

JOURNAL

ROTOR

THE WORLD OF HELICOPTERS BY EUROCOPTER - NO. 93 - APRIL/MAY/JUNE 2012

EC175
A BRIGHT FUTURE
IN THE OIL & GAS SEGMENT

MILESTONE AVIATION GROUP
THE LEASING SOLUTION

CHINA
THE SKY'S NO
LONGER THE LIMIT



(THINK OIL & GAS)

The rugged and reliable Eurocopter range is put to the test transporting crews safely to and from assignments. Enduring extreme heat and freezing weather conditions to reach offshore rigs and wells in remote land-based locations.

Specify an EC175.



Thinking without limits

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THE WORLD IS OUR NEIGHBORHOOD

At Eurocopter, our decades of international cooperation and partnerships have positioned us well to deliver on the cornerstone strategy of being in close proximity to our customers and operators.

I am proud of what Eurocopter's global team has achieved during the past several years: with subsidiaries and participations in 21 countries and our helicopters operating in some 150 nations, we are now present around the globe. Today, I am firmly committed to continuing this strategy – ensuring the adaptation of our helicopters to your local mission requirements as well as local support and assistance to help develop your helicopter business and ensure the added value that you have rightly come to expect from us.

One of Eurocopter's priorities in the coming years will be the BRIC countries (Brazil, Russia, India and China), which are poised to become major players in the rotorcraft market.

As Eurocopter was the first helicopter manufacturer to establish a major presence in Latin America, we will continue our company's commitment to the region – especially in Brazil. Eurocopter already is playing a key role in developing Brazil's local aviation industry. In addition to the in-country production of AS350s, AS355s and EC130s, customers can now order EC225s/EC725s from Eurocopter's local assembly line at Itajubá, following a contract in 2008 for 50 EC725s to equip Brazil's armed forces. Our Helibras subsidiary continues to expand to cover a wide range of capabilities, including support and services.

Eurocopter also has distinguished itself by being the only foreign helicopter manufacturer to set up a subsidiary in Russia, where the region's network of Eurocopter-certified technicians and maintenance centers now provides even more support to our customers.

Our long-term strategy is illustrated as well by Eurocopter's presence in India – with more than 50 years of experience with this country's aviation industry, and where a full-fledged subsidiary was inaugurated in 2010. Since then, we have signed a range of strategic partnership agreements to provide repair & overhaul and training services. This dedication to an important emerging market has demonstrated its results: in 2011, Eurocopter rotorcraft comprised 65 percent of the country's new helicopter deliveries.

In China, where the opening of the low-altitude airspace is progressively advancing, Eurocopter can point to more than four decades of collaboration with the Chinese aviation industry. Our Eurocopter China subsidiary has seven different branch offices, as well as a full network of partners throughout the country – ready to serve both current and future customers. Without a doubt, Eurocopter is perfectly positioned and ready for takeoff in China.

Eurocopter is more committed than ever to being a major player in the international marketplace, building on our unwavering dedication to meet your particular needs – wherever you are in the world.

Lutz Bertling, *President and CEO of Eurocopter*

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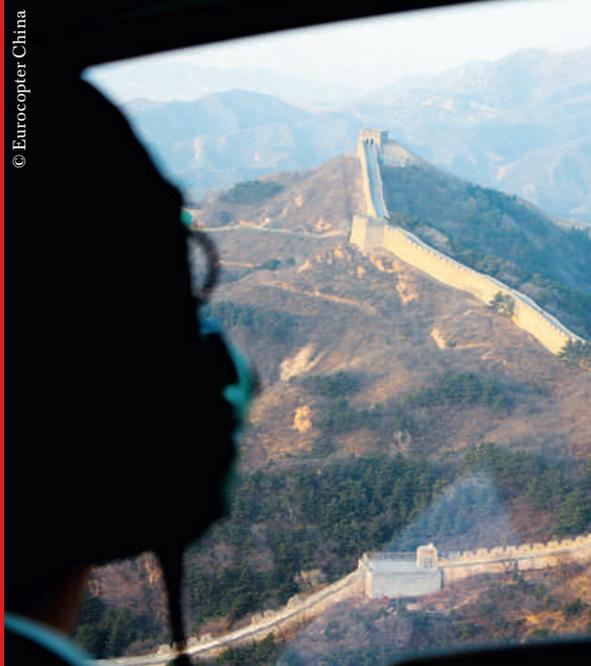
© Philip Plisson

08 UP ABOVE
Rescue of TK Bremen Crew by an NH90 NFH Caïman

Barely a week after it first entered service on December 8, 2011, the new NH90 operated by the French Navy successfully performed its first sea rescue.



© Marine Nationale



© Eurocopter China

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Times are changing concerning the ban on civil and parapublic aviation activity in the country's low-altitude airspace: As part of its 12th Five Year Plan (2011-2015), China, the world's second largest economy and third largest country, will be progressively loosening these restrictions. For now, the open airspace is restricted to a few trial areas, but industry observers foresee the entire low-altitude airspace being opened to private aviation by 2020. The resulting boom in the general

aviation sector will be staggering: As many as 1,500 rotorcraft may be operating in the country within the next decade, compared with only 300 today. "This is excellent news for Eurocopter," said Norbert Ducrot, senior vice president of Asia for the Eurocopter Group and chairman of Eurocopter China. "We have been able to develop over the years a strong industrial and commercial cooperation that has given us the lead in this market, which is rapidly expanding."



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The proven EC145 twin-engine helicopter is no stranger to American skies, and is operated across the country for a multitude of missions. It has also served as a solid foundation for the development of two key military programs in cooperation with Eurocopter's U.S. division American Eurocopter, EADS North America and the United States Army; and both the Lakota Light Utility Helicopter (LUH) and the Armed Aerial Scout (AAS) programs have much to celebrate recently.

FOR MORE INFORMATION
CHECK OUT

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IN OPERATION

French Navy: The First Dauphin AS365 N3+ SAR Shines in Polynesia

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For more **INFORMATION** about:

- Helisul and Scandinavian Helicopter, visit their websites: www.helisul.com and www.shgab.com (page 6-7).
- Milestone Aviation Group, visit www.milestoneaviation.com (page 26-27).
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Oman has been making intensive use of its NH90s, oftentimes toughing out extremely difficult operating conditions. The new experience it continues to gain with the military helicopter is playing a crucial role in the NH90's maturation process.

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READERSHIP SURVEY

As part of our commitment to continuous improvement, we would like to know your thoughts about *Rotor Journal* in order to best meet your expectations. We kindly ask that you take a few minutes to complete this questionnaire and return it to us **BEFORE AUGUST 31, 2012**.

CELEBRATING OUR CUSTOMERS

Article REGINA LANGE AND BELÉN MORANT

In celebration of its 20th anniversary, Eurocopter asked two of its customers, for whom 1992 and 2012 are also of great significance, to say a few words for the occasion.

SCANDINAVIAN HELICOPTER

LENNART PIHL,

founder of Osterman Helicopter and Scandinavian Helicopter Group.

“I always appreciated working with Eurocopter as they consider security for their customers in combination with high competencies as the cornerstones of their business, and this is also our philosophy.”

“In 1992 I was the CEO of Osterman Helicopter, a helicopter company with an extensive experience of offering qualified helicopter services. As it was for Eurocopter, this year also represents a milestone for us, as we received our first AS350 B2 in 1992, which was used for aerial work. In 1998 I founded the Scandinavian Helicopter Group, which is managed today by my son Martin. Our company has already purchased more than 60 new Eurocopter helicopters, and one of the most sought-after helicopter types is the Ecureuil/AStar AS350 B3.

I always appreciated working with Eurocopter as they consider security for their customers in combination with high competencies as the cornerstones of their business, and this is also our philosophy.

For its 20th anniversary, I wish Eurocopter and all its employees all the best. May the next 20 years bring sustainable growth, other breathtaking innovations and success without limits.”



HELISUL

RAPHAELA AND ELOY BIESUZ,
owners of Helisul.

“We would like to congratulate Eurocopter and its employees for these past 20 years, and for the innovative technology the company has developed for its civil helicopters throughout the world.”

“We’ve been working with Eurocopter for more than 20 years now, ever since we purchased our first Esquilo (Brazilian version of the Ecureuil/AStar) back in 1989. Today, our 20 Esquilos (B, B2, B3 and B4) make up half of our fleet. In 2011, Helibras gave us a plaque to commemorate the fact that our company was the largest Ecureuil/AStar operator in Brazil. We also have the Esquilo aircraft that has clocked up the highest number of flight hours in the country. We are true pioneers in the helicopter sector, having started our company way back in 1972.

The year 2012 is a very special one for us here at Helisul, because we will be celebrating our 40th anniversary by launching several new projects: air ambulance activities, the expansion of our maintenance services, and preparations for the World Cup soccer tournament and the Olympic Games.

For company management, Eloy Biesuz, the president of Helisul, can now count on his daughter Raphaela, and also on Mr. Celso and his son Bruno. We are all pilots, and all share the same passion for helicopters passed down from father to child. We are working closely together to continue to develop our company.

We would like to congratulate Eurocopter and its employees for these past 20 years, and for the innovative technology the company has developed for its civil helicopters throughout the world. We hope you continue to make sure your helicopters have high performance and safety levels, while remaining focused on continued cost reductions and even more customer support, so that we can continue to develop our own activities even further! Congratulations!”

© Mendonça Jr.



CHECK OUT THEIR WEBSITES

- www.shgab.com
- www.helisul.com

BARELY A WEEK AFTER IT FIRST ENTERED SERVICE ON DECEMBER 8, 2011, THE NEW NH90 OPERATED BY THE FRENCH NAVY SUCCESSFULLY PERFORMED ITS FIRST SEA RESCUE.

Article **REGINA LANGE**
Photo by **PHILIP PLISSON**

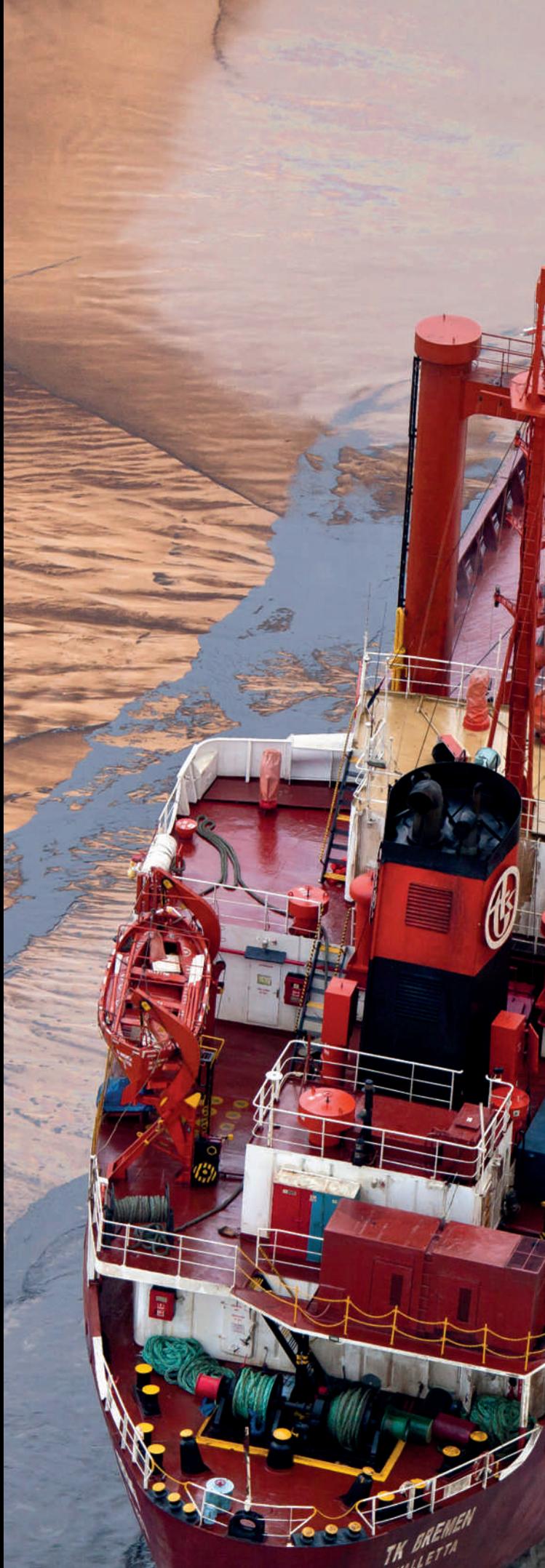
THE CAÏMAN⁽¹⁾ TO THE RESCUE

It was at 2 a.m. on the morning of December 16 when the Navy base in Lanvéoc-Poulmic received a distress call through the sea rescue switchboard from the cargo ship TK Bremen, which had run aground along the coast of Morbihan. The 4,000-tonne, 109-meter ship was being thrown up onto the beach by a violent storm. A little over an hour later, the Caïman had already reached the scene and had begun to hoist up the 19 sailors on board. The entire crew was evacuated in just two rotations, despite the difficult weather conditions – a nearby weather station along the coast measured gusts of wind of up to 140 km/h, and the sea state was 6. To make matters worse, the high masts on the ship and the waves crashing across its deck made the hoisting work even more difficult⁽²⁾.

Three Caïman-Marines are currently in service at the Lanvéoc-Poulmic base, south of Brest, as part of the reformed 33F Fleet. A total of 27 units have been ordered by the French Navy, and the first six have already been delivered. Their missions include combat against maritime terrorism, anti-submarine and anti-surface warfare, and sea rescue missions when needed.

(1) Operational name given to the NH90 of the French Armed Forces, with a sea version (Caïman-Marine) for the Navy and a land version (Caïman) for the Army.

(2) The mission to evacuate the entire crew took place at night. The next morning, the following picture was taken when a second Caïman-Marine flew to the site to inspect the ship.





Héli-Union NEW DAUPHIN AS365 N3 SIMULATOR IN FRANCE

The new simulator for the Dauphin AS365 N3 and N3+ – the first of its kind in the world – obtained FFS level B/FTD level 3 dual qualification end of February. Eurocopter and Thales jointly developed the simulator for the offshore operator Héli-Union. Located on the premises of the Héli-Union Training Center at Angoulême in southwest France, it will offer three different configurations: conventional offshore mode, with the standard avionics of the Dauphin AS365 N3 and a 3-axis autopilot; MFD⁽¹⁾ with modern avionics and a 3-axis autopilot; and finally MFD with the avionics of the N3+ and a 4-axis autopilot. Eurocopter plans to use this simulator to provide training for European customers of the Dauphin. A similar AS365 N3 simulator owned by Eurocopter South East Asia (ESEA) has been available since April training center at the new Seletar Aerospace Park.

(1) Multi Function Display



© Héli-Union

Australian Aerospace FIT TO TACKLE STRICTER REGULATIONS



© Australian Aerospace

Australian Aerospace has become the first civil helicopter maintenance training organization in the Asia-Pacific region to receive Part 147 maintenance training approval from the Civil Aviation Safety Authority (CASA). This accreditation more closely aligns local airworthiness standards with those of other leading nations. Eurocopter's Australian subsidiary is the first entity in the region to transition to these new regulations, which introduce additional requirements for Safety Management Systems (SMS) and training, thus placing a greater importance on ensuring the highest possible standards of safety. Although training organizations were allotted two years to implement the new requirements established in June 2011, Australian Aerospace successfully made the transition in less than six months.



© Anthony Pecchi/Eurocopter

Ecureuil/AStar AS350 B3e FIRST DELIVERIES IN RUSSIA AND AFRICA

In January 2012, Eurocopter Vostok delivered the first three AS350 B3es for UTair, who is still set to receive 10 more of these aircraft from an initial order of 20 Ecureuils placed in 2011 – the largest light helicopter contract ever signed in Russia and the CIS. UTair will use the aircraft for oil and gas pipeline patrols, surveillance missions, VIP transportation and cargo airlift. The Kenya Police Air Wing also became the first African customer to operate the AS350B3e for police law enforcement missions, following a competitive tender won by Eurocopter Southern Africa Limited (ESAL). The AS350 B3e is the enhanced version of the single-engine AS350 B3, offering higher performance levels to carry out the most demanding missions in extreme weather and geographical conditions.

Spain ALBACETE OPENS ITS DOORS TO IBERO-AMERICAN OFFICERS

On March 13 of this year, the Eurocopter España plant in Albacete welcomed the 10th course of Advanced Strategic Studies for Senior Ibero-American Officers, organized by the Spanish Ministry of Defense.

During their visit, the officers got a first-hand look at the industrial capabilities of Eurocopter España for the manufacturing of both civil and military helicopters. Highlights of the tour included the Tiger and NH90 assembly lines, which are both running at full steam, and the EC135 assembly line. They also watched a test flight for the Tiger, currently in its qualification phase.

The delegation was accompanied throughout the day by Francisco Vergé, CEO of Eurocopter España, and many members of the company's senior staff, who gave detailed presentations of the different units at the plant.



© Luis Vizcaino

Costa Allegra THE EC120 TO THE RESCUE



© Zil Air

On February 27, 2012, the Costa Allegra cruise ship was cut off from the world after a fire in the engine room left the ship adrift without power – or any means of communication – in the middle of the Indian Ocean. Luckily for them, the Zil Air team located nearby in the Seychelles was ready and willing to assist. Aboard its EC120 B, Zil Air delivered essential communications equipment for the ship to contact the authorities as well as food supplies for the 600 passengers and 400 crew members aboard. In two days, two helicopter pilots, one engineer and two ground crew performed eight trips and nearly 10 flight hours. “The EC120 performed extremely well considering the environment we operated in,” said Francis Savy, executive director at Zil Air. “It was reliable and provided us trouble-free operations.”

SABADELL HELICOPTERS SERVICE CENTER (SHSC)

Article
BELÉN MORANT

Last April 25, Eurocopter España acquired an 80 percent stake in the maintenance activities of TAF Helicopters, enabling the Group to position itself as a leading provider of high-quality support services to the region's light-helicopter operators.

BOOSTING SUPPORT SERVICES IN SPAIN



The new company is located just outside of Barcelona.



TAF's fleet of 21 aircraft is made up exclusively of Eurocopter helicopters.



Francisco Navarro, Support and Services director for ECE and CEO of SHSC, with Sebastian Bernasconi, executive director of TAF; Francisco Vergé, CEO of Eurocopter España and Eduardo Miralta, CEO of TAF Helicopters.

Eurocopter's Spanish subsidiary has traditionally provided maintenance services for public service operators, but with the creation of Sabadell Helicopters Service Center (SHSC), Eurocopter España is now reorganizing its activity in order to offer optimized on-site support to civil light-helicopter operators. Located just outside Barcelona, the new company answers directly to Eurocopter España and will offer the Group's civil customers a complete range of support services. In addition to traditional activities such as maintenance, inspection, repair, training and customization, SHSC will also be offering logistics support and airworthiness services. Small and medium-sized operators will now be able to outsource their maintenance activities, while benefitting from the guarantees that

only a manufacturer can offer. "The agreement signed with TAF Helicopters reflects Eurocopter's determination to expand its support and services offer," explained Francisco Vergé, CEO of Eurocopter España. "It's a win-win situation for both Eurocopter and the operators. We'll be able to increase fleet safety, while our customers will benefit from maximum availability rates." The total helicopter fleet in Spain has increased at an annual rate of 5 percent over the past twenty years, and support and service activities should grow at about the same pace over the medium and long term. Eurocopter is the current leader on Spain's civil market, with 240 helicopters in service and 57 percent of the market. The lion's share of these aircraft are in the 2 to 3 metric-ton class. Considering that these helicopters

are on average 14 years old, it's easy to see why civil operators will be excited about the creation of SHSC. In addition to TAF, whose fleet of 21 helicopters is made up exclusively of Eurocopter products, all the country's civil operators and its twenty or so private operators will be able to benefit from SHSC's services, as will foreign operators. "We will be offering our maintenance services at all eleven TAF bases, which cover all of Spain. Our technicians will also be available to visit our customers' bases to provide personalized on-site services," said Eduardo Miralta, co-CEO of TAF Helicopters. "The creation of SHSC is good news for the operators, as they will benefit from reduced maintenance costs, better quality, and of course higher availability rates for their fleets."



© ECE

SHSC performs a wide range of activities, from maintenance, inspection, repairs, training and personalization, to logistics and airworthiness services.

EC175

Interviewed by
CHRISTIAN DA SILVAPhoto by
THIÉRRY ROSTANG/EUROCOPTER

Olivier Claeys, who is in charge of the Aviation Department in Total's Operational Support Logistics division, participated in the design phase of the EC175. Below, he talks about some of his impressions and what he expects from the new machine before initial deliveries begin in the coming months.

A BRIGHT FUTURE IN THE OIL & GAS SEGMENT

As an aviation expert in the oil & gas industry, what are some of your expectations for the EC175?

Olivier Claeys: From the outset, Total actively participated along with operators and other oil & gas companies in the working groups tasked with defining the machine. Eurocopter recently announced the helicopter will have a 16-passenger carrying capacity and a range of 130 nautical miles, which is a noted improvement over the 110 nautical miles originally announced. The EC175 will clearly position itself as an alternative to medium-lift 12-seat helicopters, and with its increased carrying capacity will be similar to the Super Puma AS332 L1.

What types of missions will it be used for?

O.C.: A wide variety of missions, depending on the operating conditions, the operators' needs and the applicable regulations. Beyond the various technical issues, our number one priority is the safety of the passengers. We are also looking for a highly reliable helicopter accompanied by highly skilled service providers. The special working conditions at offshore platforms mean we must be able to count

on maximum availability from our helicopters. We have to have robust means, not only to cover our needs in case of a medical evacuation, for example, but also for when our work teams change shifts, as this often needs to be coordinated with scheduled airplane flights. Helicopter transport is also a hefty part of our overall logistics budget.

What sets the EC175 apart from existing helicopters?

O.C.: Compared with the 12-seat medium-lift class, the EC175 can fly farther and with a heavier payload. It should quickly find a home in regions such as Western Africa, Brazil and Australia. It complies with the latest certification standards, which means improved safety. The passengers will be more comfortable thanks to the roomy cabin, which also offers more headroom than its competitors. The ergonomic cockpit, together with the automated functions and systems to safeguard the flight envelope, will also lighten the crew's workload. These are all important new features. We ask manufacturers to keep cockpits and control systems as similar as possible throughout their product ranges to facilitate the type rating conversions for our flight crews. With

an overall length of 18m, it will be possible for the EC175 to serve the same platforms as the EC225 or the Super Puma AS332.

And what does the future hold in store?

O.C.: It should be very promising for the EC175. Its direct competition will now be coming from the AW189, and not the AW139. The EC175 will be the successor to the Super Puma AS332 L1 and L2, but should avoid competing for the same markets as the EC225, which is better suited for heavy-lift, long-range transport missions. The EC175 also has great SAR capabilities, and is well positioned for this segment thanks to its excellent endurance and large cabin.

The things we're looking for most from our suppliers is high availability rates, high-quality technical support and first-class spare parts logistics. To train flight crews, it is also important to have flight simulators available in close proximity to areas of activity. If Eurocopter can master these different areas, then the EC175 will quickly become a reference in the oil & gas segment.



FOCUS ON

Distance Is the Key

Total has no helicopter fleet of its own, but instead leases the machines from service providers such as CHC, Bristow, Sonair, and Hélic-Union to service its offshore platforms on all five continents. When transportation needs are analyzed for drilling, production and other projected activities, it is often the distance from the coast that determines which helicopter is required.

LUH AND AAS PROGRAMS

Article
ERIN CALLENDER
Photos by
EADS NORTH AMERICA

The proven EC145 twin-engine helicopter is no stranger to American skies, and is operated across the country for a multitude of missions. It has also served as a solid foundation for the development of two key military programs in cooperation with Eurocopter's U.S. division American Eurocopter, EADS North America and the United States Army; and both the Lakota Light Utility Helicopter (LUH) and the Armed Aerial Scout (AAS) programs have much to celebrate recently.

THE EVOLUTION OF LAKOTA



DELIVERY OF THE 200th UH-72A LAKOTA LUH

EADS North America delivered the 200th Lakota Light Utility Helicopter (LUH) to the U.S. Army on March 1, 2012, during a ceremony at American Eurocopter's Columbus, Mississippi facility, where the Lakotas are produced. This milestone helicopter is the first production aircraft to be delivered with

the new Security and Support (S&S) Battalion Mission Equipment Package (MEP). The Lakotas equipped with this MEP will be operated by Army National Guard units across the country. Currently 52 Lakota helicopters will be produced in this configuration, in addition to 16 previously fielded Lakota helicopters being retrofitted to the Army's S&S Battalion configuration.

The total anticipated number of S&S Battalion Lakotas will grow to 99 aircraft.

"Today marks another significant milestone for the Lakota program — the only DoD⁽¹⁾ program of this size and scope to remain 100 percent on schedule and on budget," said Sean O'Keefe, EADS North America Chairman and CEO. "The success of this program stems from the strong partnership we've built with the Department of Defense and the Army over the past seven years."

The Lakota helicopter is based on the twin-engine EC145 model. Operating from 31 basing locations in the continental U.S., Puerto Rico, Germany and the Pacific Ocean's Kwajalein Atoll, Lakotas are used in multiple configurations for medical evacuation (MEDEVAC), search and rescue, border patrol, VIP transportation, general aviation support and in combat flight training missions.

EADS North America won the Lakota contract in June 2006 and officially delivered the U.S. Army's first UH-72A three months ahead of schedule in December of the same year. The current program calls for 346 UH-72A Lakotas to be delivered to the Army and Army National Guard through 2016.



INTRODUCING THE AAS-72X+, THE LATEST EVOLUTION OF THE ARMED AERIAL SCOUT HELICOPTER

One month after the delivery of the 200th Lakota, EADS North America unveiled the latest evolution of the armed derivative of this helicopter specially developed for the U.S. Army's Armed Scout requirement: the Armed Aerial Scout AAS-72X+. This newly released version builds on the three Technical Demonstrator Aircraft (TDA) already developed in order to offer increased capabilities for the U.S. Army. "This latest evolution of the Armed Scout gives us the option of offering an even more capable system, to ensure our combat troops have the very best aircraft available to meet their demanding missions," continued Mr. O'Keefe. "We look forward to demonstrating the advanced performance of the AAS-72X+ during the Army's Voluntary Flight Demonstration this summer."

Based on the EC145 T2, which incorporates the more powerful Turbomeca Arriel 2E engines with dual channel FADEC, a Fenestron® tail rotor for improved anti-torque, an upgraded transmission, the Helionix glass cockpit and avionics suite and a 4-axis autopilot system, this variant will offer the Army greater power, range,

endurance and payload. This improvement is crucial when operating in 6,000 foot altitude and 95 degree environments, commonly known as "6K/95 high/hot" conditions – the most demanding environment for rotary-wing operations.

The AAS-72X+'s performance will exceed the Army's previously published 6K/95 endurance requirement of 2 hours and 12 minutes plus a 20 minute fuel reserve, while carrying a 2,800 pound useful pay-

load for mission equipment and crew.

The AAS-72X+ will also be manufactured by American Eurocopter at its Columbus, Mississippi plant and could be available as early as 2016.

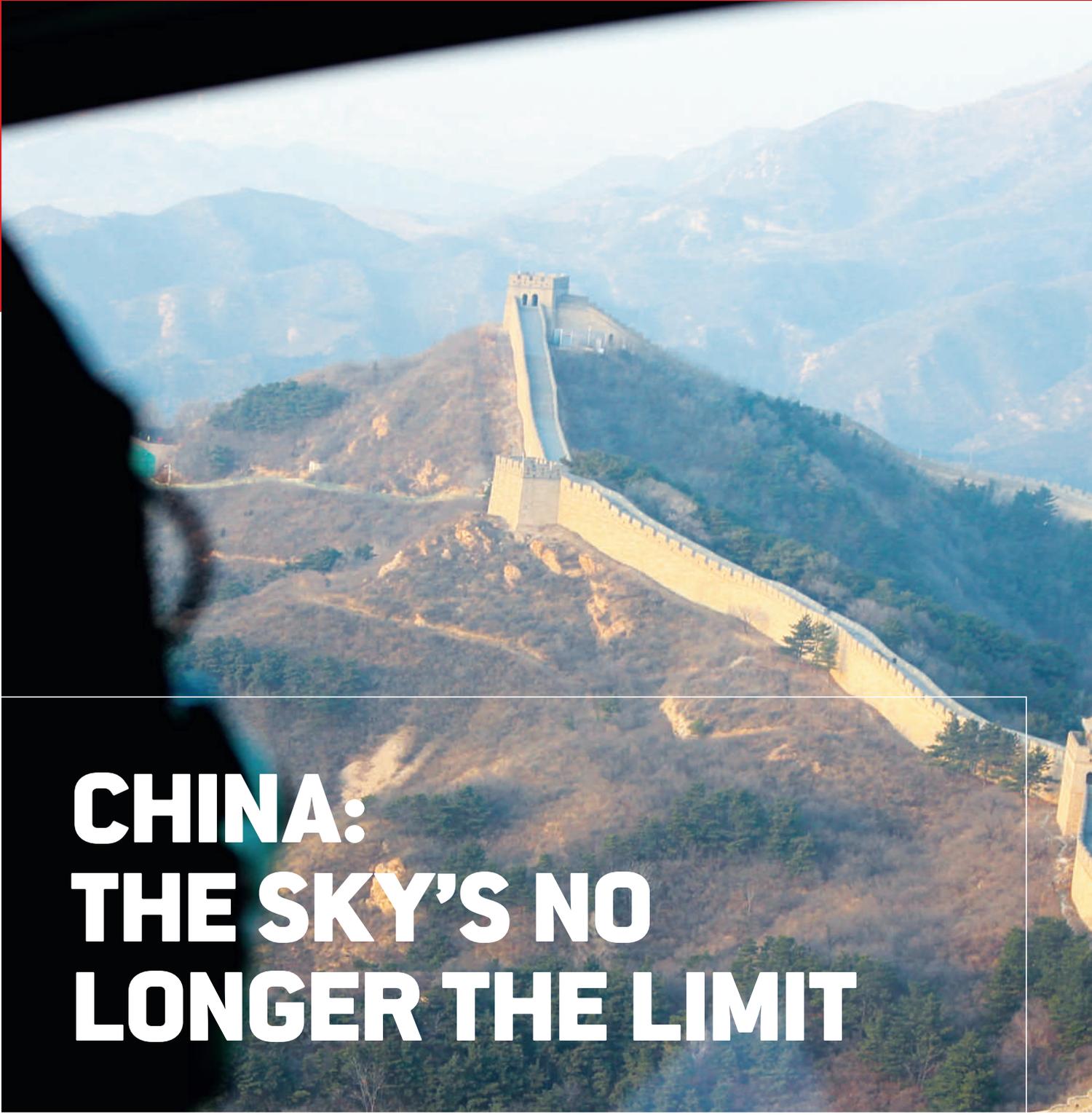
(1) Department of Defense



WATCH A VIDEO OF THE UNVEILING OF THE AAS-72X+ ON ROTOR ONLINE
www.eurocopter.com

EADS North America unveiled the AAS-72X+ on April 2, 2012, at the annual Army Aviation Association of America convention.



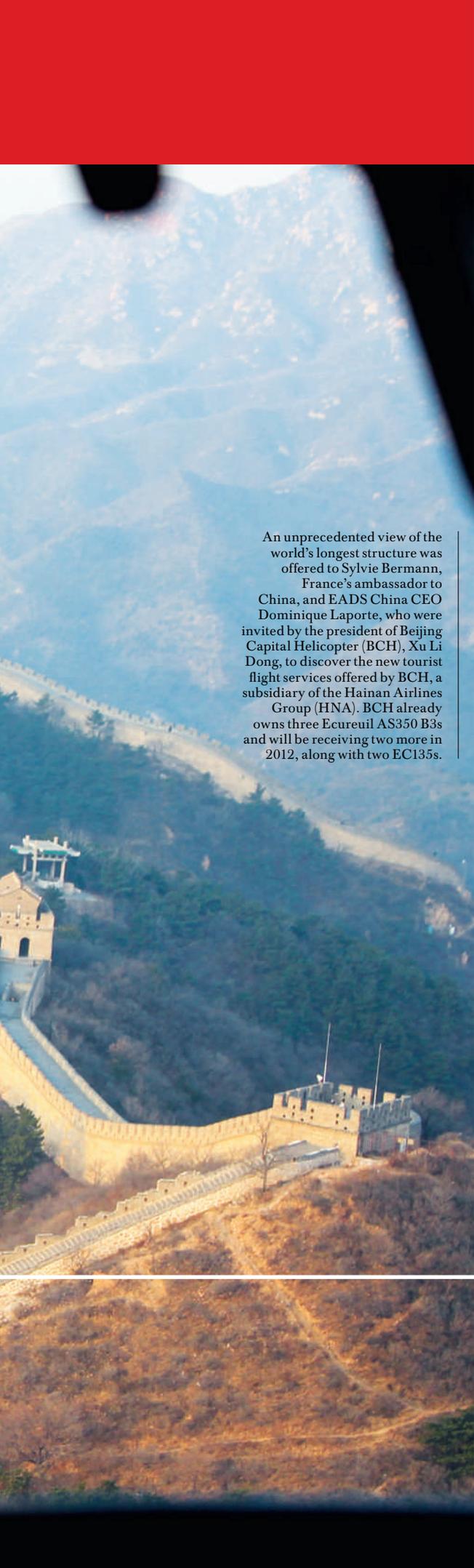


CHINA: THE SKY'S NO LONGER THE LIMIT

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**CHINA,
CHALLENGE
ACCEPTED**

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**A BIGGER
FOOTPRINT
IN CHINA**



An unprecedented view of the world's longest structure was offered to Sylvie Bermann, France's ambassador to China, and EADS China CEO Dominique Laporte, who were invited by the president of Beijing Capital Helicopter (BCH), Xu Li Dong, to discover the new tourist flight services offered by BCH, a subsidiary of the Hainan Airlines Group (HNA). BCH already owns three Ecureuil AS350 B3s and will be receiving two more in 2012, along with two EC135s.

Article

REGINA LANGE

Photo by

EUROCOPTER CHINA

Times are changing concerning the ban on civil and parapublic aviation activity in the country's low-altitude airspace: As part of its 12th Five Year Plan (2011-2015), China, the world's second largest economy and third largest country, will be progressively loosening these restrictions. For now, the open airspace is restricted to a few trial areas, but industry observers foresee the entire low-altitude airspace being opened to private aviation by 2020. The resulting boom in the general aviation sector will be staggering: As many as 1,500 rotorcraft may be operating in the country within the next decade, compared with only 300 today. "This is excellent news for Eurocopter," said Norbert Ducrot, senior vice president of Asia for the Eurocopter Group and chairman of Eurocopter China. "We have been able to develop over the years a strong industrial and commercial cooperation that has given us the lead in this market, which is rapidly expanding."



CHINA, CHALLENGE ACCEPTED

Interview with Bruno Boulnois,
CEO of Eurocopter China

Interviewed by
REGINA LANGE

Photos by
SHANGHAI POLICE

What is Eurocopter's current position in China in terms of market shares and sales?

Bruno Boulnois: Eurocopter is the market leader. We have 125 machines currently operating in the country, representing 40 percent of the civil and parapublic fleet. But this enormous country still has barely 300 civil helicopters in service, compared with 12,000 in the United States and 8,000 in Europe. The needs in the years to come will be expanding exponentially, and the challenge for us is to make sure the majority of Chinese customers prefer, and select, "Eurocopter solutions"! I'm optimistic that, within the next 10 years, we'll be delivering around 100 helicopters a year. Eurocopter has several decades of experience in China and a strong geographic footprint, with teams already up and running in Shanghai, Beijing, Harbin, Chengdu, Wuhan, Shenzhen and Hong Kong. We're well positioned to earn the confidence of Chinese operators and win the lion's share of this enormous market. Our consolidated results for 2011 (subsidiary plus parent company) prove that we're on the right track: 200 million euros in revenues and 300 million euros in new orders.

What are some of the special features of the Chinese market, and which helicopters have been most successful?

B.B.: The rapid growth we're witnessing and the enormous potential of the Chinese market make it unlike any other – and not just today, but for years to come. Things are just getting started, and 90 percent of our potential customers don't even exist yet! Our current best

“The needs in the years to come will be expanding exponentially, and the challenge for us is to make sure the majority of Chinese customers prefer, and select, ‘Eurocopter solutions!’”

Bruno Boulnois,
CEO of Eurocopter China.

A BRIEF HISTORY LESSON

- 1967:** Sale of the first Eurocopter helicopter (Alouette III) in China
- 1980:** Licensing agreement to manufacture the Dauphin AS365 in Harbin
- 1992:** Cooperation with CATIC & STAé for development of the EC120
- 2002:** Eurocopter becomes co-shareholder in a CITIC company providing maintenance in Southern China: COHC General Aviation Maintenance & Engineering Co (CGAMEC)
- 2004:** Opening of branch office in Beijing
- 2005:** Signature of cooperation agreement with AVICOPTER (the helicopter division of China Aviation Industry Corporation, AVIC) for the joint development of a new helicopter in the 7-tonne class, the EC175
- 2007:** Opening of the Eurocopter China subsidiary in Shanghai and a branch office in Shenzhen
- 2008:** Opening of the Eurocopter China subsidiary in Hong Kong
- 2009:** Eurocopter increases its share in the CGAMEC joint-venture from 21% to 34%
- 2011:** Opening of regional offices in Harbin, Chengdu and Wuhan

sellers are the EC225, EC155, EC135 and the Ecureuil AS350 B3, but the EC120 is already gaining ground, and the EC145 won't be far behind. The wide range of products Eurocopter has to offer gives us a huge advantage, because we'll be needing to fill all different types of needs at the same time: big and small models, single- and twin-engines, high-end and low-end.

The high value that the Chinese place on long-term relationships also plays in our favor. Our 30 years of cooperation with Chinese industry, which began in 1980 with the Dauphin licensing agreement and has now reached a new level with the current EC175 joint development program, have earned us the unparalleled trust of the Chinese authorities. We've also been a faithful partner with COHC, the country's largest civil operator, for more than twenty years now, which is sure to convince new customers of our loyalty and ability to satisfy their needs.

What are Eurocopter's goals over the short, medium and long term, and what is the company doing to prepare for the upcoming boom in general aviation once the Chinese skies have been opened to civil aircraft?

B.B.: Proximity will be the first pillar of our strategy: Seven Eurocopter China offices and a full network of regional partners already blanket the country to serve current and future customers. The second pillar will be our training offer: From ab initio to a Full Flight Simulator (the EC225 simulator to be inaugurated in June 2012, through our



partnership with COHC, will be the first helicopter simulator ever installed in China), our local branches will be providing both technicians and pilots with training up to the most recent international standards. Services are the third pillar: We're providing technical support, maintenance services and spare parts to Chinese helicopter customers, wherever they may be. A few examples include our joint-venture maintenance facility based in Shenzhen, the logistics platform in the South, in Hong Kong, and the Airbus parts distribution center in the North, in Beijing. The fact that we have to get everything up and running at the same time is of course a challenge, but it's also a great opportunity to get off on the right foot with first-acquisition operators who are just getting started in the business. We have to be able to offer them comprehensive services right from day one... and must never forget that our market share is something we "borrow" from our customers: We only get to keep it as long as they remain satisfied with our work!

COHC

ON THE HUNT FOR OIL IN CHINA

With an exclusive Eurocopter fleet which could reach a total of 40 aircraft by late 2015, COHC is China's number one helicopter company and a leading operator in the Asian oil & gas segment.

Article **BELÉN MORANT** Photos by **PATRICK PENNA/EUROCOPTER**

COHC⁽¹⁾ has been operating Eurocopter helicopters in China for more than 20 years and enjoys an 80 percent market share in the oil & gas market. Twenty-three of its helicopters (mainly from the Dauphin and Super Puma families) are used for offshore missions in southern and eastern China, while another six aircraft (two Dauphin AS365 Ns, an EC135 and three Ecureuil AS350 B3s) perform onshore operations through its subsidiary, CGAC⁽²⁾. In March 2011, following the presentation of the five-year plan by the China National Offshore Oil Corporation (CNOOC) to determine the country's oil production needs, COHC decided to purchase additional helicopters to meet offshore transport demands. Orders have been confirmed for four EC155 B1s (out of a total purchase of ten) and seven EC225s. Following delivery of

these EC155s scheduled for 2012 or early 2013, COHC will be the world's number one civil operator of this helicopter model. The EC225s are slated for delivery between late 2012 and 2015.

OFFSHORE MISSIONS

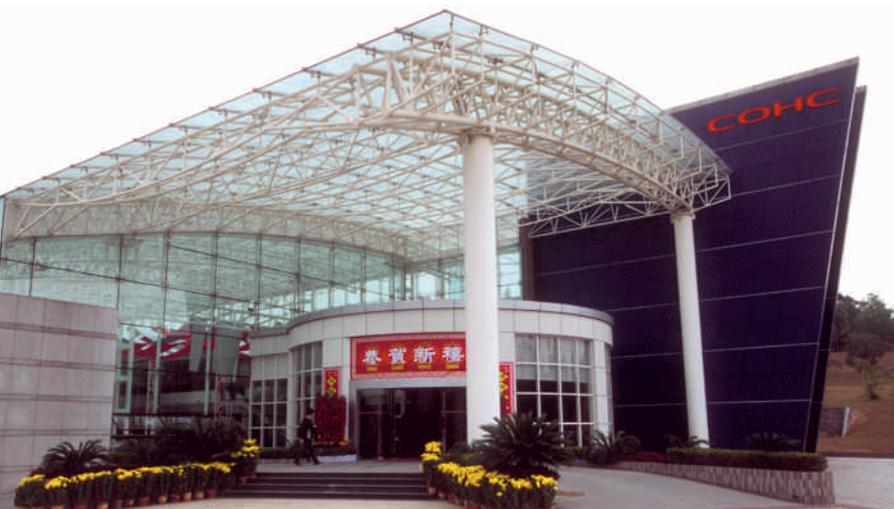
Most of COHC's operations are for major oil companies, particularly CNOOC, which is responsible for offshore operations in China. These tend to be typical offshore missions to transport passengers to oil platforms, although the company also carries out SAR missions for the Chinese Ministry of Communications, VIP transport and operations with the Shanghai Port Pilot Station.

COHC has its headquarters at the Nantou Heliport in Shenzhen and seven bases located all over China to cover the main oil production zones.

STRONG LOCAL INVOLVEMENT

As a leading company, COHC is strongly involved in the development of the helicopter industry in China. These efforts have led to the establishment of a joint venture with Eurocopter and Samwell Aviation to carry out maintenance of Eurocopter helicopters in Shenzhen. In 2005 the resulting company, COHC Gamec, was recognized as an approved Eurocopter maintenance center for the Dauphin family, the Super Puma, the Ecureuil and the EC135. COHC is currently involved in the start-up of a training center together with Eurocopter which will in future offer flight simulators for the EC155 and EC225 and is expected to begin operating this year.

(1) Citic Offshore Helicopter Co., Ltd
(2) Citic General Aviation Co., Ltd



The COHC headquarters at the Nantou Heliport in Shenzhen.



FOCUS ON

The Chinese Oil & Gas Market

China's economic expansion requires enormous amounts of energy and the country currently imports 50 percent of its oil needs pending the development of local drilling operations. These include sites on dry land, such as the Tarim Desert (northeast China) and the Daqing site in Heilongjiang province, and offshore sites located mainly in the East China Sea, the South China Sea and Bohai Bay.

China's oil operations are regulated by the five-year plans prepared by CNOOC in accordance with the nation's energy needs, offering major transparency for offshore operators. The current five-year plan established the need for additional deep-water oil drilling activities. This movement further offshore will contribute to the success of the EC225 in China, which has outclassed its competitors thanks to its ability to perfectly meet the needs of this type of mission.

Another interesting development is the increasing presence of Chinese drilling companies overseas, particularly in Africa, South America, the Persian Gulf and Asia. This has opened up new markets for COHC, which is looking into the possibility of international expansion and partnerships with other international operators.





Eurocopter sold 30 helicopters in China in 2011, representing a 40 percent share of the country's civil market. Several of the new orders were strategically important, involving key cooperation agreements.

A BIGGER FOOTPRINT IN CHINA

Article **RÉGIS NOYÉ**

Photo by **SHANGHAI POLICE**

The Shanghai police force, one of three Eurocopter customers in the law enforcement segment in China, operates four Eurocopter helicopters.

On November 5, 2011, Wuhan Helicopter placed on order for three new helicopters – two Ecureuil AS350 B3es and one EC120 B – to be used for utility missions. Deliveries are slated for the first quarter of next year. These will be the first Eurocopter aircraft to join the fleet of the company, which is based in Wuhan, Hubei Province.

As part of the deal, a cooperation agreement was signed that is the first of its kind. It sees Eurocopter providing training and maintenance services not only to the customer, but also to other helicopter operators in the region.

Just a few days later, on November 20, 2011, the newly registered operator Xilin Fengteng General Aviation Co. based in Deyang, Sichuan Province, purchased two helicopters of its own: an EC120 B and an EC135. With the order, Xilin Fengteng became Eurocopter's first customer in Southwest China, just a few months after the

Group opened its regional office in Chengdu. The new helicopters are scheduled for delivery in mid-2012, and will be used for multiple general aviation missions, including pilot training. The operator was won over by the helicopter's mission flexibility and low operating costs.

Eurocopter was already present in the region, having signed a cooperation agreement with the Civil Aviation Flight University of China (CAFUC) in Guanghan City – which is where this new contract was signed – to develop training programs for helicopter technicians. Skyway, a company based in Shanghai, already operates an Ecureuil to monitor high-voltage power lines, and will soon be one of the first Chinese operators of the Ecureuil AS350 B3e, the latest version in the family. The B3e offers more power than its predecessor, and comes equipped with FADEC and a data recording system to automatically monitor engine parameters. A total of 28 Ecureuils are already in service in China, along with eight EC120 Bs, including one serving a private hospital. China participated in the development of the EC120, and has been manufacturing fuselages at a plant in Harbin since 1997.

In December 2011, Eurocopter delivered the first of two EC155 B1s to the Dalian Police. The second machine is scheduled for delivery in early 2013. This is now the third police agency in China to purchase Eurocopter helicopters, following the Shanghai and Guangzhou police forces (4 and 3 helicopters respectively).

Eurocopter has now sold more than 180 helicopters in China, representing 40 percent of the country's civil market. The Group employs 60 people in 7 cities throughout the country to provide its customers with top-notch services.

FRENCH NAVY

Article
RÉGIS NOYÉPhoto by
MARINE NATIONALE

One of the reasons the French Navy selected the Dauphin AS365 N3+ to replace the Super Puma was so as to be able to perform medical evacuation missions from the island of Rapa, in French Polynesia. Why this particular island? Located more than 1,250 km from Tahiti, it is home to nearly 500 people, but has no hospital, no means of sea transport of its own, and no airplane runways. This makes the helicopter the only way to quickly travel to and from the island.

THE FIRST DAUPHIN AS365 N3+ SAR SHINES IN FRENCH POLYNESIA

The first Dauphin AS365 N3+, delivered last September⁽¹⁾, was put to the test on December 14, 2011, when an adolescent living on Rapa was severely burned. The Dauphin brought her to a hospital in Tahiti in less than 12 hours, proving itself perfectly capable of performing this type of mission.

IT IS WORTH NOTING THAT THE OPERATING CONDITIONS WERE HARDLY IDEAL...

The helicopter took to the sky early that morning from its base in Papeete to retrieve the patient. The flight plan was broken up into three legs in order to allow for refueling. The Dauphin was at its maximum takeoff weight, with an additional fuel tank in the hold, a stretcher and basic medical equipment. The flight crew included two pilots, a cargo opera-

tor and a physician specialized in emergency care.

"The entire flight was carried out over water," explained the flight commander, Lt. Jérôme Noudeau, who is also in charge of the 35F/Tahiti-Faa'a detachment. "Between each island, we flew in straight trajectories over 300 nautical miles long, with no other land accessible in between. Plus the weather conditions are far from ideal in the region, and the only rescue helicopter available in case of trouble was... ours." The total flight time to final destination was 6 hours and 10 minutes, passing in order by the islands of Rurutu, Raivavae, and then finally Rapa. Flights such as this clearly demonstrate why a next-generation navigation system and autopilot are so important. It should also be noted that the majority of the refueling was performed manually, pumped straight out of a barrel!

Once the Dauphin crew had reached Rapa, it was decided to carry the patient to the nearest airport, located 500 km away on the Island of Raivavae, so that she could be taken to Tahiti as quickly as possible via a specially chartered airplane. Following a two-hour helicopter flight, the patient was transferred to the airplane at 5 p.m., and then hospitalized in Tahiti that same night at 8 p.m. The helicopter returned to its base the next day, following the exact same flight path in reverse.

Lt. Noudeau summed up the exploit: "We flew over 3,000 km across the middle of the ocean with hardly any advanced notice and no true refueling stations. What could better illustrate the reliability, rapidity and flight comfort of the Dauphin AS365 N3?"

(1) The second Dauphin N3+ was delivered to the French Navy at the end of April.



OPERATING LEASE MODEL

Article
ERIN CALLENDER

Milestone Aviation Group, created in 2010 by a team well-versed in both the aviation and financial worlds, offers a visionary new solution to operators looking for more flexibility, less risk, faster delivery times and maximized cash flow.

REACHING A NEW MILESTONE

The solution lies in operating leasing – a process in which Milestone finances 100% of the capital cost of the necessary helicopter for operators, who then pay a monthly fee to operate it. “Milestone saw that there was a crying need for capital in the industry,” explained Robert Dranitzke, managing director at Milestone. “High-quality operators with the necessary know-how and expertise, yet lacking access to proper funding, were missing out on crucial contracts. We provide 100% financing so that operators around the world can get the aircraft they need.”

THE LEASING PROCESS

Milestone leases both new and pre-owned helicopters and provides sale-leaseback of existing aircraft. An operator chooses the helicopter right for its mission and then negotiates directly with an OEM⁽¹⁾ such as Eurocopter. The purchase contract is then signed over to Milestone, and a leasing contract is established based on the operator’s specific needs. Milestone covers all pre-

delivery payments keeping crucial capital available within the company. This kind of structure eliminates residual value and funding risk for operators and increases cash flow. At the end of the lease term the operator has the choice to re-lease the aircraft or walk-away, if their contract has not been renewed, and not pay another cent.

A TRUE PARTNER

Before entering into a lease agreement, Milestone wants to understand an operator’s capability to take on the new aircraft, its safety standards, maintenance standards and whether or not a longstanding partnership is possible – a key aspect of Milestone’s business model. “Milestone is not interested in one-off deals,” said Mr. Dranitzke. “We want to establish long-lasting relationships with operators who depend on their helicopters to earn a living. The aviation world is built on trust, relationships and the passion of those invested in it. The trust Eurocopter has placed in us to get

their helicopters to the right operators is highly important to us, and we want to work closely together to continue to develop this relationship.”

BETTING ON THE EC225

In February 2011, Milestone ordered 16 EC225s, which it plans to provide as early as 2013 notably to oil and gas operators. Milestone will be able to secure early delivery slots for the sought-after EC225 so that operators can bid on and win contracts and have the helicopters at their disposal right away.

In the 18 months since its creation, Milestone has already signed some 45 contracts worth a total of more than \$550 million (411 million euro).

(1) Original Equipment Manufacturer





© Anthony Pecchi / Eurocopter



© Milestone Aviation Group

INTERVIEW WITH

**RICHARD
SANTULLI**
CHAIRMAN OF
MILESTONE
AVIATION GROUP.

With more than 30 years of experience in the field, Richard Santulli has shaped the face of modern aviation with the founding of NetJets, the largest private aviation company in the world. Prior to NetJets, he created and ran the leasing business for Goldman Sachs and also founded RTS Helicopters, which became the world's largest helicopter lessor in the 1980s and early 1990s.

How did Milestone Aviation Group come to be?

Richard Santulli: After I left NetJets, I knew I wanted to get back to my roots in the helicopter industry. Looking at the market we saw that operators around the world did not have access to the necessary capital to grow their business. We believed that by starting a customer-focused leasing company that we could fill a very important gap and allow operators to grow their business and compete in the worldwide arena.

While at RTS Helicopters, you leased Eurocopter (called Aerospatiale at the time) helicopters. How has this relationship grown over the past 25 years?

R.S.: Aerospatiale was one of the most important companies that propelled me into the helicopter business and has a special place in my heart; Eurocopter is naturally an extension of this great relationship. In fact, the first person I called after announcing the creation of Milestone was Marc Paganini [president of American Eurocopter], and we discussed how we could evolve this partnership. We hope to do a lot more with Eurocopter in the future.

Why is creating long-standing partnerships so important to Milestone?

R.S.: Most people make the mistake in thinking that price is the most important aspect of a business, but from our experience we know that this is no way to be successful. Our goal at Milestone is to build real relationships based on working with our partners and treating them right. We want to develop strong partnerships with a large portfolio of operators of all sizes around the world. My 25 years of experience building trust with OEMs is very positive and valuable for what we can do in the future.



© A. Roine/Ecpad

LIBYA

Article
ALEXANDRE MARCHAND

The Tigers serving the French Armed Forces have completed a second successful operational engagement – this time in Libya, where the combat helicopter demonstrated its impressive operational capabilities once again.

THE TIGER ON THE FRONT LINE

Following the popular uprising against the regime of Colonel Gaddafi, the UN Security Council adopted resolution 1973 on March 17, 2011, authorizing military operations against the Libyan dictator. But two months into the air campaign conducted as part of the Unified Protector operations, Gaddafi's forces had adapted their strategy to western rules of engagement. They were proving very elusive and it was becoming more and more difficult to engage them in combat.

Helicopter interventions were proposed jointly by the French and the British, who thought rotorcraft would be an effective

means to break the deadlock and turn the tide in the coalition's favor. The scenario presented by the French Army Air Corps was hardly lacking in audacity: interventions on moonless nights, with tactical nap-of-the-earth flights, immediate extraction (IMEX) capabilities to ensure maximum safety for flight crews, deep penetration into enemy territory, with gun, rocket and missile attacks. France also requested a cockpit delegation for its crews, giving them complete authority to select their targets and decide how to engage them. Once the Army Air Corps received the green light, it began preparing for the en-

gagement of its Helicopter Strike Group (HSG), as designated by NATO. The HSG, which was based on an amphibious assault and command carrier sailing a few miles off the Libyan coast, included two Tigers, ten Gazelle Vivianes and two Pumas. In parallel, the British Army Air Corps was assembling its own HSG on its vessel, the HMS Ocean.

The first raid was carried out on June 3, 2011, a moonless night with level-5 darkness. While the British opted for mid-altitude missile strikes, the French helicopters hugged the terrain, blending completely into the surrounding darkness.

The Tigers found their first targets and used their guns to destroy the vehicles of the pro-Gaddafi forces. They were then joined by the Gazelles, and all the helicopters flew together in formation as they continued their combat reconnaissance mission. Each Tiger was responsible for protecting two or three Gazelles. The Tigers kept a low profile in the darkness, protecting the Gazelles by scanning the terrain with their Strix visors, ready to act if they detected even the slightest thermal footprint of an enemy fighter. During combat, the crews can slave the visor and gun to their Topowl helmet display – another crucial advantage of the Tiger weapon system. Another operational strength of this unique combat helicopter is its excellent carrying capacity: for each operation, the Tiger left its base with a full fuel tank and the maximum amount of munitions: approximately 450 shells, and forty rockets in its two pods.

A slight distance behind the combat helicopters, a Puma acting as an aerial command post coordinated the formations and ensured the radio link with the helicopter carrier off the coast. A second Puma, baptized the IMEX, carried a team of commandos ready to move in immediately to rescue a downed flight crew. The Gazelles were hindered by their low endurance, but by working closely in tandem with the Tigers, they were able to quickly locate

their targets without losing any time. The French Army Air Corps later reported that one of the Gazelles was able to fire its four HOT missiles at three pickup trucks and an armored troop transport vehicle in less than 90 seconds. A total of 425 HOT missiles were fired during the operations.

Over the course of forty full-scale raids and hundreds of hours logged in nap-of-the-earth flights in the combat zone, with enemy missiles, rockets and tracers filling the sky, the French crews could boast of having destroyed nearly 600 targets. Without a single loss.

FOCUS ON

With the EC725 Caracals of the French Air Force

From the very start of the French air operations in Libya, two EC725 Caracals from the French Air Force's 1/67 Pyrénées helicopter squadron were deployed on the French aircraft carrier Charles de Gaulle. Their primary mission was Combat SAR (CSAR) for the coalition airplanes and Army Air Corps helicopters in cases where the IMEX procedure proved impossible. A Puma from the squadron was also brought on board, primarily to provide logistics support, but also to replace one of the Caracals if necessary.

When the Charles de Gaulle returned to Toulon on August 12, 2011, the CSAR unit was transferred to the Mistral amphibious assault and command carrier (it would later be transferred to its sister ship the Tonnerre on September 10), from which the Army Air Corps would then launch its raids. The helicopters

demonstrated their multi-role capabilities by carrying out a wide variety of missions. To counter potential attacks by fast-moving sea craft, the EC725 Caracals were used for "force protection" missions. The Caracal was well suited for the task with its Flir, its self-protection systems, its high endurance and its carrying capacity, which made it possible to bring on board a sniper along with two side-mounted machine guns. When the Army Air Corps helicopters took off for their raids, the Pyrénées squadron would maintain a position near the coastline, on full alert, ready to rescue any army flight crews forced to abandon their aircraft over the water. On September 15, 2011, the two EC725 Caracals and the Puma were on duty when the French president travelled to Libya. No less than twelve helicopters (2 Caracals, 1 Puma Air, 7 Pumas and 2 Tigers from the Army Air Corps) participated in the escort that day!



© Frédéric Lert/Eurocopter



TIGER

Article
REGINA LANGE

The signature of a new framework contract for repair work marks an important new step for maintaining the combat helicopter in operational condition.

FRAMEWORK CONTRACT FOR REPAIRS

The Repair Frame Contract (RFC) signed on December 7, 2011 in Bonn, Germany is a tri-national convention between the Tiger division of the OCCAR⁽¹⁾ (ODT) and ECT⁽²⁾. "The framework contract covers our European customers and defines the Tiger components and equipment that can only be repaired by Eurocopter and its subcontractors," explained Manfred Röthinger, who is in charge of support for the Tiger program at Eurocopter.

The contract specifies three component repair classes. Class 1: components not to be repaired for economic reasons; Class 2: components covered by a repair solution that is pre-financed by the customer; and Class 3: components studied on a case-by-case basis, with a decision reached between the customer and manufacturer for possible repair solutions.

"In the run-up to the RFC, 242 repair solutions were identified for Class-2 Tiger components as part of the ML3⁽³⁾ agreement," said Mr. Röthinger. "Nineteen suppliers and the three

Eurocopter plants (Marignane, Donauwörth and La Courneuve) all participated in the work."

This is the third major framework contract for the Tiger program, following the TLS (Technical Logistic Support) contract signed at the end of 2009 and the SFC 2nd Amendment (Spare Frame Contract) signed in the summer of 2011.

The TLS defines how to respond to technical queries and requests for analysis coming from the German, French and Spanish customers. The contract guarantees the Tigers will be maintained in operational condition, and also covers internal technical support services. In the ensuing phase, it will be extended to include the Tiger HAD. The SFC agreement defines the spare part procurement for European customers, and was amended in July 2011 to better reflect the specific needs of the customer countries.

The signing of the new RFC marks another important step in the deployment of a dedicat-

ed in-service support structure for the Tiger weapon system, which will enable the helicopter to successfully perform its full range of missions.

- (1) Organization for Joint Armament Cooperation
- (2) Eurocopter Tiger GmbH
- (3) Repairs that can only be performed by the manufacturers (as opposed to ML1 and ML2 maintenance operations, which the customer may perform internally)



DELIVERY OF THE FIRST TIGER HAP IN STANDARD 1 CONFIGURATION

Article
PAIGE STANTON

Photo by
LORETTE FABRE

On March 7, Eurocopter delivered the first retrofitted Tiger HAP to the French Army at its National Support Center in Marignane. The machines are part of a five-year retrofit program to upgrade 15 HAPs delivered in intermediate configurations to the final HAP Standard 1 configuration.

In 1998, the French Army signed a production contract for a total of 80 Tigers. During the development phase, it became clear that aiming to deliver the Tigers in their final configuration would generate delays, given the program's complexity. That's why in 2003, Eurocopter, the contractual agency OCCAR and French officials all agreed that Eurocopter would develop the combat support helicopter using a "step-wise approach". The approach consisted of delivering the Tigers in two intermediate configurations, which has allowed the army to receive the aircraft in a timely manner in order to train on them and begin operations without delay. Eurocopter has committed to

upgrade all 15 Tigers to their final configuration by 2016.

French Army Colonel Beaudoin (EMAT), present at the delivery ceremony, expressed the army's satisfaction with the way the program has been handled as well as with the Tigers currently operated with success in Afghanistan. He also underscored the strategic role that the helicopters will increasingly play in their warfare operations. "The strong collaboration between the military and the industry has provided us with a world-class machine—a true symbol of Eurocopter genius," stated Colonel Beaudoin. "The Tiger program is only at its beginnings."



Serge Panabière, vice president of the Repair & Overhaul department, and French Army Colonel Beaudoin during the delivery ceremony on March 7.

NH90 TTH

Article
REGINA LANGE

FIRST HELICOPTERS EQUIPPED WITH MEDEVAC KITS

Despite a tight schedule, four of the twelve NH90 TTHs delivered to Germany have already been equipped as planned with intensive care kits for medical evacuation missions (MedEvac). They have now been made available to the operational units, who can prepare their interventions accordingly. This achievement was only made

possible thanks to the seamless and determined cooperation between Eurocopter and Germany's army, air force, military health services, and defense ministry. The remaining eight helicopters will be fitted with the kits on a monthly basis. The NH90 in FwdAirMedEvac configuration allows the armed forces to evacuate wounded

persons both day and night regardless of the terrain, weather conditions, or ground threats.

A typical MedEvac mission scenario usually involves two helicopters: one to evacuate wounded soldiers or civilians, and a second to provide armed protection for the mission from the air.



OMAN AND THE NH90: PUSHING THE ENVELOPE

Oman has been making intensive use of its NH90s, oftentimes toughing out extremely difficult operating conditions. The new experience it continues to gain with the military helicopter is playing a crucial role in the NH90's maturation process.

Article
ALEXANDRE MARCHAND

Photo by
ANTHONY PECCHI/EUROCOPTER



At the end of 2011, approximately 100 NH90s were delivered around the world, representing 20 percent of the in-service fleet. The NH90 has now fully entered its operational phase, having logged a total of 17,000 flight hours. As of the end of March 2012, the biggest users of the helicopter were Italy (4,200 hours), Finland (2,900 hours), Australia (2,400 hours) and Oman (1,300 hours).

"The hours logged by Oman are remarkable because they were performed by a fleet of just four NH90s in just over a year," noted Philippe Beurton, program manager for the country.

Oman received its first four NH90 TTHs over the summer of 2010 in the intermedi-

ate version (IOC+). The next two machines were delivered in late 2011, followed by an additional two in early 2012. These latest additions were also the first in the entire NH90 fleet to be delivered with Full Operational Capability. "There are still twelve more helicopters to be delivered to complete the order, which will all be arriving before the end of 2013," added Mr. Beurton. Once the entire fleet has arrived, it will be spread over three operational bases that cover the entire kingdom.

While the NH90s in Finland must brave the cold and the snow, the fleet in Oman is confronted by the exact opposite conditions: violent storms, blowing sand, and summer temperatures of over 50°C.

"The severe weather conditions haven't dimmed the enthusiasm of the Royal Air Force of Oman," said Mr. Beurton. "They lost no time putting the NH90s to use in a wide variety of missions: troop transports, rescue missions for villagers trapped by floods, and coast guard missions to deter pirates. Oman was also the first country to qualify the NH90s for extremely long-range missions. They can equip the helicopter both with external fuel tanks and with tanks in the cargo hold, enabling the machine to travel over 700 nautical miles in a little over five hours!"

FOCUS ON

Top-notch Technical Support

A Eurocopter technical support team is providing Oman with assistance for the first three years of NH90 operations.

The team's goal is two-fold: to guarantee an availability rate of over 75 percent for the fleet [at least three out of four NH90s available for service at all times], while training the Omani technicians to take over the maintenance work when the support contract ends.

The intensive use that Oman has been able to make of the machines provides patent proof of the contract's success.

A SECOND CHANCE

Spain is the world leader in organ donations, with 35.5 donors per million inhabitants. The country has set up an effective infrastructure in order to complete the transplant process in record times, and the helicopter plays a key role.

Last year, organ donations helped save more than 4,000 lives in Spain, and the number of donors increases each year, thanks both to a spirit of solidarity in the country and to the effectiveness of the structure set up by the authorities. The successful use of each donation – a source of great anxiety and tremendous hope – hinges on the response time of the emergency services. Lost time is in fact the greatest challenge in transplant operations: it takes just a few hours for a donor organ to lose its viability.

“Our medical team only needs four minutes to take off, and on average reaches the scene of an accident in 17 minutes,” explained Antonio Alvarez, who is responsible for the Helicopter Emergency Medical Services of Castile-La Mancha, which operates an EC135 and three EC145s. “When it is no longer possible to save an accident victim, we follow the ‘Donation following cardiac arrest’ protocol⁽¹⁾, which can save the lives of one or more patients on the waiting list. It is in these types of situations that the helicopter plays an essential role, as the delivery time for the organs cannot exceed 120 minutes. When you consider the fact that the hospitals can be separated by distances of up to 190 kilometers, the vital importance of helicopters becomes clear.” Contrary to popular belief, road accidents only represent 5 percent of organ donations, and this is in fact a decreasing trend. Today, the majority of donors are hospitalized, but the procedure is the same: the organs and medical teams must be transferred to the receiving hospital and the patient must be prepared. The only way to do this quickly is via helicopter.

Mr. Alvarez concurs: “We need helicopters that are available 24 hours a day, seven days a week. They must have the necessary medical equipment, the necessary power, and a cabin size that enables the medical teams to do their work. In my opinion, the EC145 is the ideal aircraft for this type of mission – and the EC145 T2 will undoubtedly be even better. Its Fenestron® shrouded tail rotor

will increase safety even further, and make it possible to land right on the road and closer to inhabited areas. You could almost say the EC145 T2 was designed just for us!”

(1) In 2005, a special program was set up to perform organ transplants following cardiac arrest. Several countries, including Spain, France, Germany and Great Britain, have already adopted the practice, with spectacular results.





ON THE LOOKOUT FOR COPPER

NEW ADVENTURES IN GREENLAND

In Greenland, the helicopter is an indispensable tool for mining exploration work. Over the summer of 2011, an AS350 B3 Ecureuil/AStar operated by HTM Helicopter Travel voyaged to the Carlsberg-Fjord camp, where an international team of geologists was trying to determine the economic viability of mining copper deposits discovered in the region.

Article **REGINA LANGE**

Photos by **WWW.HELITRAVEL.DE**



In Greenland, the melting of the polar ice cap – which covers 80 percent of the land – is a cause of great concern. But climate change is also having some positive effects on the country. Higher temperatures have meant longer growing seasons, and Greenland now imports less food. The melting ice has also uncovered many new riches beneath the ground, which could bring the country the financial and political independence it has so long desired.

For Bernd Kirchgassner and Werner Greipl, pilots at HTM Travel, this was their second “business trip” to the High North. In early June, they flew to the Carlsberg-Fjord camp along with two flight assistants, Gerhard Bstielier and Andreas Goldhofer. They formed two teams to fly missions through mid-September 2011 out of the camp, which was owned by a Chinese investor. “Working on behalf of the Icelandic company Blue West Helicopters, we supplied the camp with food and fuel, and also transported

the work teams and drilling equipment,” said Mr. Greipl.

NO MARGIN FOR ERRORS

“Although the cold weather (between -5 and -15°C) wasn’t really a problem, flying in Greenland was still quite a challenge,” continued Mr. Greipl. “The overall conditions are just really different, because when you’re flying in the wild, there is absolutely no margin for errors. Up there, if you forget to bring something along, you’ll just have to get by without it. You have to be as prepared as you can for everything!” His colleague Mr. Kirchgassner had this to add: “The demands placed on both the machine and the flight crews are huge. We often had to perform long flights, followed immediately by tricky operations to attach external loads. Fuel management was also a challenge, as we were often called on to haul heavy loads over long distances – something that’s impossible to do with a

full fuel tank.”

The Ecureuil/AStar is equipped with a satellite telephone which can also be used in flight. To make it easier to locate the helicopter in case of an emergency, 20 percent of its external skin is covered with a light-reflecting film. “This is mandatory,” said Mr. Greipl. “We also always kept a rifle in the cabin to defend ourselves against polar bears and musk oxen, along with land and sea emergency survival kits, and an emergency flotation system for if we were forced to ditch the helicopter.”

Their voyage to the Land of the Midnight Sun was certainly a unique experience for the entire team. The geologists found their veins of copper, but more drilling work is still needed to determine if mining the deposits is worth the while. “Our Ecureuil logged 400 flight hours without the slightest problem, flying in extreme conditions,” added Mr. Kirchgassner. “A truly remarkable performance.”

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