

# Rotor

BY AIRBUS HELICOPTERS

## SERVICES

Technical  
Support is being  
revamped

## LIFE OF THE RANGE

Focus  
on the H225  
and the H225M

## AROUND THE WORLD

Thailand:  
all arrows  
pointing up

Featured articles

Flight safety  
comes first



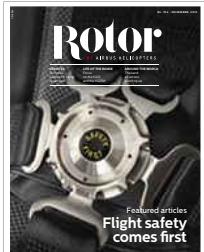
## 08

## FEATURED ARTICLES

### Flight safety comes first



© Anthony Peccci



Communication Director: Yves Barillé (Publication Director), Editorial Director: Pascale Fleur, Editor in Chief: Belén Morant (contact.rotor-magazine.ah@airbus.com), Director of photography: Jérôme Deulin, Translation: Burton, Van Iersel & Whitney, Munich: Euroscript. Published by **beocean**, Printed by: SPI, N° ISSN 1169-9515 (Copyright Airbus Helicopters 2015, all rights reserved). A-Star, Alouette, Arms, AS332, AS350, AS355, AS365, AS532, AS550, AS555, AS565, Bluecopter, Blue Edge, Blue Pulse, BK117, B0105, Cigalhe, Colibri, Cougar, Dauphin, Dijin, Dolphin, H120, H130, H135, H145, H155, H175, H225, H135M, H145M, H225M, H160, Eco-Star, Ecoueril, E-Techpub, Eurocoat, Fenestron, Fennec, Frelon, Gazelle, Horizon, Indoc, Keycopter, Lama, M'arms, Miniarms, Minihums, Panther, Puma, Sarib, Sirina, Spheriflex, Starflex, Steadycontrol, Stylence, Super Puma, Thinking without limits, Tiger, Tigre, Twin-Star, Vemd, Vertivision, VSR700 are trademarks of Airbus Helicopters. Magazine printed on Triple Star paper originating from sustainable forests.



For more information  
[www.airbushelicopters.com](http://www.airbushelicopters.com)



Follow us on  
twitter/AirbusHC



Join us on  
facebook/AirbusHelicopters



Follow us on  
youtube/AirbusHelicopters

#### IN THE SPOTLIGHT

[4/The interior of the H145](#)

#### 360°

[5/Overview of  
Airbus Helicopters events](#)

#### ENCOUNTER

[16/Interview with pilot  
Jürgen Ackermann](#)

#### UP ABOVE

[18/The H225's high-altitude  
aerial work in the Alps](#)

#### LIFE OF THE RANGE

[20/The H225 and H225M](#)

#### IN ACTION

[22/The H135 at work saving lives](#)

#### SERVICES

[24/Technical Support  
is being revamped](#)

#### BEHIND THE SCENES

[26/A strategically  
important partnership](#)

#### AROUND THE WORLD

[28/Thailand: all arrows pointing up](#)

#### OFF THE BEATEN TRACK

[30/In Darwin's footsteps](#)



© Lorette Fabre

Two years after its introduction, the Airbus Helicopters transformation plan continues to make strides—and you're beginning to notice its impact. Our external reviews and customer satisfaction survey are also telling us we're on the right track and showing us the road that lies ahead.

You know our priorities: customer satisfaction, quality, safety and competitiveness. This issue of *Rotor* focuses primarily on safety, which is our number one priority. We've introduced a cooperative approach with our employees—and with you—so that we can further improve flight safety while working towards a common goal: achieving zero accidents.

It's with this objective in mind that we're preparing for the future, fully aware that the current economic climate is difficult for all of us and business

**“At Airbus  
Helicopters,  
safety is our  
number one  
priority.”**

**Guillaume Faury**

conditions are in constant flux. The Oil & Gas sector in particular has had a trying year.

We're developing our products to help you meet these challenges. An excellent example is the H175, a fantastic product that has already reached the 1,000 flight hour mark with NHV. We've also just signed the first contract for the H175 in its SAR version. The H160 is moving ahead as well, right on schedule. We've opened the flight envelope and the results are very encouraging.

We'll continue to work closely with operators, manufacturers and aviation authorities, sharing best practices in order to make our goal a reality. As the end of the year draws near, I'd like to take this opportunity to offer my best wishes to you and your families, and wish you a very successful 2016.

IN THE SPOTLIGHT



UNITED KINGDOM

Helitech, October 6-8

**The interior of the H145, fitted out by the Mercedes-Benz design studio**

## FRANCE



## MONACAIR ACQUIRES SIX H130s

Monacair signed an order for six H130s to set up an improved service of regular scheduled flights linking Monaco Heliport to Nice International Airport. The first commercial flight is planned for January 2016 with a flight every 15 minutes.

Based in Monaco, the operator, specialized in VIP transport, manages a fleet of 20 helicopters, half of which are Airbus Helicopters. Thanks to the purchase of these six H130 light helicopters, Monacair will now operate its own helicopter fleet.

## CHINA

## SUCCESS IN CHINA

On September 9, China Minsheng International Financial Leasing Corp., Ltd. (CMIFL) announced the order of 100 Ecureuils over five years, including an initial order of ten aircraft that will be delivered in 2016. This new acquisition makes CMIFL the first and largest helicopter leasing company in China.

Meanwhile, the Chinese MIT group has finalized its order for seven H130s for emergency medical service missions in Shandong province.

In parallel, Beijing Capital Helicopter (BCH), a subsidiary of Hainan Airlines, has been designated as an Airbus Helicopters services center in China. In this context, BCH will provide maintenance, repair and overhaul services (MRO) for H125 and H135 helicopters.

© Airbus Helicopters



© Charles Barr



EUROPE

## BLUECOPTER: THE ECOLOGICAL ENERGY OF THE FUTURE

With the first flight of the Bluecopter demonstrator this summer, Airbus Helicopters has taken a giant step in eco-environmental research. A technological laboratory, the demonstrator proved quieter than its predecessors, while achieving higher speeds and lower fuel consumption. From the blade-tips to the skid fairings, the Bluecopter offers new characteristics that will have a definite impact on the development of future Airbus Helicopters products.

## MINICA

## THE FOUNDATION STEPS IN

In August, the Airbus Helicopters Foundation worked with the operator Héliblue Hélicoptère, based in Martinique, France, to fly teams from the Red Cross in H120s, in a rescue effort tasked with identifying areas rendered inaccessible by land following the passage of tropical storm Erika, and to provide assistance to the most isolated populations. The flights have enabled the teams to identify the hardest hit villages, where nearly 8,000 people still had no access to water a week after the storm's passage.



© Anthony Peccetti

## HONG KONG H175: A NEW PUBLIC SERVICES CONFIGURATION

Hong Kong-based Government Flying Services (GFS) ordered seven Airbus Helicopters H175s, becoming the world's launch customer for this rotorcraft in its public services configuration.

GFS is a department of the Hong Kong Special Administrative Region, with the responsibility of providing 24-hour emergency support services. With its new H175s, GFS can perform SAR operations, emergency medical services, fire fighting, law enforcement and land/maritime border security patrols. Deliveries will begin towards the end of 2017 with the first batch of three aircraft, followed by the remaining four in 2018.



© Courtesy of Italian Army

## ITALY DELIVERY OF THE 250<sup>TH</sup> NH90

The NH90 program passed a significant milestone last October with the delivery of its 250th aircraft to the Italian army, with a total of over 500 units on order. Operating at full capacity with nearly 100,000 flight hours, aircraft in the NH90 fleet have been deployed in various theaters of operation all around the globe (Mali, Afghanistan, Somalia), for a variety of missions. This delivery confirms the clear success of the NH90: since 2006, every client placing orders has received at least one helicopter. Furthermore, complete delivery of series aircraft was finalized this year for the company's Belgian and Finnish clients.

## FRANCE NEW SITE FOR EXCELLENCE IN BLADES

In the coming months, the transfer starts for Airbus Helicopters' new site of blades manufacturing, from La Courneuve to a new and modern site at Dugny, in the Paris region. The goal for the transfer is a demanding one: to assure that personnel (around 730 people) as well as industrial resources make the move under the best circumstances, without impacting the schedule of deliveries. The new site, named Paris Le Bourget, covers 180,000 m<sup>2</sup> with 60,000 m<sup>2</sup> worth of modular buildings, which will allow for shortened distribution channels and streamlined manufacturing.



© Patrick Penna

## ARGENTINA THE COAST GUARD RECEIVES ITS FIRST H225

AIRBUS HELICOPTERS officially handed over an H225 helicopter to the Argentine Coast Guard, following an acquisition contract signed in November 2014. This new helicopter, which will be based in the city of Mar del Plata and used for search and rescue missions in the Argentinian sea, marks the start of the renewal program for the Coast Guard's fleet of SA330 Puma helicopters.

The Argentine Coast Guard will be the first customer operating H225 in the Southern Cone. The aircraft is equipped with searchlights, a winch and a rescue basket, although it can also be rapidly reconfigured to carry out other missions such as coastal surveillance, port security or aid missions for coastal communities.



© Anthony Pecchi

UPDATE

## H160 PROGRAM IN FULL SWING

The first prototype flights are progressing according to plan and the aircraft has already reached a maximum speed of 175 kts and an altitude of 10,000 feet. As the validation of technical parameters is followed closely, the flight tests also provide a perfect opportunity for the fully integrated ground support teams to optimize maintenance activities.

The second prototype (PT2) is progressing as per plan since its power-on in June. Since one of the key priorities of the H160's development program is maturity at entry into service, the Turbomeca Arrano engines will be installed and tested on the Dynamic Helicopter Zero.



© Anthony Pecchi



© Lorette Fabre

UNITED KINGDOM

## WAYPOINT LEASING SIGNS FOR 20 H135s

On October 7, Waypoint Leasing became the first lessor to sign an agreement for the H135, with an order for 20 helicopters. Waypoint will primarily offer the H135s to operators performing EMS missions, but also

for law enforcement and offshore operations.

With this order, Waypoint Leasing reinforces its fleet diversification strategy, which already comprises H225s and H145s.



© Anthony Pecchi

Airbus Helicopters' chief priority is to support flight safety for the thousands of men and women around the world who are transported in its aircraft every day.

# FLIGHT SAFETY COMES FIRST



“Safety is what Airbus Helicopters is all about. It’s the cornerstone on which our customers’ confidence is built, and we’re determined to ensure excellence in all aspects of flight safety by setting the benchmark in the helicopter industry. Day in and day out, we make sure that the products, services and operations of Airbus Helicopters are completely safe for helicopter crews and passengers. For us, safety is not a question of competition: it’s a goal we’re actively working towards in close cooperation with customers, suppliers, manufacturers and authorities.

Safety begins with each job we perform as part of our daily work, which is why we strive for a fully integrated safety management system (SMS). More generally, aviation safety has been broken down into four other top priorities: safety by design, safety by training, safety by maintenance and safety by cooperation. Please read on to learn more about these four important areas.”

**Gilles Bruniaux**, Vice President Aviation Safety at Airbus Helicopters

Article: Belén Morant and Matthias Klein

# Safety Management System (SMS)

In line with its “zero accident” approach, Airbus Helicopters is introducing a safety management system throughout the company—the SMS.

## RISK MANAGEMENT

Together with the quality management system (QMS), the SMS is an important tool for improving the safety of helicopter operations. Through a reactive, proactive and predictive organizational approach to safety risks, one of its aims is to actively promote a “safety” culture, employing safety-driven decision making and risk management. Airbus Helicopters is wasting no time rolling out the SMS across its global network.

The SMS enables the company to spread awareness about the importance of identifying hazards. It also defines a method to analyze specific risks in daily operations, determines their consequences, and proposes preventive and corrective measures. Airbus Helicopters has many different tools at its disposal, including reports on ground and flight incident declarations and the Airbus Group’s OPENLINE application, which has been set up online to report any condition or anomaly that may affect safety. Airbus Helicopters has also developed new

technical means to collect aviation safety data, such as the Vision 1000 recording system for Helicopter Flight Data Monitoring (HFDM), and the helicopter Health & Usage Monitoring System (HUMS). With this information, safety specialists can perform risk analyses using a robust management process, which is the very foundation of the SMS.

## SHARING THE SMS WITH OUR CUSTOMERS

But Airbus Helicopters has even more ambitious goals. To improve aviation safety and reduce the number of helicopter accidents worldwide, the company is fully committed to working closely with its customers to introduce the SMS in their own organizations.

The gateway thereby created between the safety management system of Airbus Helicopters and the SMS of its customers, partners and suppliers will ensure high-quality cooperation that takes full advantage of the experience of each participant. ■

“Aviation safety first, for all staff at all times, is based on personal commitment, awareness, alertness, learning and sharing. That is why we put our Aviation Safety Management System (SMS) in place.”

**Matthias Klein,**  
Corporate Aviation SMS Manager & Transformation  
Project leader for Aviation SMS.





## Safety by crew training

Safety by training happens through significant investment in training facilities and programs, providing operators with the tools for safely operating their aircraft.

### REALISTIC TRAINING SCENARIOS

Airbus Helicopters provides realistic training for its complete product range, preparing flight personnel for real-world situations and for safe operations in a full range of conditions. With an original equipment manufacturer (OEM) data package, Airbus Helicopters can ensure that the latest rotorcraft developments and improvements are reflected in its simulator network and guarantee a real-to-life full flight simulation.

In addition, Airbus Helicopters is the only OEM to have developed a Flight Crew Operating Manual (FCOM) to answer operational needs through a complete mission description. This guide, as a complement to the flight manual, provides Airbus Helicopters guidance in Standard Operating Procedures (best practice, automated systems and multi crew coordination).

Specific training for helicopter landings is proposed as well to address offshore helideck emergencies. ■

### Aviation safety network

**Airbus Helicopters promotes safety awareness through its currently 26 safety focal points worldwide. Their goal: the deployment of the Safety Management System in the customer centers, as well as the planning and implementation of customer roadshows to promote safety awareness and training sessions for customers.**

“Since its creation in 2010, Airbus Helicopters Mexico has carried out around 40 safety roadshows in 12 different countries. Around 150 companies and 1,200 professionals were reached with this initiative. The accident rate on Airbus Helicopters Mexico territory has been reduced by 60% since 2010.”

**Paul Teboul**, training manager and safety correspondent in Mexico.

# Safety by maintenance

Proper maintenance practices play a crucial role in supporting helicopter safety. The three pillars related to safety are maintenance procedures, documentation, and training.



© Lorette Fabre



© Lorette Fabre

## MAINTENANCE PROCEDURES

Airbus Helicopters works closely with customers to support their maintenance teams, whether ensuring adherence to existing maintenance procedures and inspection schedules, applying Service Bulletins and Airworthiness Directives, or developing new services that simplify and optimize customers' maintenance organizations.

In this regard, the Health & Usage Monitoring System (HUMS) provides invaluable information that helps maintenance teams make the right decisions to keep an aircraft airworthy.

“HUMS is to protect the helicopter, HFDM is to protect the people on board.”

**Amanda Roberts,**  
Global Manager of HFDM at Bristow.



## MAINTENANCE TRAINING

A wide variety of classroom and hands-on courses designed to teach aircraft maintenance is available to engineers and technicians. The courses cater to all levels, from new technicians in need of type rating training, to more experienced mechanics in need of recurrent training.

The company has aircraft mockups available for maintenance training at its 26 training sites around the world. ■

## MAINTENANCE DOCUMENTATION

The online technical publications service, e-TechPub, available via the Keycopter customer portal, provides operators with complete, accurate and up-to-date documentation to support safe operation and maintenance of their helicopters.

Customers have at their fingertips in real time the latest technical information that could impact the safe operation of their aircraft.

**CRASHWORTHY SEATS**

are designed to plastically deform upon severe impact, absorbing all or a portion of the crash energy transmitted to the seat.

**FENESTRON® SHROUDED TAIL ROTOR**

is incorporated on the H120, H130, H135, H145, AS365, H155, and H160 helicopters. The Fenestron provides protection from obstacles on the ground and foreign object damage, while offering increased safety for ground personnel working around the tail boom.

**THE VISION 1000 DEVICE**

collects inertial and global positioning data, ambient acoustic data and cockpit imagery, which are stored on a crash-hardened memory module, as well as a removable secure digital card. This information is processed internally for use in Helicopter Flight Data Monitoring (HFDM) and flight training. Vision 1000 is also critical in supporting accident investigations.

**THE HELIONIX® SYSTEM**

is an advanced avionics suite that offers unrivaled pilot assistance in an intuitive human-machine interface, improving overall safety through reduced pilot workload and unique flight envelope protection.

# Safety by design

Safety is also a matter of design and of making sure the latest advances are applied with regard to security in the air and on the ground. Airbus Helicopters has developed a reputation for innovation, constantly ensuring that the most recent technological advances are incorporated on its helicopters. Shown here are just a few examples.



© Ross Johnston/Newline Media

Another example of safety by collaboration: Step Change in Safety provides a forum for exchange, information and action to achieve flight safety in the North Sea.

# Safety by collaboration

To improve safety industry-wide, Airbus Helicopters works closely with operators, suppliers, and manufacturers as well as key organizations such as the International Helicopter Safety Team (IHST) and HeliOffshore. The company also sponsors the Airbus Helicopters Safety Partnership.

Airbus Helicopters is an active member of the international helicopter community, sharing its values with the industry and actively contributing to key rotorcraft safety goals. Supporting the safety initiatives of leading organizations, institutes, steering groups and governmental agencies around the world is a key priority.

### INTERNATIONAL HELICOPTER SAFETY TEAM (IHST)

The IHST, formed in 2005, is open to all aviation safety professionals, particularly those within the helicopter community. With a presence in 40 countries, the organization works with global partners and regional teams to develop strategies and to harmonize safety efforts in

“When it comes to safety, collaboration drives a more consistent performance.”

**Les Linklater**, Executive Director for Step Change.

key areas. Airbus Helicopters is an active member of the IHST and a major sponsor of the organization's annual symposium.

### HELOFFSHORE

HeliOffshore is a safety-focused organization formed by offshore operators and manufacturers. Its purpose is to share best practices among helicopter transport providers and improve safety related technology (see interview).

### SAFETY PARTNERSHIP

The objective of the Airbus Helicopters Safety Partnership is to improve safety practices and standards, working in close cooperation with operators and industry stakeholders. Airbus Helicopters hopes in this way to use the experience and know-how of those who operate and maintain the aircraft on a daily basis, to further improve the helicopters and their services.

Initially focused on offshore missions and the Super Puma range, the initiative's aim is to spread to other missions and helicopter ranges, in close partnership with HeliOffshore, the IOGP, StepChange, and authorities. ■

Read the full interview with  
Gretchen Haskins in Rotor on line  
[www.airbushelicopters.com](http://www.airbushelicopters.com)



# “OUR STRENGTH: AN INDUSTRY COMMITTED TO COLLABORATION”

**Interview with HeliOffshore CEO, Gretchen Haskins,**  
about the challenges to safety in offshore oil and gas operations,  
and what's being done to bring about change.

Article: Heather Couthaud

© HeliOffshore



## What are the challenges to affecting safer operations in oil & gas?

**Gretchen Haskins:** Over the past decade, the profile of a typical offshore flight has changed. As exploration and drilling technology improves, installations are moving into deeper water, further from land. Where a decade ago, helicopters might have travelled 150 NM on average, now operators are flying 250 NM. Operating vibrating aircraft in conditions that expose them to salt water means you need expert maintainers. The weather conditions

also require detailed flight planning, taking into consideration wave height, lightning and other factors.

Our strength is that, as an industry, we are deeply committed to collaboration. We are already identifying and exchanging best practice, and are working together to support the implementation of those practices, globally.

## During your time heading HeliOffshore, what positive steps toward safety has the organization been able to take?

**G.H.:** In May 2015, we brought together more than 150 of the most senior leaders in the offshore helicopter industry to add force and momentum to our joint commitment to ever-improving safety. The attendees endorsed HeliOffshore's priorities and the delivery plan, and we gained alignment on next steps.

Through the efforts of more than eight member organizations, the Health & Usage Monitoring System group developed and finalized a best practice manual for review and implementation.

Airbus Helicopters issued the industry's first Flight Crew Operating Manual for H225 aircraft; other manufacturers are

committed to delivering FCOMs for all aircraft in the offshore fleet.

We are also supporting two cross-industry studies; one uses eye-tracking technology used by major commercial fixed wing airlines and the other builds on U.K. CAA research on Helicopter Terrain and Warning Systems (HTAWS).

## Have you seen steps taken by Airbus Helicopters towards safety?

**G.H.:** Communication from the rotary industry to manufacturers is changing. With HeliOffshore, we can speak with one voice as an operator community. This means manufacturers, as well as maintaining individual customer relationships, can get consolidated feedback from our forum, which enables them to provide a more efficient and effective response.

It's clear that everyone is aligned, so there is clarity and momentum behind our safety goals. This is a great sign for our global industry. We're also very keen to work together to share data on performance and this will help us to identify issues and best practice, and optimize wherever possible. ■

“I see evidence of the joined-up approach being taken by Airbus Helicopters around the globe. What I'm hearing from Airbus Helicopters in Houston is the same as from Airbus Helicopters in Aberdeen.”

**Gretchen Haskins**, CEO of HeliOffshore.

## JÜRGEN ACKERMANN

Jürgen Ackermann is chief commissioner of, and pilot for, the German federal police squadron stationed in the Bavarian town of Oberschleissheim. Transporting high-level political figures represents only a small part of his duties. The federal police squadron also transports special forces and participates in mountain search and rescue operations. For example, in June 2014, Jürgen Ackermann transported the rescue team that recovered speleologist Johann Westhauser from the Riesending cave. In 2013, he participated in flights to rescue those caught by catastrophic flooding in Bavaria.



# “VIP transport is planned down to the smallest detail”

**Whether for a NATO or a G7 summit, in Germany,** federal police helicopter pilots are regularly called upon to transport high-level political figures in complete security to particular meetings or events. Pilot Jürgen Ackermann explains how transporting VIPs is fundamentally different from his other missions.

Article: Beata Cece

## What do the helicopters used to transport political figures look like? Like flying limousines?

**Jürgen Ackermann:** No (laughs), but they are very comfortable, nevertheless. We use the same model for transporting VIPs that we use for moving police forces: the Airbus Helicopters Super Puma. Of course, when we are transporting a foreign statesman or a member of the government, the aircraft is configured accordingly. The cabin can carry up to 18 passengers, therefore we remove a few seats to create more legroom. We can also quickly lay a carpet. I wouldn't say that it's particularly luxurious, but it's comparable to flying business class.

## In what way is the Super Puma particularly suited to transporting VIPs?

**J.A.:** This helicopter has a spacious cabin and almost an ‘all-weather’ capacity, meaning that we can operate under practically any meteorological conditions. For all of our missions, the Super Puma also has the advantage that you are able to count on sufficient power reserves, should they be needed.

## Do you ever have time to chat a little with your prestigious passengers?

**J.A.:** We offer our passengers a simple welcome and give them essential information regarding the flight. Generally speaking, it doesn't go further than that. High-level political figures often take advantage of their time aboard to work or to relax between meetings. In fact, their short helicopter flights are among the rare moments when they are completely sheltered from the eyes of the public.

## How do the federal police prepare for these flights?

**J.A.:** To the smallest detail! Landing in particular, needs to be particularly well researched. The meetings or events to which we take VIPs often take place far from aerodromes. Consequently, we have to put down in barracks, on sports grounds or even just fields, which means that these areas have to be very precisely identified in advance. We have photos sent to us to prepare for the landing. If the fields identified for the purpose are muddy, we may decide to have an access road constructed using wooden boards, so that our passengers are able to reach their destination.

## How does a VIP flight differ from other operations?

**J.A.:** Generally speaking, typical police operations cannot be planned. When an alert comes through, we don't know which direction we'll be flying in, the route isn't marked out and the landing area is unknown. This is the biggest difference from the highly planned VIP transport flights. Of course it's also much more important to fly smoothly when public figures are aboard. When transporting special forces that I have to bring discreetly to their theater of operations, this is not always possible.

## How do you prepare yourself personally before flying with celebrities?

**J.A.:** If I learn that I have to fly the president of the Federal Republic to a meeting, I polish my boots more carefully and make sure I've had a proper shave (laughs). I'm joking, of course. As a pilot, I don't make any distinction between transporting the president or one of our troops. I fly each flight so that everything goes as smoothly as possibly and in complete safety – it doesn't matter who's sitting in the cabin. ■

UP ABOVE





## LIFE OF THE RANGE

# H225

Going the distance for Oil & Gas and SAR operators worldwide, the H225 is a dependable and capable part of the customer's team.

### OIL & GAS

Committed to availability and reliability



### SAR

Ready to save lives. The H225 supports offshore rescue efforts to help people in distress.

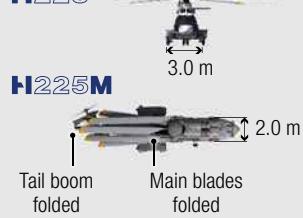


### Dimensions

**H225**



**H225M**



### Technical data

Capacity

Max speed (Vne)

Max. take-off weight

Max. range with additional fuel tank

Standard fuel capacity

# H225M

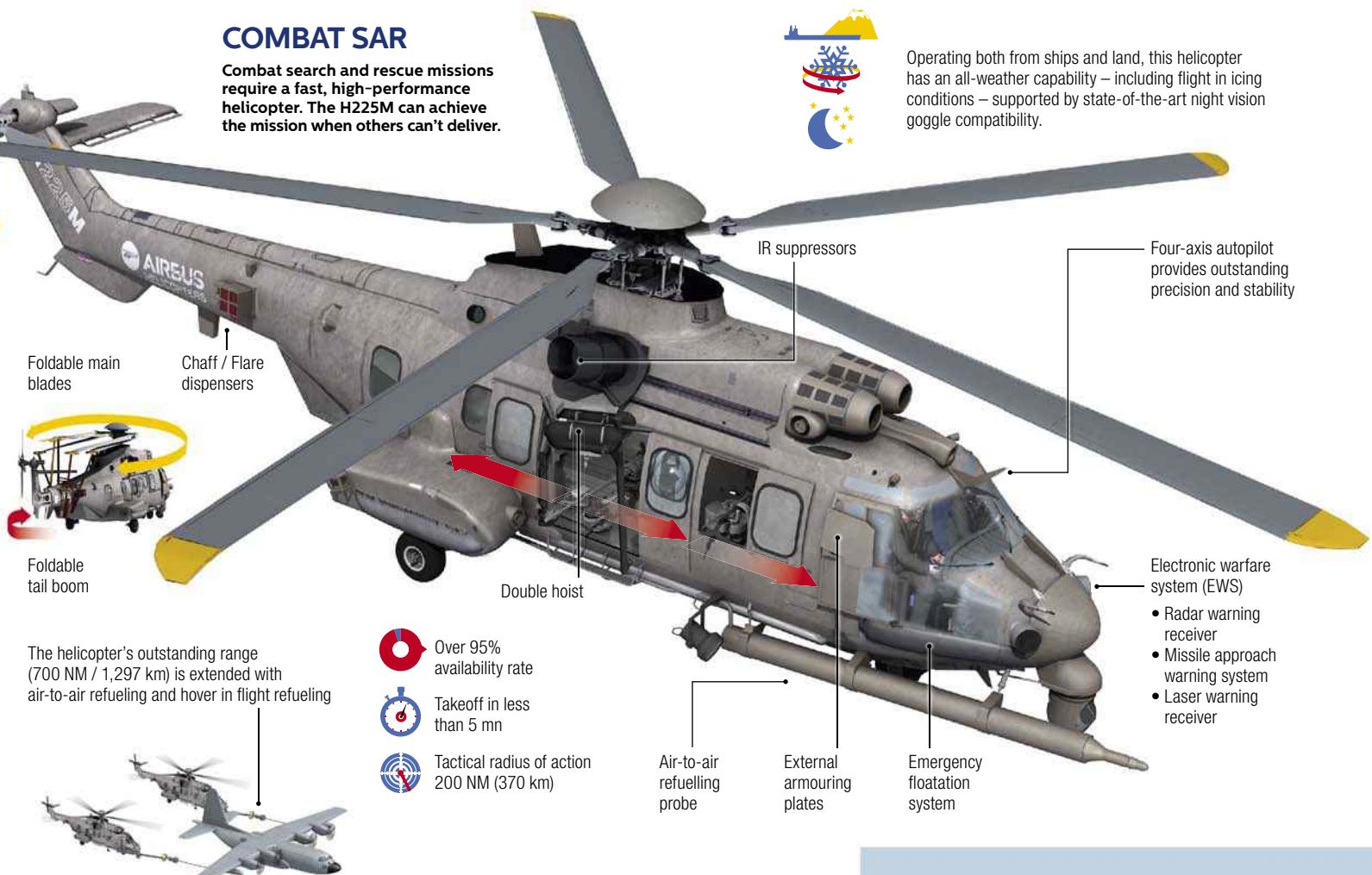
The H225M Caracal's reliability and durability have been demonstrated in combat conditions and crisis areas.

## COMBAT SAR

Combat search and rescue missions require a fast, high-performance helicopter. The H225M can achieve the mission when others can't deliver.

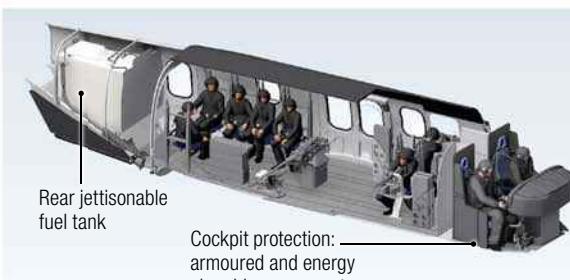
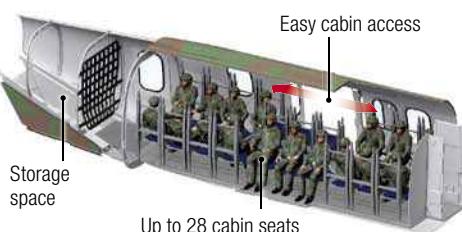


Operating both from ships and land, this helicopter has an all-weather capability – including flight in icing conditions – supported by state-of-the-art night vision goggle compatibility.



## TACTICAL TRANSPORT

The agility, high load capacity and easy cabin access of the H225M Caracal combine with a fast cruise.



## SPECIAL OPERATIONS

### Survivability equipment



H225	H225M
2 pilots + 19 pax	Troop transport: 2 pilots + 1 chief of stick + 28 seats  10 stretchers + 2 pax in rear cabin
324 km/h 175 kts	324 km/h 175 kts
11,000 kg	11,000 kg
613 NM	703 NM (1,302 km) without pax
2,297 kg	2,277 kg

# More performance for growing demands

## Founded in 1977, the Norwegian Air Ambulance Foundation (NLA AS)

provides emergency medical services. As of 2015, the company operates 10 helicopters out of 9 bases all over Norway on a state-financed contract as a part of the Norwegian health care system. On their rescue missions, the service has relied on the advantages of Airbus Helicopters' twin-engine lightweight rotorcraft of the H135 family since the very beginning.

Article: Jens Reitlinger

Strong crosswinds, lashing rain and steep transitions of altitude in difficult terrain are common features of the Norwegian landscape and a daily challenge for pilots. It was earlier this year that NLA AS carried out a flight test campaign in the Norwegian mountains, engaging in intensive experimentation with the new H135 to get a feeling for the increased power of the helicopter. "We wanted to experience the advancements of the latest model in comparison to our current EC135 P2+ helicopters under live conditions in Norway," says Erik Normann, chief pilot at the "Norsk Luftambulanse."

### THE H135 AND H145 GO STRAIGHT TO THE HEART

Normann has flown helicopters since the early '90s and looks back on 15 years of flying medical emergency missions in Norway. During this time, he came to appreciate the H135 family of helicopters for the spaciousness of their cabins despite their compact size, their maneuverability, power, reliability and availability. For the purpose of the flight test campaign, the H135 was given 180 kg more useful load than the EC135 P2+. Both rotorcraft then embarked on simulated rescue missions in the Norwegian mountains. The overall result showed that the H135 provided clear operational advantages – even in harsh weather – and was capable of carrying out

medical evacuations and hoisting with great precision and high levels of safety. "The improvements in the latest H135 really made an impression on us," concludes Normann.

The foundation currently operates 8 helicopters of the H135 family and 2 H145s. "With mission tasks that continuously increase in the demands they put on the crew and the aircraft, as well as the need for 24-hour-availability for rescue services, the requirements towards the helicopters are constantly growing. The empty weight of the helicopters has gradually gone up over the last decade as the aircraft are required to load plenty of additional medical and operational equipment," Normann explains.

### A LOYAL AND ENDURING CUSTOMER

Helicopters of the H135 family, the reference helicopter for EMS missions, have always been the aircraft of choice for the Norwegian operator. NLA AS currently holds a fleet of 13 EC135 P2+ in medical services. "The increased tail rotor control and the removal of its end-plates really made the difference during the test campaign in the mountains, in the city and in the Norwegian countryside, especially in dangerous crosswind conditions," Normann adds. "We are always in need of more performance." ■

**1 – Every year, the Norwegian Air Ambulance performs around 8,000 air rescue missions in Norway and Denmark.**

**2 – Daily challenge: dangerous crosswinds and the diverse landscape call for increased power reserves.**

**3 – During a flight test campaign under real-life conditions the advancements of the new H135 became evident.**

"Anyone can read a flight manual. We wanted to experience the new H135 under live conditions. The aircraft really exceeded our expectations."

**Erik Normann,**  
chief pilot at Norwegian Air Ambulance, about the flight test campaign in June 2015



**H135**

- Capacity: 1 pilot + 6/7 passengers, or 2 pilots + 5/6 passengers
- Engine: 2 Turbomeca ARRIUS 2B2plus, or 2 Pratt&Whitney PW206B3
- Max. cruise speed: 252 km/h (136 kts)
- Range: 801 km (432 NM)



**HCare**

# Technical Support is being revamped

**Airbus Helicopters has brought all services offered to operators together under the HCare brand.** Among them, Technical Support has been entirely rethought with a view to continuous improvement. A detailed review with Claude Houver, director of Engineering Support, and Martin Lang, director of Technical Support.

Article: Alexandre Marchand

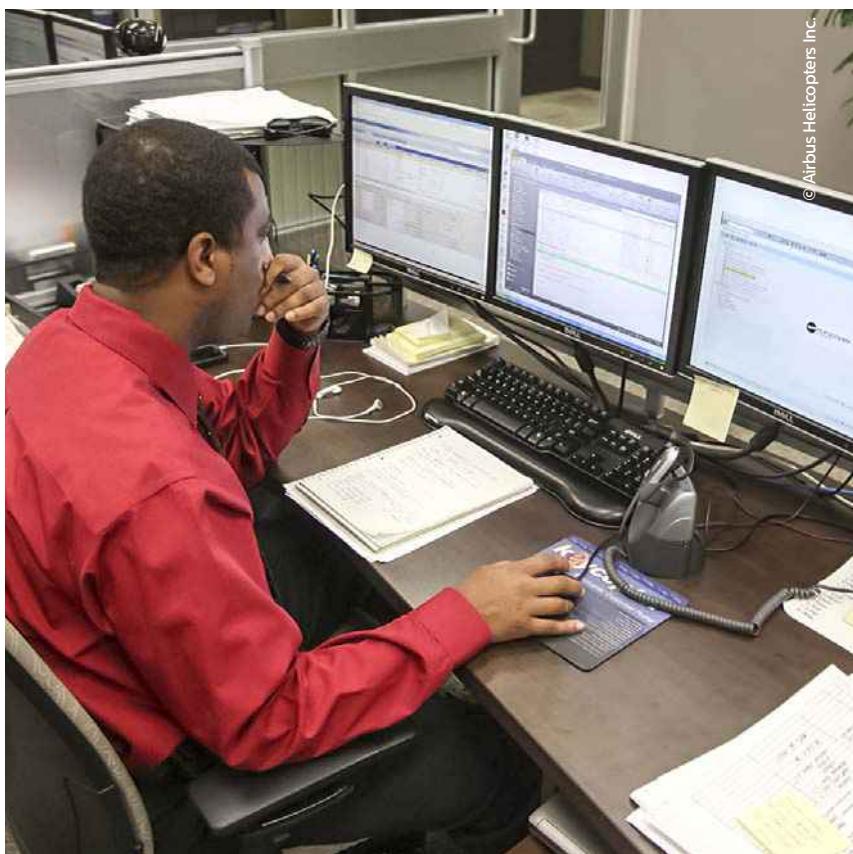


## 1 A swift response

The Keycopter client portal will now be enhanced by the Technical Request Management service. "It's about being able to respond more efficiently with technical support for the client by implementing a swift and organized processing and monitoring procedure," explains Martin Lang. "Operators have a personalized score chart with dynamic indicators enabling them to monitor all of their technical questions," he continued. All technical events are fed into a single database that is accessible throughout the Airbus Helicopters network. This information sharing makes it possible not only to provide appropriate responses more rapidly, but also to detect "faint signs," i.e. potential technical concerns arising among the operators which, if dealt with in time, can be prevented from becoming more serious. Furthermore, as of now, Airbus Helicopters is making a commitment regarding response times to technical questions: once an initial acknowledgment of receipt has been given (within 24 hours), Airbus Helicopters will inform the client of any progress and the time needed to resolve their problem, together with a performance commitment. "When the client receives their response, they will be able to communicate their satisfaction level to us directly via the tool, which is a first in terms of customer service at Airbus Helicopters," Martin Lang explains. ■

## 2 Availability 24/7

Technical Support is one of the services most used by Airbus Helicopters customers. Therefore, the creation of a new 24/7 Technical Support service represents a tangible improvement for commercial fleet clients. "From now on, the sun no longer sets on Airbus Helicopters Technical Support," Claude Houver continues. "In order to offer 24/7 availability, we have established three regional technical hubs: in Europe (Marignane and Donauwörth), Dallas, and Singapore. Across the time zones, there will always be a hub available to deal with emergencies." A technician on the end of the line is the first contact for assistance. If they are unable to offer sufficient assistance, they will contact the out-of-hours technical support experts. This emergency management was already in place for AOGs and logistics. From now on it will be extended to Technical Support. ■



# 3

## An annual meeting

"We would like all of our TechReps to meet our clients at least once a year, purely to exchange information and take stock of their operational concerns," explains

Martin Lang. "This is already the case for the largest operators and in certain geographic regions; we want to systematize this level of service worldwide, for our 3,000 clients," Claude Houver adds. ■

# 4

## Roll-out

The 24/7 service and technical support hubs have been operational since September 2015, while the Technical Request Management service is in the process of being rolled out: 900 clients will be registered by fall 2015 and the remainder by the end of the year. As well as the free 24/7 hotline number already provided on the Airbus Helicopters website, all information and contacts relating to the hubs will be communicated, offering clients support in addition to that provided by their current TechRep. ■



© Patrick Penna



# A strategically important partnership

Suppliers play a decisive role in determining Airbus Helicopters' competitiveness and are strategically important actors in the company's transformation. In this context, the relationship between Airbus Helicopters and its suppliers has taken on a whole new dimension in recent years.

**Article: Regina Lange and Belén Morant**

Suppliers are strategically important actors in Airbus Helicopters' transformation. Improving the quality and competitive pricing of the parts and services they provide is a daily challenge. "Our suppliers are under the same pressure as the rest of us to continually demonstrate and improve the quality of their products, their production efficiency, and their cost and time optimization strategies," explains Martin Schübel, Executive Vice President Strategic Procurement at Airbus Helicopters. "Our goal is to work with suppliers that may not be the biggest, but are

undoubtedly the best in the aviation industry." At the same time, Airbus Helicopters has begun to intensify cooperative activities as part of its transformation.

To reinforce these ties and develop a more collaborative approach, Airbus Helicopters has organized several initiatives including, this year, the International Suppliers Conference in Marignane in February, and the presentation of the Supplier Awards at the Paris Air Show in June.

Three of Airbus Helicopters' key suppliers share their point of view here.



© ZFL



Aernnova manufactures the lower and upper central fuselage for the H225.

## AERNNOVA

### THE COMPONENTS SPECIALIST

"Aernnova is a leading global aerostructures & components company specialized in the design, development, manufacturing and in-service support of lightweight structures. We have developed a strong relationship with Airbus

Helicopters over the years, manufacturing components for the H225 (tail boom, lower and upper central fuselage), H135 (tail boom) and Tiger (rear fuselage and HTP assembly).

Last July we held a senior management meeting in Spain: a joint meeting between Aernnova and Airbus Helicopters.

We exchanged information and objectives in a very transparent and pragmatic way and committed to working on ways to reduce costs and risks in the Airbus Helicopters supply chain. I really believe in this kind of open and pragmatic dialogue. Clear and realistic objectives are key to simplifying and improving the supply chain, with the ultimate goal of reducing the total cost for Airbus Helicopters and supporting its sales.

We really believe in our reliability and competitiveness as the means to continue developing a long and productive relationship with Airbus Helicopters, based on professionalism and transparency." ■

**Pedro Fuente Arce**, Chief Operating Officer of Aernnova



ZFL has been producing transmission systems for Airbus Helicopters since the 1970s.

[Read more on Rotor On Line](#)  
[www.airbushelicopters.com](http://www.airbushelicopters.com)



## ZFL

### THE TRANSMISSIONS CHAMPION

"ZFL and Airbus Helicopters look back on more than 45 years of successful collaboration. ZFL employs 332 people at its Kassel-Calden location, in Germany, and is a full subsidiary of the ZF Group, which celebrates its 100th anniversary this year. The latter's roots go back to the early days of aviation, when it was founded to manufacture gears for Zeppelin airships.

ZFL began designing and producing BO105 transmission systems back in the '70s. In subsequent years, this cooperation was extended and intensified to include the BK117, Tiger and H135 programs. Over the years, ZFL has produced and delivered more than 10,000 helicopter transmission systems for Airbus Helicopters, and sees itself as an integral partner of Airbus Helicopters. As such, the company supports and accompanies each product throughout its entire life cycle: from development to maintenance, not forgetting production. We use state-of-the-art calculation and simulation processes, have our own in-house transmission test benches, and offer global maintenance services." ■

**Burkhard Siebert**, Managing Director  
of ZF Luftfahrttechnik GmbH



Sagem offers a full range of helicopter systems and equipment.

© SAGEM

## SAGEM

### THE EXPERT IN AVIONICS

"Sagem (Safran) has developed proven expertise in key enabling technologies for inertial navigation, avionics, optronics, electronics and critical software, all for the civil aviation, defense and security markets. Sagem and its subsidiaries employ 7,600 people and logged sales of 1.22 billion euros in 2014. Dedicated to civil and military applications, Sagem offers a full range of helicopter systems and equipment in the areas of flight control, autopilot, inertial navigation, data analysis, observation and mission management.

Sagem supports Airbus Helicopters' transformation plan in three areas: the customer relationship aspect, the management and leadership aspect, and through Sagem's processes and operational improvements plans. The improvement plan was set up jointly, supported by both Airbus Helicopters and Sagem's top management. So far, it has resulted in a significant improvement in terms of quality and on-time deliveries in all aspects of the business—including customer support. The effects of alignment among the two companies'

top management were also visible commercially. Results have been convincing, so together we decided to pursue a plan to reach a higher standard of excellence.

We were proud to receive a supplier award and view it as an incentive to continue the transformation of our own company, allowing us to respond positively to the challenges Airbus Helicopters faces." ■

**Joël Berkoukchi**, Chief Operating Officer Sagem,  
Executive Vice President Avionics Division

# All arrows pointing up

## Thailand continues to modernize and expand its helicopter fleet

to better serve and protect its people. Airbus Helicopters has taken the pole position in this expanding market, commanding sixty percent of the civil & parapublic sector.

Article: Alexandre Marchand

In 2008, the Bangkok site only performed maintenance work for Airbus Helicopters South East Asia, based in Singapore. Four years later, Airbus Helicopters Thailand (AHT) became a fully operational customer center, with MRO and technical support remaining the main focus of its activities.

"Airbus Helicopters holds approximately sixty percent of the market share in the civil & parapublic sector, with over fifty helicopters now in service in Thailand," says Mathieu Debrand, managing director of AHT. "We're looking to double that figure over the next four years. This year alone, no less than thirteen new helicopters have been delivered."

Nearly the entire Airbus Helicopters range of products is in service in Thailand, from the H125 Ecureuil to the heavy-lift H225M. Four of the latter are currently in service for the Royal Thai Air Force, with two more slated for delivery in 2016-2017. Customers in Thailand are motivated to obtain the most modern helicopters available on the market. The first H145 will be added to the military fleet in 2016 (a total of eleven units will be delivered to the armed forces in 2016 and 2017), and two H175s for VIP

transport are scheduled for delivery in 2017. Thailand will be the first country in Asia where the H175 is operated. Airbus Helicopters Thailand had just six customers back in 2009. Today it has fourteen, performing a wide range of activities and including each branch of the armed forces. The next conquest on the horizon for the customer center is the oil & gas market, where the H160 and H175 are sure to gain a foothold. "Our goal is to bolster our services as our customers expand their fleets, and to further develop our maintenance services," added Debrand. "We offer HCare\* contracts to the majority of our customers, and our Bangkok facilities have sufficient capacity to service helicopters based in Laos, Cambodia, or even Myanmar. Over the coming months, we also want to further develop our on-site services for our customers' fleets." A strong local presence and a service-minded approach remain the top two priorities for Airbus Helicopters Thailand. One look at the order book shows that this strategy is paying off. ■

\* Officially launched at Heli-Expo 2015, HCare is a dynamic new service offering for operators, covering spare parts availability and new warranty extensions.

"We are glad to operate the AS365 N3+ for our search and rescue (SAR) missions. The quality of Airbus Helicopters' 4-axis autopilot is simply unmatched. The search radar fitted on the AS365 N3+, as well as its automatic hover mode, make this aircraft the perfect tool to perform our highly demanding SAR missions."

An officer from the Royal Thai Police Aviation Division\*

\* The Royal Thai Police Aviation Division operates five EC155 B1 and two AS365 N3+ helicopters.



© Royal Thai Police





Two of the Royal Thai Police's EC155 B1 in flight over Thailand.

"From the start of our operations, eight years ago, our relationship with Airbus Helicopters has always been excellent. We share the same vision about the importance of having a maintenance center located in Thailand. This makes for a win-win situation: we benefit from excellent technical support and in return, Airbus Helicopters sales develop thanks to the in-country presence. Yes, we can say without a doubt that the support we get from Airbus Helicopters is the best."

**Chai Nasylvanta**, CEO of Advance Aviation\*

\* Advance Aviation operates two EC135 P2i, one EC130 B4 and two EC130 T2 helicopters.



© Advance Aviation

## Rescue missions

Among the nine Dauphin helicopters currently in service in Thailand—the largest fleet of its kind in Southeast Asia—two are proving to be exceptional: the AS365 N3+ Dauphins flown by the Royal Thai Police for maritime SAR missions. The helicopters have been equipped with floatation gear and hoists, and the pilots and hoist operators have received specialized rescue training in France and Singapore. Following the recent entry into service of the two helicopters, the rescue teams have clearly demonstrated an increased capacity to perform SAR missions for the local populations.

# In Darwin's footsteps

**Not for the first time, an H125 was faced with an operation**

**a little out of the ordinary:** taking on the job of helping the giant tortoise settlement in the Galapagos Islands. Read on.

Article: Beata Cece

“With its exceptional power, the H125 was made to carry out missions like this. Without the aid of our helicopter, the national park’s rangers would have had to transport the tortoises one by one.”

**Benoît Dubois,**  
chief pilot  
of the mission



## Rare giants

The Galapagos were once home to some 250,000 giant tortoises. Following man’s arrival, and that of other invasive species, their numbers dropped to such an extent that by 1965 – when the first breeding station was founded – there were only 3,000 individuals left on the islands. Over the next 40 years the initiative saw the population rise again to 20,000. The tortoises bred at the station remain there until they are about five years old. As soon as they mature and their shells reach a diameter of approximately 20 centimeters, they are released into their natural habitat.



## Help from the sky

In June 2015, a team from the Bertarelli Foundation travelled to the Galapagos to help the national park transfer tortoises to the wild. Based in Switzerland, the foundation is committed to protecting the seas and oceans and supports life-science research and education activities. Its financing is through partnerships with academic institutions, NGOs and governments. As part of this particular initiative a team of 14 people and an H125 were sent to the Galapagos.

## H125



- **Capacity:** 1 pilot + 5/6 passengers
- **Engine:** 1 Turbomeca Arriel 2D
- **Max. cruise speed:** 251 km/h (136 kts)
- **Range:** 631 km (341 NM)
- **Endurance:** 4 h 28 mn



### A unique mission

The team came face to face with the tortoises for the first time at the airport on the island of Isabela, the largest in the Galapagos. The creatures had arrived in the back of a small truck and had to be unloaded. Each individual weighed between 15 and 40 kilos; the smallest were loaded into the cabin and the largest into the transport cradle. "I'm probably the first helicopter pilot ever to have given tortoises a lift," smiles Benoît Dubois, the French chief pilot.



© Fondation Bertarelli



© Fondation Bertarelli

### Hitching a ride

The team came up with an ingenious solution for transporting their cargo, which was carried in the cradle, a place normally reserved for heliski equipment. "Taking out the cabin seats was pretty easy and we set up a protective cover inside, while the sliding doors proved handy when it came to loading and unloading," adds Benoît. Up to 25 tortoises were transported on each run – a load that presented no problem for the H125, which can carry up to 1.4 tons.

### Flight to freedom

"With its exceptional power, the H125 was made to carry out missions like this," adds Benoît. "Its size and high landing gear also make it the perfect aircraft for landing on the hardened lava and dense vegetation. In total, we carried 357 tortoises into the wild, and the national park's rangers were very grateful to us," he continues. "If we hadn't turned up with the helicopter, they'd have had to strap the tortoises to their backs and carry them one by one." On foot the journey takes up to six hours, but thanks to the air taxi the tortoises were set free in a mere 15 minutes.

# THINK SEARCH & RESCUE

The future of search and rescue. With the longest range and largest capacity in its class, this piece of life-saving equipment can be packed with vital search, rescue and intensive care technology. A stable and powerful platform for saving lives under the harshest conditions.  
**Call for the all new H225.**



Important to you. Essential to us.

 **AIRBUS**  
HELICOPTERS