicopter ride is by far the quickest way to reach your destination.

Faster maintenance and repair

For wind farm companies, being able to reach the turbines for maintenance or repair as quickly as possible is essential to avoid loss of earnings.

Quick take-off capabilities

In the case of an emergency evacuation, the quick take-off capability and fast cruise speed of a helicopter can make all the difference by reaching the concerned party within “The Golden Hour”. This critical window of time is of the utmost importance when a crew member’s health is at stake.

AVAILABILITY

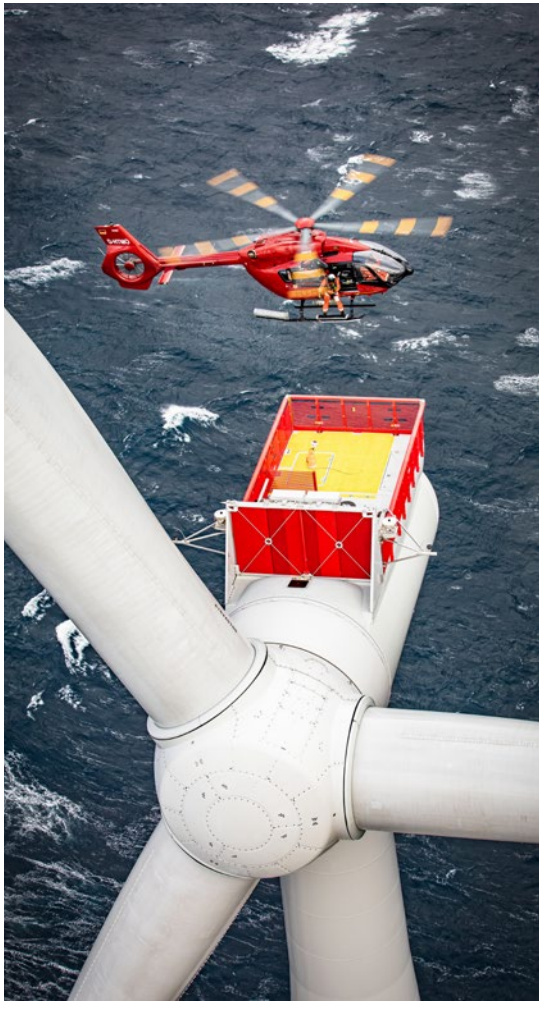
Airbus’ worldwide network of helicopter service centers

Helicopter operators will be ready to fly at a moment’s notice, 24/7 no matter their location.

High Time Between Overhaul (TBO)

With the highest TBO figures in the industry, Airbus helicopters benefit from an exceptional availability rate.


D-HTMO
HTM



ACCESS TO FLOATING WIND TURBINE

October 12th 2023 trials at the Hywind Tampen Floating Wind Farm (Norway)

In a world-premier trial, Airbus Helicopters and partners teamed up to show that helicopters are an important asset to support floating wind farms.

On 12 October, an H135 and an H145, hoisted cargo and two crew members onto the nacelles of floating wind turbines at the Hywind Tampen Floating Wind Farm, 140 km off the coast of Bergen, Norway.

Work in harsh weather environment

With 30 kts of wind, 5.5 meters waves height, 5 meters swell, this trial demonstrated that the helicopter can be the only means to position technicians and equipment onto a floating wind turbine in a harsh weather environment. The helicopter can be a successful add-on to a logistics toolbox to safely deploy technicians to a floating wind farm.

THE HELICOPTER ADVANTAGE

COST-EFFECTIVENESS
VERSATILITY AND FLEXIBILITY


INNOVATION

COST-EFFECTIVENESS
VERSATILITY AND FLEXIBILITY

AN ECONOMICAL SOLUTION FOR ALL YOUR OPERATIONS

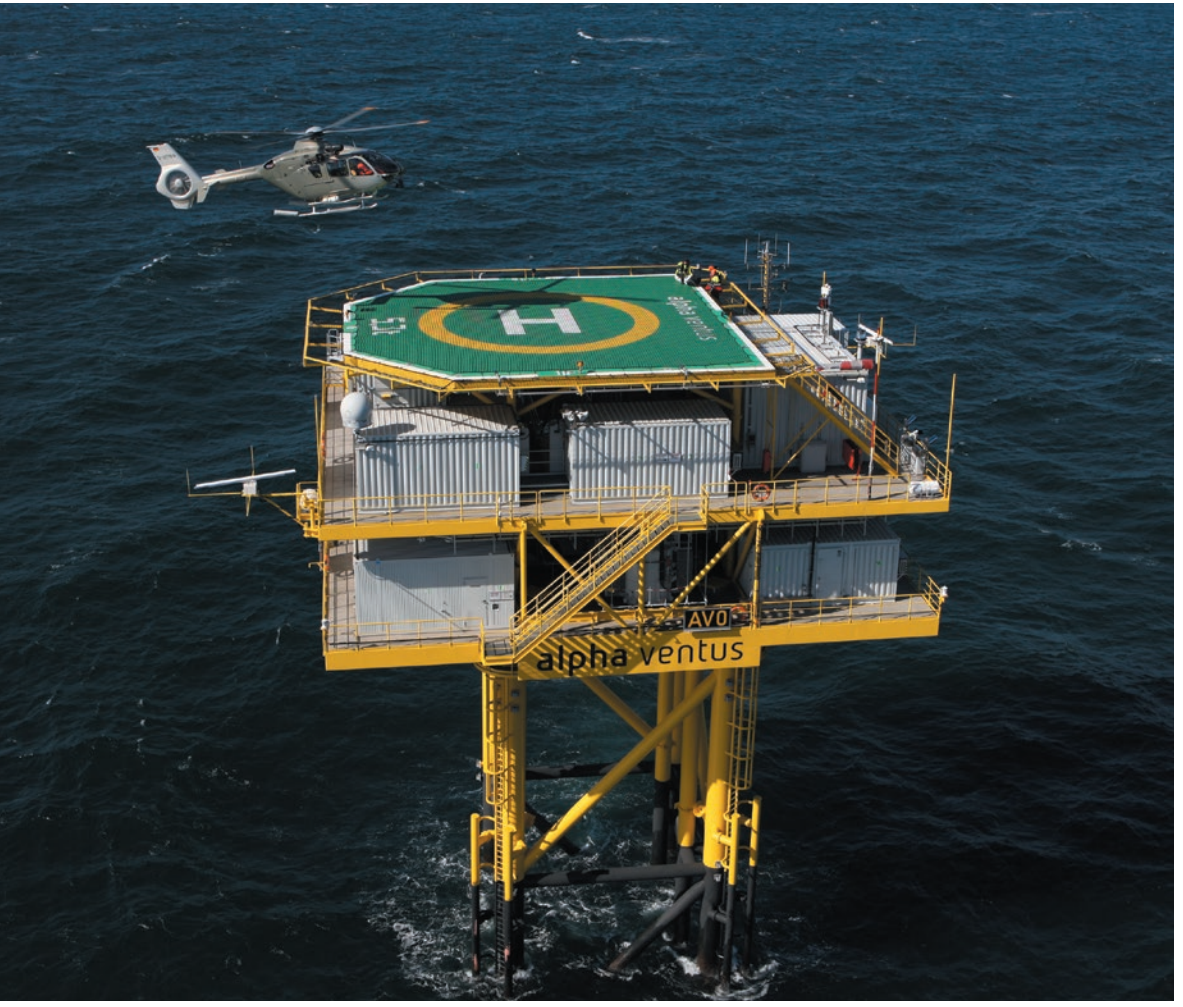
Aircraft chartering services with various helicopter operators

No need to purchase your own helicopter to reap the benefits – several skilled helicopter companies have the capability to conduct this kind of operation. This allows the wind power energy to invest in its core business.

Greater earnings during winter months

Using helicopters can result in significant savings when the sea is at its roughest. While a complete wind farm may be inaccessible for personnel and equipment by vessel, a helicopter can continue operations during rough sea conditions, thus avoiding a significant loss of revenue.

A five-hour helicopter charter service to conduct wind turbine maintenance is the same cost as 24 hours downtime on a 6 megawatt turbine.


AV0
alpha ventus


NO
N019

Lowest operating and maintenance cost

Design simplicity, easy access to main components, the use of composite materials and the technological reliability of Airbus helicopters contribute to ensuring low operating cost.

Capability to quickly change roles

Make the most out of your fleet. Switch back and forth from crew change to Search and Rescue (SAR) configurations quickly and easily, while keeping the flexibility you need in case of simple maintenance duties or emergency situations.

A complementary asset

Helicopters can efficiently work alongside the more traditional means of transportation when it comes to crew transport and servicing vessels. But for “winch to work” and SAR, helicopters hold a number of advantages over marine transportation including an increased frequency of passenger operations and lower down time.

MISSION-EFFICIENT
HELICOPTERS FOR ALL OPERATIONAL NEEDS


N H V
www.nhv.be

CREW TRANSFER: THE WORLD'S MOST COMPREHENSIVE RANGE OF HELICOPTERS AT YOUR SERVICE

One of the quickest and surest personnel transportation options for offshore missions.

Increased access to wind turbines

Technicians and up to 12 bags of equipment can be airlifted to perform service anywhere in the park (directly on the platform itself or on offshore substations) even when high waves might prevent a vessel from reaching those areas.

Shorter-distance transfers

Airbus H135 and H145 light-twin helicopters are well-suited to transport from 3 to 8 technicians to closer-range turbines/ offshore substations and can also provide support as feeder aircraft between turbines out at sea.

Transfer farther offshore

Airbus medium, super medium and heavy helicopters have established themselves as a major asset for the oil and gas industry, with a strong track record worldwide. The medium H160 and super medium H175 can transport respectively up to 12 or 16 passengers, while the heavy H225 can hold up to 19 passengers.

In rescue missions, every second counts. Helicopters can transfer patients to the nearest hospital in the shortest amount of time, while emergency medical service personnel provide immediate first aid during the journey.

RESCUE **CAPABILITIES**


OY-HNL
KN

Quicker emergency rescue response time

Fast and reliable emergency response is more important than ever with an increasing number of personnel servicing a growing number of wind farms – which are located farther offshore.

Sure option in difficult conditions

Helicopters are the fastest and most reliable option for rescue missions in remote locations and in unfavorable conditions.


alpha ventus

Our helicopters have proven their ability to transfer crews to wind farms more than 90% of the time across a varied range of weather conditions.

Offshore wind operators have already carried out some 100,000 hoisting cycles without any reported incidents.

HOIST OPERATIONS

When helicopters are unable to land, they hoist! A Helicopter Hoist Operation (HHO) is the transfer of personnel or loads by means of a hoist cable to or from an aircraft in stable hover flight. The helicopter's ability to hover with loads hoisted beneath allows it to reach inaccessible places, conduct a variety of operations and save lives.

Passenger and cargo hoisting

Airbus helicopters are easily adaptable to your operations, hoisting both workers and cargo to the platform or vessel below.

Safety during rescues hoists

The stable and precise hover capabilities of Airbus helicopters allow pilots to strategically position rescuers on hoist in a wide range of conditions, with the twin engines offering an added safety margin during extended hovering operations.

Airbus helicopters have proven experience in stretcher-hoist missions to and from ships and offshore wind farms. If a person is injured, the helicopter may be the only sure method of evacuation available.

In the offshore wind energy sector, the most challenging operational aspect is contending with difficult weather conditions. Airbus helicopters are developed with these constraints in mind, proposing a wide range of rotorcraft solutions focused on the highest levels of safety and performance.

REACHING THE MOST DEMANDING **STANDARDS**


H145
D-HTMO
AIRBUS
HTM

EMS EQUIPMENT

AVIONICS

FLOATS

HOIST SYSTEM

HIGH VISIBILITY PAINT ON BLADES

FIRE EXTINGUISHER

EQUIPMENT*	ENHANCED SAFETY	ENHANCED PERFORMANCE
ANTI-CORROSION PROTECTION KIT		●
4-AXIS DIGITAL AUTOPILOT		●
COCKPIT VOICE AND FLIGHT DATA RECORDER (CVFDR)	●	
DE-ICING SYSTEM		●
ICING DETECTOR	●	
DUAL FADEC	●	
EMERGENCY FLOATATION SYSTEM AND LIFE RAFTS	●	
ENHANCED GROUND PROXIMITY WARNING SYSTEM (EGPWS)	●	
FIRE EXTINGUISHING SYSTEM	●	
FUEL MANAGEMENT SYSTEM		●
GLASS COCKPIT		●
EMERGENCY MEDICAL SYSTEM (EMS)		●
HIGH VISIBILITY BLADES	●	
HELICOPTER EMERGENCY EGRESS LIGHTING (HEEL) SYSTEM	●	
JETTISONABLE DOORS	●	
MOVING MAP		●
PUSH-OUT WINDOWS	●	
RETRACTABLE CLASS 1 ELECTRICAL HOIST		●
TIE-DOWN KIT TRAFFIC COLLISION		●
AVOIDANCE SYSTEM (TCAS)	●	
WEATHER RADAR OFFSHORE WIND FARMS		●

*depending


AIRBUS
F-WWPA
#03
H160

Innovation you can rely on

Airbus helicopters – in all classes – are known industry-wide for their high performance levels, which result from a combination of proven engineering solutions and cuttingedge technologies. You can count on having the right equipment to carry out your mission safely and successfully.

QUALITY TRAINING **TO IMPROVE SAFETY**

Safety is Airbus top priority. The company is committed to providing world-class training to pilots and mechanics, so they can master the skills to work in the most severe conditions. Missions involving offshore hoist operations require a highly-qualified helicopter crew, which must continuously undergo intensive training

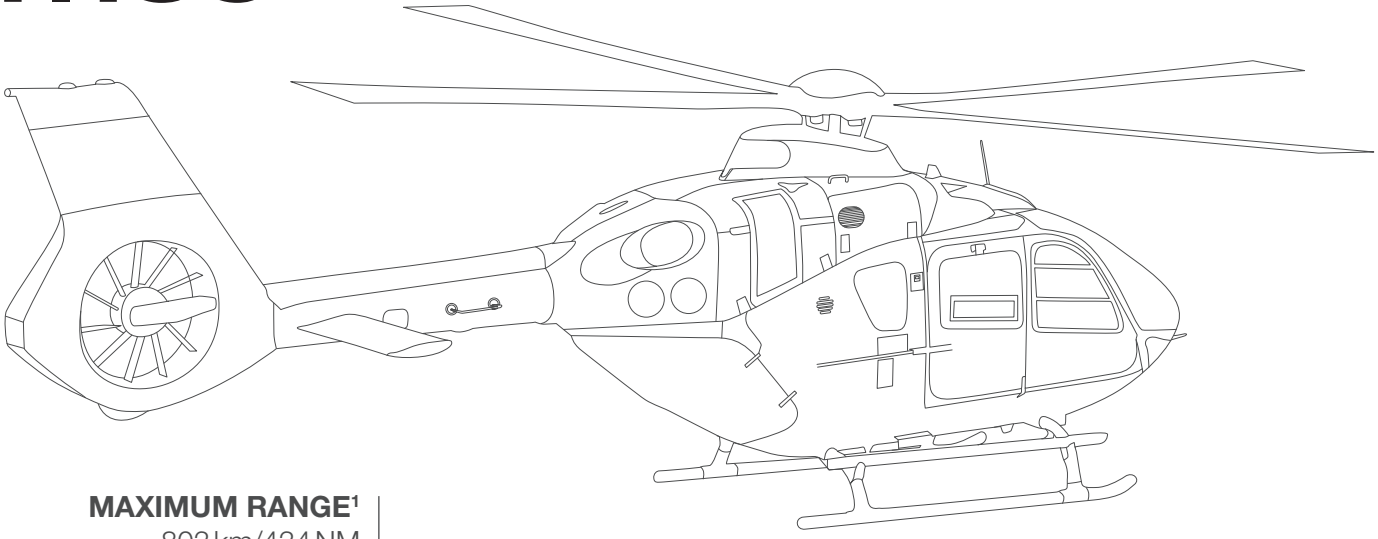
The Airbus helicopters training offer focuses on real-life situations and decision-making procedures. The use of Level-D Full Flight Simulators enables trainees to operate in realistic conditions for mission scenarios in full security, while allowing the helicopter fleet to remain operationally available.


D-HECB
BOSE

Airbus helicopters product line includes all types of rotorcraft, from light twin-engine to heavier 11-ton helicopters.

A HELICOPTER FOR EVERY **MISSION**

H135



MAIN ROLES

The light, multipurpose twin-engine helicopter is the reference for EMS[4], public services and offshore missions thanks to its:

- Outstanding performances,
- Cabin flexibility and capabilities,
- Comfort,
- Versatility.

MAXIMUM RANGE[1]
803 km/434 NM

FAST CRUISE SPEED[1]
252 km/h-136 kts

MAXIMUM CARGO SLING LOAD
1,300 kg/2,866 lb

MAX. WEIGHT[2]
2,980 kg/6,570 lb

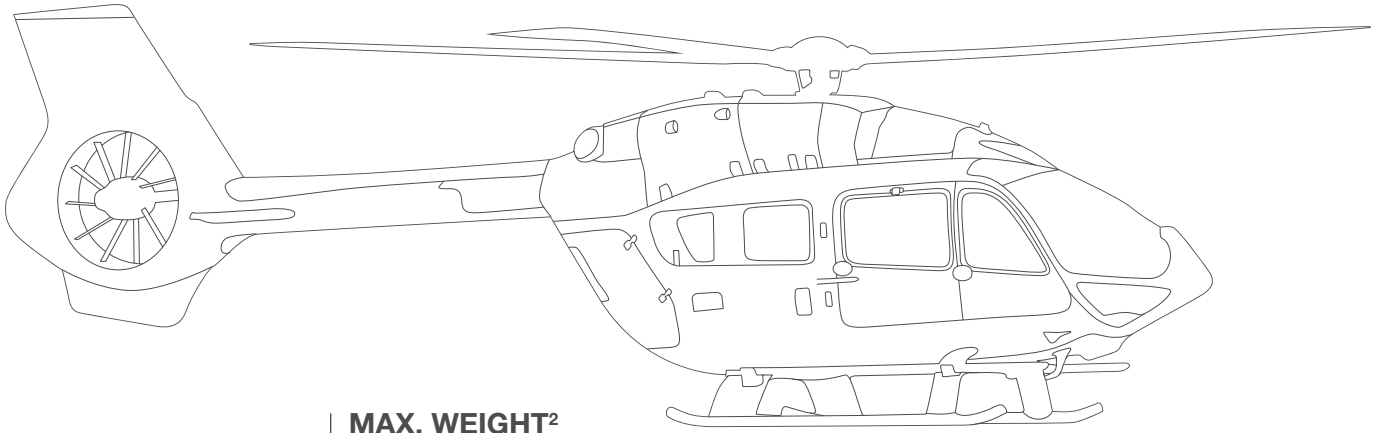
USEFUL LOAD
1,498 kg/3,302 lb

ENGINE
2 Safran ARRIUS 2B2[plus]
or 2 Pratt&Whitney PW206B3
Both with FADEC

CAPACITY
1 pilot + 6/7 passengers,
or 2 pilots + 5/6 passengers

OPERATIONAL WIND LIMITS
Hoisting: 60 kts
Rotor start and stop: 50 kts

H145



MAIN ROLES

A powerful, multi-role helicopter, the H145 is the latest evolution of the EC145. It combines Airbus Helicopters' breakthrough technologies, such as advanced cockpit design, modern avionics, 4-axis autopilot and the Fenestron tail rotor.

MAXIMUM RANGE[1]
812 km/438 NM

FAST CRUISE SPEED[1]
250 km/h - 135 kts

MAX. WEIGHT[2]
3,800 kg/8,378 lb

USEFUL LOAD
1,731 kg/3,816 lb

MAXIMUM CARGO SLING LOAD
1,600 kg/3,527 lb

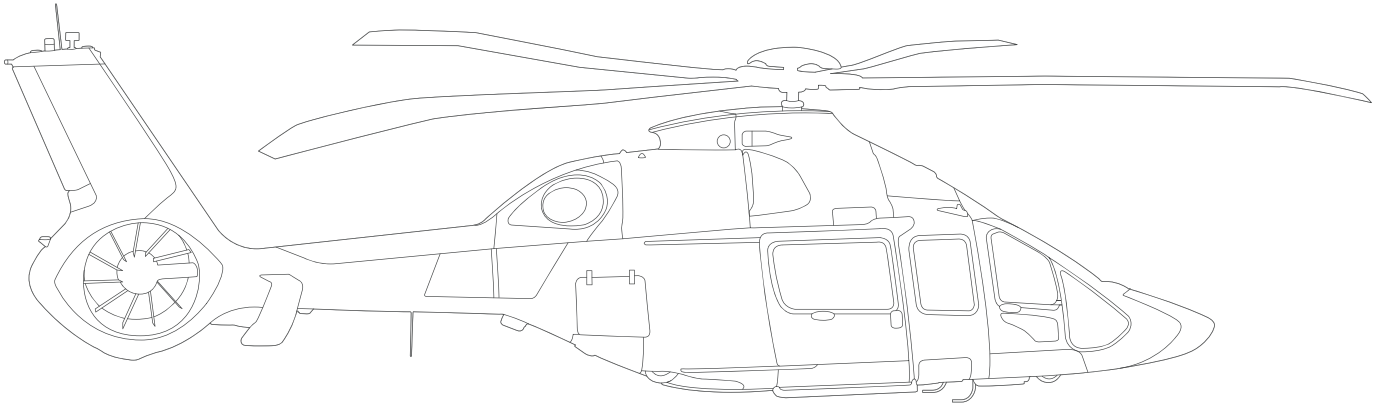
OPERATIONAL WIND LIMITS
Hoisting: 70 kts
Rotor start and stop: 50 kts

CAPACITY
1 pilot + 9/10 passengers
or 2 pilots + 8/9 passengers

ENGINE
2 Safran ARRIEL 2E
with FADEC
OEI 30 sec 800 kW/1,072 shp

1: AT MAXIMUM WEIGHT, ISA SEA LEVEL, 2: FOR ALL CONFIGURATIONS, 3: ONE ENGINE INOPERATIVE (MAX. EMERGENCY POWER), 4: EMS = EMERGENCY MEDICAL SERVICES, 5: SAR = SEARCH AND RESCUE

H160



MAIN ROLES

This innovative medium helicopter is planned for an EIS in 2019. Ideally suited for maritime role, it can perform both crew transfer and hoisting.

MAXIMUM RANGE[1]
861 km/460 NM

FAST CRUISE SPEED[1]
Up to 287 km/h/155 kts

MAXIMUM CARGO SLING LOAD
1600 kg/3,527 lb

MAX. WEIGHT[2]
5 670 kg/12,500 lb

USEFUL LOAD
Up to 2140 kg/4,718 lb

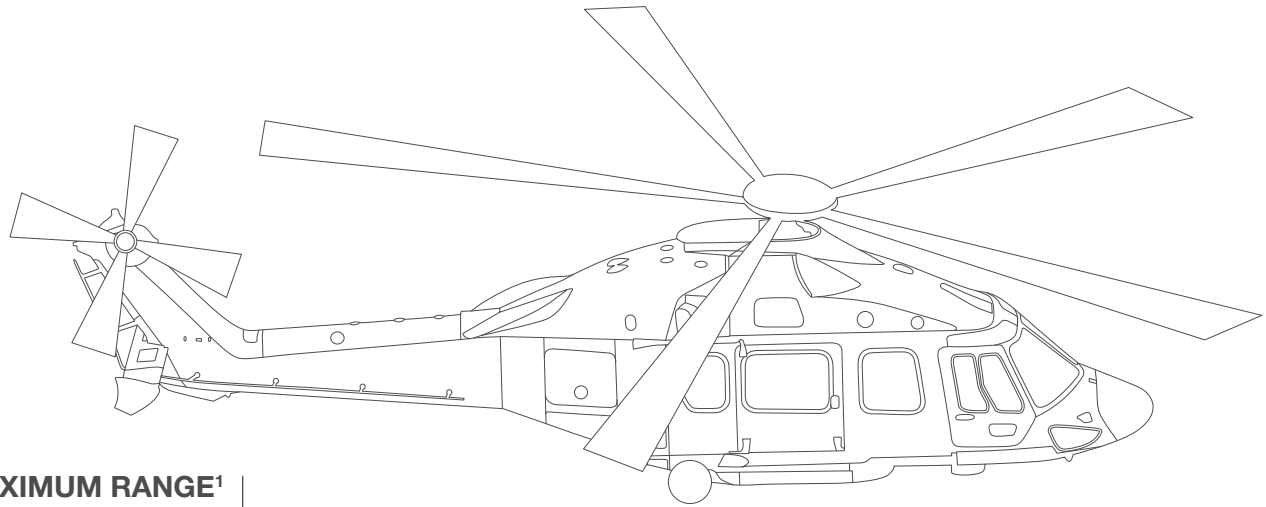
ENGINE
2 Safran Arrano
With New Generation FADEC
OEI 30": 1064 kW/1426 shp
OEI 2' : 1014 kW/1359 shp

CAPACITY
2 pilots + 12 passengers
or 1 pilot + 1 hoist operator
+ 10 passengers

OPERATIONAL WIND LIMITS
Hoisting: up to 166 km/h /90 kts
Rotor start and stop: 45 kts
wind facing on nose; 25 kts wind
azimut

1: AT MAXIMUM WEIGHT, ISA SEA LEVEL, 2: FOR ALL CONFIGURATIONS, 3: ONE ENGINE INOPERATIVE (MAX. EMERGENCY POWER), 4: EMS = EMERGENCY MEDICAL SERVICES, 5: SAR = SEARCH AND RESCUE

H175



MAXIMUM RANGE[1]
1,133 km/612 NM

USEFUL LOAD
2,897 kg/7,271 lb

FAST CRUISE SPEED[1]
276 km/h-149 kts

MAX. WEIGHT[2]
7,500 kg/16,535 lb

MAXIMUM CARGO SLING LOAD
2,700 kg/5,952 lb

CAPACITY
2 pilot + 16/18 passengers

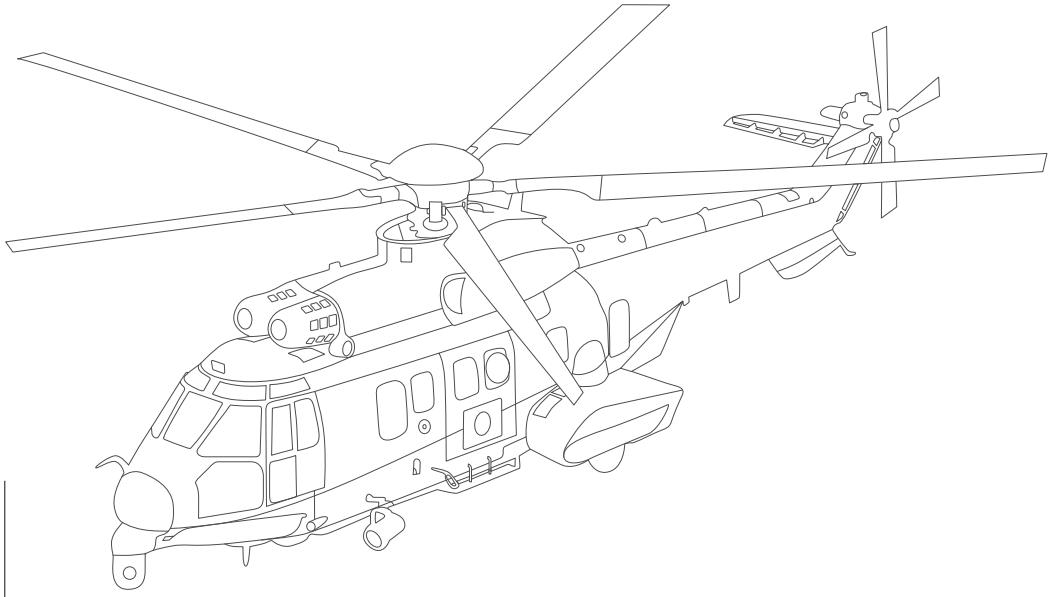
OPERATIONAL WIND LIMITS
Hoisting: 55 kts
Rotor start and stop: 55 kts

MAIN ROLES

A versatile, fully-equipped helicopter, capable of fulfilling missions in various segments, such as oil and gas, SAR5, public services, homeland security, police, EMS4 and business aviation transportation. Oil and gas crew changes and SAR configurations have been carefully studied and optimized with operators and end-users.

ENGINE
2 Pratt&Whitney PT6C-67E with FADEC
OEI3: 1,541 kW/2,067 shp

H225



MAIN ROLES

Thanks to its modern avionics and unrivalled autopilot capability, the H225 has become the reference aircraft for long range SAR (Search and Rescue) missions in any weather condition. Its high useful load, five-blade main rotor and low vibration level, results in the most efficient solution for passenger transportation, gas missions and business aviation transportation.

MAX. WEIGHT[2]
11,160 kg/ 24,604 lbs
11,200 kg/24,690 lb
(with external load)

USEFUL LOAD
5,457 kg/12,030 lb

FAST CRUISE SPEED[1]
262 km/h - 142 kts

MAXIMUM RANGE[1]
1,135 km/613 NM

MAXIMUM CARGO SLING LOAD
4,750 kg/10,474 lb

ENGINE
2 Safran MAKILA 2A1
with FADEC
OEI3: 1,776 kW/2,382 shp

CAPACITY
2 pilots
+ 19 passengers

OPERATIONAL WIND LIMITS
Hoisting: 65 kts
Rotor start and stop: 50 kts

1: AT MAXIMUM WEIGHT, ISA SEA LEVEL, 2: FOR ALL CONFIGURATIONS, 3: ONE ENGINE INOPERATIVE (MAX. EMERGENCY POWER), 4: EMS = EMERGENCY MEDICAL SERVICES, 5: SAR = SEARCH AND RESCUE


AIRBUS
Oya

THE WORLD'S LEADING HELICOPTER MANUFACTURER

The world's leading helicopter manufacturer.

To date, Airbus has delivered some 18,850 helicopters in 158 countries. With more than 8,500 civil and parapublic helicopters in service, Airbus helicopters make up nearly one-third of the world's turbine-engine rotorcraft fleet.

From single and twin-engine light and medium helicopters to eleven-ton-class rotorcraft, Airbus has the right aircraft to handle any and all of your civil missions.

AIRBUS

AIRBUS HELICOPTERS
Aeroport International Marseille Provence 13725 Marignanne Cedex, France

August, 2024.

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The paper is entirely recyclable and is produced from trees grown in sustainable forest resources.

The printing inks use organic pigments or minerals. There are no use of basic dyes or dangerous metals from the cadmium, lead, mercury or hexavalent chromium group.
The printer, Art & Caractère (France 81500), is engaged in a waste management and recycling programme for all resulting by-products.