

JOURNAL

ROTOR

THE WORLD OF HELICOPTERS BY EUROCOPTER - NO. 90 - JUNE/JULY/AUGUST 2011

ECUREUIL, THE HELICOPTER ALL-STAR

HÉLI-UNION AND UTAIR
FIRST CONTRACTS SIGNED
FOR THE EC175

EC135 AND EC155
WHAT'S NEW?



Thinking without limits



Innovation at Eurocopter. The future of the helicopter begins here.

The helicopter is an extraordinary machine. At Eurocopter, four decades of innovations have pushed its limits even further. Operational innovations, like the glass cockpit graphics and all-weather capabilities, or the reduced pilot workloads that help increase safety. Technical innovations, like the HUMS, fly-by-wire and composite air frames. Environmental innovations, like the Spheriflex™ 5 blade main rotor and Fenestron™ tail rotor, setting the industry's standard by making ours the quietest range of helicopters in the world as well as the most fuel efficient. Are there still limits to what a helicopter can do? If there are, then at Eurocopter we're already thinking beyond them.





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EUROCOPTER MOVES INTO HIGH GEAR

Every two years, the Paris Air Show is the biggest draw in the aeronautics world,

attracting customers, operators and manufacturers from around the globe. It is also the perfect occasion for Eurocopter to get together with you to share the latest news and show you our most recent innovations. This year, the X³ is certainly at the top of the list. With this new high-speed hybrid helicopter, Eurocopter has really taken things up a notch: On May 12, the X³ reached a speed of 232 knots (430 km/h) in level flight, surpassing the target speed of 220 knots initially set for the program.

Flying for the first time in the public eye during the 49th edition of the Paris

Air Show, the X³ and the EC175 are concrete examples of Eurocopter's dynamic innovation policy, which has been in full force these past few years. The first contracts have already been signed for the EC175, and the production line has been up and running since the beginning of the year.

Additional innovations showcased in static display during the show include the EC145 T2 and the AS350 B3e – helicopters that offer remarkably better performance levels for your missions and demonstrate yet again the ability of Eurocopter aircraft to adapt to your needs. These are just a few examples of how, for Eurocopter, innovation means transforming scientific progress into a higher added value for you.

Lutz Bertling, *President and CEO of Eurocopter*

A handwritten signature in black ink, appearing to read 'Lutz Bertling'.

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Heli-Expo 2011 was all about innovation – Eurocopter not only unveiled the newest addition to its helicopter family but also showcased its aircraft evolutions. During the three-day show, Eurocopter brought in new customers and secured multiple signatures. *Rotor Journal* takes a closer look at the events from this year’s show.



© Patrick Gertner/Eurocopter



© Heli Invest

16 FEATURED ARTICLES
**ECUREUIL,
THE HELICOPTER ALL-STAR**

Whether it’s known as the Ecourel in Europe, the AStar in the United States or the Esquilo in Brazil, one thing is for sure – there is no mistaking the best-selling Eurocopter family that has proved its success for 40 years, with some 22 million total flight hours and almost 5,000 aircraft delivered worldwide. The Ecourel is a tried and true multi-purpose machine, and has seen and done it all – from

extraordinary mission opportunities to record breaking ascents, without forgetting the world record for the highest takeoff accomplished in May 2005. But the challenges keep coming. With the launch of the new AS350 B3e version introduced this year, this family continues to evolve in order to offer the highest performance and capabilities possible for whatever the future has in store.



© American Eurocopter

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First Contracts Signed for the EC175

In December 2010, Hélic-Union signed a firm order for four EC175s. Following close on its heels, the operator UTair placed an order for fifteen EC175s in March 2011. The future looks bright for the new helicopter, which now has its first official customers and purchase intentions for another one hundred units.

• **EC145 T2, Joining Forces with INAER**



© Paul Brown

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© Bundespolizei

SERVICES

Heli Invest: Serving Customers with Pride

The manufacturer's responsibility for a helicopter doesn't end when it's delivered to the customer. Once its products enter service, Eurocopter takes every necessary measure to ensure quality technical support and honor its warranty commitments. When

Eurocopter and its Polish partner Heli Invest delivered 23 EC135 P2is between September 2009 and December 2010 to Poland's state air ambulance operator LPR, Eurocopter entrusted Heli Invest with the task of providing warranty services for the customer.

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Eurocopter Gains Ground in Argentina

With the help of its subsidiary Eurocopter Cono Sur, Eurocopter has managed to steadily expand its market share in Argentina in recent years, thanks to the success of its light and medium-lift helicopters.

- The latest news from Eurocopter subsidiaries around the world

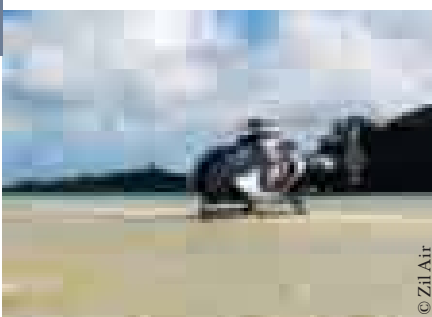


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34 OFF THE BEATEN TRACK

More Than Just a Flight

It's your ticket to paradise. This slogan, coined by the company Zil Air, could just as easily apply to the operator Corail Hélicoptères, ("corail" meaning "coral" in English), whose name alone evokes a dream destination. Both companies also share the same vocation: providing unforgettable experiences for their customers.



© Zil Air

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+ FOR MORE INFORMATION, CHECK OUT

JOURNAL **ROTOR** ONLINE



LEARN ALL about the Ecureuil at www.eurocopter.com/EcureuilCelebration (page 17).



Read the **INTERVIEW** with Jurek Wilczynski, CEO of Heli Invest (page 31).



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- The X³ in flight (page 7),
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WWW.EUROCOPTER.COM

WITH ITS INGENUOUS DESIGN AND UNPARALLELED TECHNOLOGY, THE X³ DEMONSTRATOR HAS ALREADY ENABLED EUROCOPTER TO START THINKING ABOUT PUTTING THE HIGH-SPEED HYBRID HELICOPTER ON THE MARKET.

Article **CHRISTIAN DA SILVA** Photo by **ANTHONY PECCHI**

X³ A PERFECT CUBE!

High Speeds

The X³ reached 232 kt (430 km/h) on May 12, 2011, demonstrating its high cruise speed capabilities. The flights also confirmed the hybrid helicopter's operational qualities, offering excellent capabilities for both civil and military missions.

Maneuverability and Handling

The propulsion system of the X³ offers simply amazing performances: a rate of climb and descent of 5,000 ft/mn at a stabilized speed and an attitude of 30°; high banking maneuvers such as "wing overs" and lateral attitudes of up to 80°; and translational acceleration/deceleration capabilities that are out of this world.

Safety

The power margins in hover flight and at low speeds are well above those of a conventional helicopter, which means better safety – in particular in case of a single-engine failure.

Profitability

Save time and reduce mission costs: Higher speeds mean higher productivity, which significantly outweigh the slightly higher acquisition, maintenance and operating costs.

Comfort

The new aircraft has low vibration levels, comparable to the most high-performance helicopters currently available without any active or passive anti-vibration systems having been installed.

Environment

The rotor and propeller speeds can be varied by wide degrees, making it possible to significantly reduce noise levels during low-altitude flyovers ("whisper" mode). With its high rates of climb and descent, the X³ also can perform optimized flight trajectories during landing and takeoff in order to reduce the sound footprint perceived on the ground.

With its sleek, aerodynamic lines, the X³ consumes less fuel per kilometer during high-speed cruise flights than the current generation of conventional helicopters.





WATCH A VIDEO OF THE X³
ON ROTOR ONLINE
WWW.EUROCOPTER.COM

Eurocopter Canada TRK HELICOPTERS

TRK Helicopters, operating out of British Columbia and Yukon Territory, accepted its third Ecureuil from Eurocopter Canada in early April.

This twin-engine AS355 NP will join the company's existing Eurocopter fleet of one AS350 BA and one AS350 B2 and will be used for a variety of missions, including tours and commercial operations. The AS355 NP offers excellent OEI⁽¹⁾ performance with its Category A rating and combines excellent handling, robustness and low maintenance and operational costs with state-of-the-art technologies, such as the Vehicle and Engine Multifunction Display (VEMD). "The AS355 NP's flexibility will give TRK the ability to perform demanding operations over water, rugged terrain and urban areas quickly, efficiently and safely," explained TRK President Randy Marks.

(1) One Engine Inoperative



© Vitek Zawada

Turkey FIRST NEW EC145s DELIVERED



© Global Tecknik

The official acceptance ceremony for the two EC145s ordered by DHMI⁽¹⁾, the state airport authority in Turkey, took place in March. There was much to celebrate, as these aircraft are the first new EC145s to arrive in the country. DHMI, a part of the Transportation Ministry, controls the Turkish airspace and manages the country's airports. DHMI's main helicopter missions include the surveillance of airport radar systems as well as business aviation transportation. The spacious cabin, low sound level and excellent performance of this multi-role, twin-engine helicopter provide the perfect solution for both DHMI and the Ministry. Eurocopter's assistance does not end with the delivery, as maintenance support for these aircraft is scheduled for the next two years.

(1) Devlet Hava Meydanları İşletmesi

March 17

EUROCOPTER DE MÉXICO REINFORCES ITS INDUSTRIAL PRESENCE

On March 17, ground was officially broken at the construction site for the subsidiary's new plant in the state of Querétaro. José Eduardo Calzada Rovirosa, the state's governor, was on hand for the occasion. Representing an initial investment of nearly 100 million dollars (including subcontractors), the new facilities will result in approximately one hundred qualified jobs being created and will help Eurocopter de México, which will be celebrating its 30th anniversary in 2012, strengthen its presence in the extremely dynamic Latin American market. ■

Switzerland 20,000 HOURS

In March, the Swiss operator Rega reached the 20,000 total flight hour mark with its six EC145s (from a total fleet of 17 aircraft). The operator reached this milestone in less than eight years, and the availability rate on the six machines has been nearly 100%. Rega is recognized throughout the world for its extensive experience in air rescue missions. The company also achieved another major accomplishment in October 2010: its 300,000th mission with its entire helicopter fleet. ■



© Rega

March 15

LOGISTICS TRAINING FOR CUSTOMERS



Since 2010, Eurocopter has been offering its customers free training to familiarize

them with the organization behind the Group's procurement activity and the accompanying logistics services. The sessions last one or two days and cover aspects such as procurement, logistics chain management, order processing, storage and shipping. They also examine customers' specific needs, and a special training module is available to learn how to use the Keycopter portal.

On March 15, this training was held on the customer's premises for the first time. The six members of the helicopter squadron of the State of Baden-Württemberg police force who attended the classes at Stuttgart airport were all extremely pleased with their course. ■

© Eurocopter



HELI-EXPO 2011

MARCH 5-8 ORLANDO, FLORIDA

Article **ERIN CALLENDER**

Heli-Expo 2011 was all about innovation – Eurocopter not only unveiled the newest addition to its helicopter family but also showcased its aircraft evolutions. During the three-day show, Eurocopter brought in new customers and secured multiple signatures. *Rotor Journal* takes a closer look at the events from this year's show.



© Patrick Gertner/Eurocopter

• EC145 T2

Making its debut at this year's air show, the EC145 T2 caught the attention of many during its unveiling ceremony on the opening day. **Eurocopter signed 17 commitments with its four customers, including 10 of these new-generation aircraft for Spain's INAER** (see article, page 14). The remaining seven aircraft are for three US-based companies: Metro Aviation for five helicopters and both Lewis Energy Group and Leading Edge for one EC145 T2 each.

• Bond Air Services

UK-based Bond Air Services ordered eight EC135 T2e aircraft, the newest enhanced version of this twin-engine helicopter offering an increased maximum takeoff weight and a gain in payload.



The Eurocopter stand, with an Ecureuil AS350 B3e, an EC135 T2e/P2e, an EC145 T2, an EC130 EMS and a scale model of the EC175 in oil and gas configuration on display during the event.

© Paul Brou

• V. Kelner Helicopters

Eurocopter Canada also confirmed an order by V. Kelner Helicopters for an Ecureuil AS350 B3, their second helicopter of this kind. The new addition to their Eurocopter fleet will be used primarily for mineral exploration, forestry missions, precision long-line work and MEDEVAC operations.



© Paul Brou



© Paul Brou

• UTair

Benefiting from one of Eurocopter's latest aircraft modernizations, UTair decided to convert its standing order for 20 AS350 B3 helicopters to the new B3e version.

UTair signed a firm contract for a total of 15 EC175s (see article, page 13).



© Paul Brou

• Air Medical Resource Group

American Eurocopter had its share of success with this AS350 B3e, as they announced the sale of seven AS350 B3es to Air Medical Resource Group, also a new customer for the subsidiary. The contract consists of three firm orders, with an option for four additional aircraft next year.



© Paul Brou

• Ontario Police Department

The Ontario, California Police Department, an AS350 B2 customer since 2002, signed on for its third aircraft of this kind with American Eurocopter.

The aircraft will be delivered in late spring and will be primarily used for aerial patrol and special operations surveillance.

• Aero France Hélicoptère

Eurocopter welcomed a new customer, Aero France Hélicoptère, a subsidiary of Airex Aviation, and confirmed the sale of two AS350 B3es for their transportation and aerial work operations.

• Capitale Hélicpro

Eurocopter Canada celebrated the sale of six aircraft to Capitale Hélicpro, bringing their total Eurocopter fleet to 11. Deliveries of all six aircraft – three Ecureuil AS350 B2s, two EC130s and one Ecureuil AS350 B3 – are expected for this year. Capitale Hélicpro uses its aircraft for various missions, including training, aerial work, passenger transportation and business aviation.



© Paul Brou



© Paul Brou

• Pegaso

A loyal Eurocopter customer for some 30 years, **Transportes Aéreos Pegaso signed a contract for five EC145s plus an option for five additional machines**. These aircraft, two of which were delivered mid-April, joined Pegaso's current fleet of six EC145s and will be used for utility missions for the Comisión Federal de Electricidad, the Mexican government's electricity company. The remaining three aircraft are scheduled for delivery by the end of this year, and the five others would be delivered in 2012.

In Other News...

• Elifriulia: 30 years and 50,000 flight hours

A ceremony was held on March 7 to commemorate the 30 years of cooperation between Eurocopter and Elifriulia, an Italian helicopter services provider specializing in emergency medical services, aerial work, fire fighting and passenger transportation. The company has clocked up more than 50,000 flight hours with its fleet of three EC135 T2s, one Ecureuil AS355 N and eight Ecureuil AS350 B3s; Elifriulia accepted delivery of its 9th aircraft of this kind in the days following the air show.



© Paul Brou

• Ecureuil AS350 FFS Level B Certification

The Ecureuil AS350 Full Flight Simulator (FFS), located at American Eurocopter's Grand Prairie site, received Level B and night vision goggle (NVG) certification by the Federal Aviation Administration (FAA) on March 6. That same day, American Eurocopter announced that the Texas Department of Public Safety signed a simulator contract to use the Ecureuil AS350 FFS for pilot training. This Level B simulator can provide a multitude of training possibilities with its wide array of mission scenarios. This is also the only Ecureuil AS350 Level B Full Flight Mission Simulator with NVG training certification in the world.



© American Eurocopter



“UTair will use the EC175s for further market expansion and in our development of the oil and gas segment,” Andrey Martirosov said.

© Paul Brou

HÉLI-UNION AND UTAIR

Article
BELÉN MORANT

In December 2010, Héli-Union signed a firm order for four EC175s. Following close on its heels, the operator UTair placed an order for fifteen EC175s in March 2011.

EC175: FIRST CONTRACTS SIGNED

The future looks bright for the new helicopter, which now has its first official customers and purchase intentions for another one hundred units. It's hardly surprising that the EC175 has begun turning heads in the oil and gas sector. The reasons are many: excellent flight quality and safety, top-notch comfort, and a high-performance man-machine interface.

Héli-Union, the first operator to officially confirm its interest in the EC175, has been a Eurocopter customer for fifty years now. Its staff actively participated in the work sessions held with a selection of oil and gas customers during the design phase of the EC175. The company has been rapidly expanding and already operates thirty five aircraft, including 13 AS365 N3 Dauphins and two Super Pumas⁽¹⁾. Héli-Union will be using the EC175 to transport passengers to oil rigs and, when necessary, for rescue missions. In related news, Eurocopter is currently working on an oil and gas variant, known as the “Quick Role Change”, that can quickly be transformed to the SAR configuration. It will be available on the market in 2014. “We've been part of this

new helicopter's development from the outset,” highlighted Loïc Binard, deputy director of Héli-Union, “and we are firmly convinced that the EC175 will be the perfect addition to the Eurocopter range for oil and gas missions.” At the Paris Air Show, Héli-Union will celebrate its fiftieth anniversary and hold a signing ceremony for the four EC175s.

In March 2011, it was UTair, Russia's biggest helicopter operator, that signed a firm order for 15 EC175s at the Heli-Expo Air Show. UTair will also be using the EC175 to transport passengers to oil rigs, as the company is looking to expand its activities in this rapidly-growing market segment. “Eurocopter offers high-quality products and excellent technical support,” said Andrey Martirosov, the general director of UTair Aviation. “This one-two punch has given us the confidence we need to move ahead with our strategic development project.” This latest signature will strengthen the excellent partnership between UTair, Eurocopter and Eurocopter Vostok. The first deliveries are slated for 2013. Thanks to Eurocopter's worldwide network, UTair will

benefit from optimal support for its EC175s in all the regions where it operates.

(1) Soon followed by two EC225s to be delivered by the end of the year.



© Eurocopter

EC145 T2

Article
BELÉN MORANT

On March 7 at this year's Heli-Expo air show, INAER officially announced its intention to purchase 10 EC145 T2s as part of its strategy to renew and reinforce its current fleet.

JOINING FORCES WITH INAER



| José Caparroz, industrial director for INAER.



| INAER's helicopters in the EMS version are equipped similar to an intensive care unit.

The INAER Group is Europe's largest onshore helicopter operator and a worldwide leader in emergency helicopter services. It has also become the latest operator to opt for the next-generation EC145 T2 helicopter, the latest evolution in the BK117/EC145 family. Its large cabin, increased safety, reduced sound levels and extremely competitive operating costs impressed everyone in the sector

as soon as it was unveiled. José Caparroz, the industrial managing director at INAER, talked about the reasons behind his group's decision to sign the letter of intent for 10 new T2s: "It offers better performance levels than the other helicopters in its class in 'hot and high' conditions. Plus its avionics system and roomy cabin make it the ideal choice for EMS⁽¹⁾ missions in IFR⁽²⁾ conditions."

INAER'S GROWING FLEET

The INAER Group has been working with Eurocopter for more than four decades. It has been expanding its activities over the past few years, and currently operates a fleet of 300 aircraft and employs over 1,900 people. Based in Alicante, Spain, INAER is a recognized specialist in emergency medical missions, civil defense, sea and moun-



© Charles Abarr/Eurocopter



INAER currently operates 11 EC145s for air medical missions.

tain search and rescue (SAR), firefighting and sea patrols.

THE EC145 T2, THE IDEAL MACHINE FOR EMS MISSIONS

For EMS missions (air ambulance flights for wounded, inter-hospital ferry flights), the INAER Group currently operates 18 EC135s and 11 EC145s. Each helicopter carries a physician and nurse,

together with a full intensive care unit that allows the medical team to care for patients and accident victims. Last year alone, INAER performed more than 26,000 flight hours for EMS missions (14,676 hours for primary missions and 11,301 hours for secondary missions), with nearly 20% of the missions performed at night.

“We will be using the EC145 T2s mainly for emergency medical missions,” said Mr. Caparroz, “but we haven’t ruled out the possibility of using them for offshore missions as well. INAER is present in Spain, Italy, France, the United Kingdom, Portugal, Chile and Australia. Considering our current setup and the growing need for emergency services, we will be operating the EC145 T2s primarily in Europe.”

(1) Emergency Medical Service
(2) Instrument Flight Rules

FOCUS ON

Eurocopter Unveils the EC145T2

On March 18, just two weeks after the EC145 T2 was first unveiled at the Heli-Expo Air Show, a select group of customers from around the world were invited to a special event at the Donauwörth plant to see the new helicopter, together with the employees of Eurocopter in Germany. In his welcoming address, Eurocopter CEO Lutz Bertling stressed that this new version was only made possible thanks to the outstanding cooperation the company received from its customers. With their help, the EC145 T2 is now poised to set new standards in the industry thanks to its exceptional performance levels, low sound footprint and excellent safety features. The guests were treated to a flight demonstration, during which the new helicopter performed a series of figures. A full-scale mockup was also on display that provided a sneak preview of the helicopter’s avionics system.

A purple helicopter is shown in flight against a blue sky with scattered clouds. Below the helicopter, a volcanic landscape is visible, featuring a prominent lava flow in the foreground and a volcano in the background. The helicopter is positioned in the upper right quadrant of the frame, flying towards the left. The lava flow is bright orange and yellow, contrasting with the dark volcanic rock. The volcano in the background has a plume of smoke or ash rising from its peak.

ECUREUIL, THE HELICOPTER ALL-STAR

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**CAN ANYTHING STOP
THE ECUREUIL?**

P. 20
**NO MISSION
IMPOSSIBLE**



LEARN ALL ABOUT THE ECUREUIL AT
WWW.EUROCOPTER.COM/ECUREUILCELEBRATION

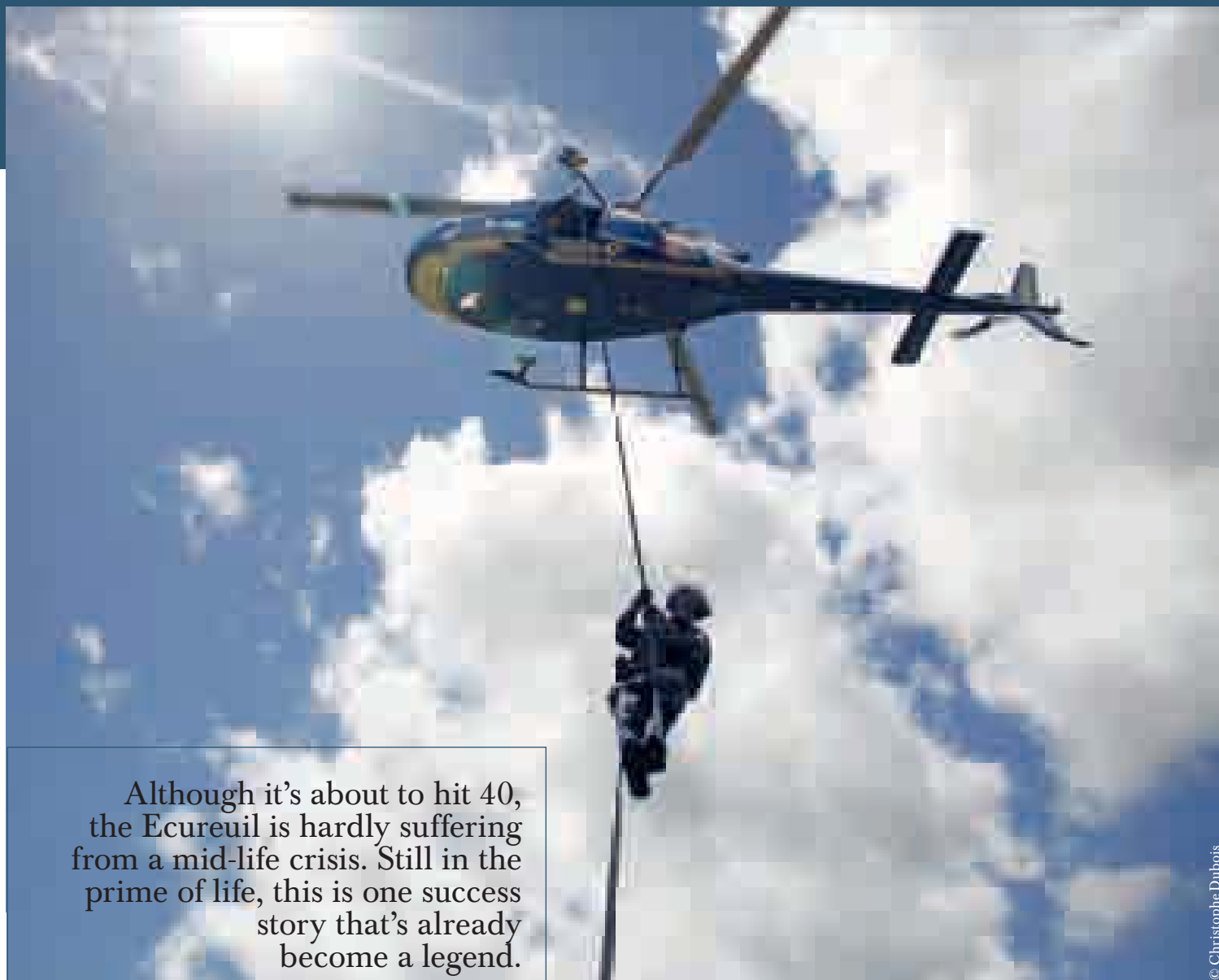


Article
ERIN CALLENDER

Photo by
AMERICAN EUROCOPTER

Whether it's known as the Ecureuil in Europe, the AStar in the United States or the Esquilo in Brazil, one thing is for sure – there is no mistaking the best-selling Eurocopter family that has proved its success for 40 years, with some 22 million total flight hours and almost 5,000 aircraft delivered worldwide.

The first Ecureuil took to the skies in 1974, designed to be a simple, practical and competitive aircraft while leaving plenty of room for future development – something that has kept these helicopters in flight for all these years. The Ecureuil family – consisting today of the AS350 B2/B3e, the EC130, the AS355 NP and the military version AS550 C3e Fennec – offers exceptional versatility and performance while remaining easy to operate, maintain and personalize, resulting in the perfect solution for almost any mission imaginable. The Ecureuil is a tried and true multi-purpose machine, and has seen and done it all – from extraordinary mission opportunities to record breaking ascents, without forgetting the world record for the highest takeoff accomplished in May 2005. But the challenges keep coming. With the launch of the new AS350 B3e version introduced this year, this family continues to evolve in order to offer the highest performance and capabilities possible for whatever the future has in store.



© Christophe Dubois

Although it's about to hit 40, the Ecureuil is hardly suffering from a mid-life crisis. Still in the prime of life, this is one success story that's already become a legend.

CAN ANYTHING STOP THE ECUREUIL?

Article **ALEXANDRE MARCHAND**

Since the AS350 Ecureuil's maiden flight on June 27, 1974, more than 5,000 helicopters from the Ecureuil family have been built. And the program hardly seems to be losing steam, as 143 more units were ordered in 2010. In the history of aeronautics, not many aircraft can boast of such popularity after nearly 40 years of production. What's the Ecureuil's secret? Bernard Certain, the flight test engineer who has been part of the program since the very beginning, has the answer: "It offers excellent performance levels and a remarkable capacity for adaptation."

THE SECRET TO SUCCESS

To better understand the circumstances surrounding the birth of this phenomenal machine, let's go back to the early 1970s, a good twenty years before the creation of Eurocopter, when Aerospatiale was looking to develop a new low-cost helicopter. The company was envisaging a more modern version of the Alouette II, which would have a lower price tag and specifically target the civil market. Before the first prototype had even been assem-

AS SEEN BY

BERNARD CERTAIN, THE FLIGHT TEST ENGINEER.

A Star Is Born

Some called it the “Business Alouette” when the program was first launched, while others threw around the term “the light low-cost helicopter,” but neither term went over very well with the marketing folks. “Management was looking for a French-English name,” recalls Bernard Certain. It’s hard to figure out

then why the name “Ecureuil” was finally selected and officially announced to the press on March 9, 1976, when the second prototype was presented. The Americans were a bit taken aback: In the US, the “squirrel” is seen more as a pesky rodent than a helicopter. Plus the French name is nearly impossible to pronounce. Luckily, it was right at this time that the movie “A Star is born”, with Barbra Streisand, became a big hit. And soon the Ecureuil had become the AStar for the US market.

bled, the future AS350 Ecureuil already benefited from a major advantage that would go a long way towards making it a success: An interdisciplinary team made up of Production and Design Office personnel was tasked with its design. “That was a fantastic team,” remembered Mr. Certain. “The production guys were focused on the economic aspects right from the outset. They were always looking for ways to find the perfect compromise between cost and efficiency.” Without ever cutting corners in terms of safety, the cost targets would nonetheless provide the impetus for a series of technological innovations, resulting in a reduced number of parts, simplified assembly procedures and the use of revolutionary new materials. “We kept all the development work under wraps right up until the first flight,” said Mr. Certain, who was on board that day with test pilot Daniel Bauchart. “I can’t tell you how thrilled we all were when that first flight was a success.” But it wasn’t always a joy ride, as it took a while to iron out a few final problems with the horizontal stabilizer and the tail rotor. But the Starflex rotor, another one of the major innovations introduced on the Ecureuil, lived up to everyone’s expectations. Mr. Certain still gets excited when he talks about that first flight, and the questions he kept asking himself about the reliability of the Starflex: “I kept telling myself that the design office must have done a good job.”

CONQUERING NEW CUSTOMERS

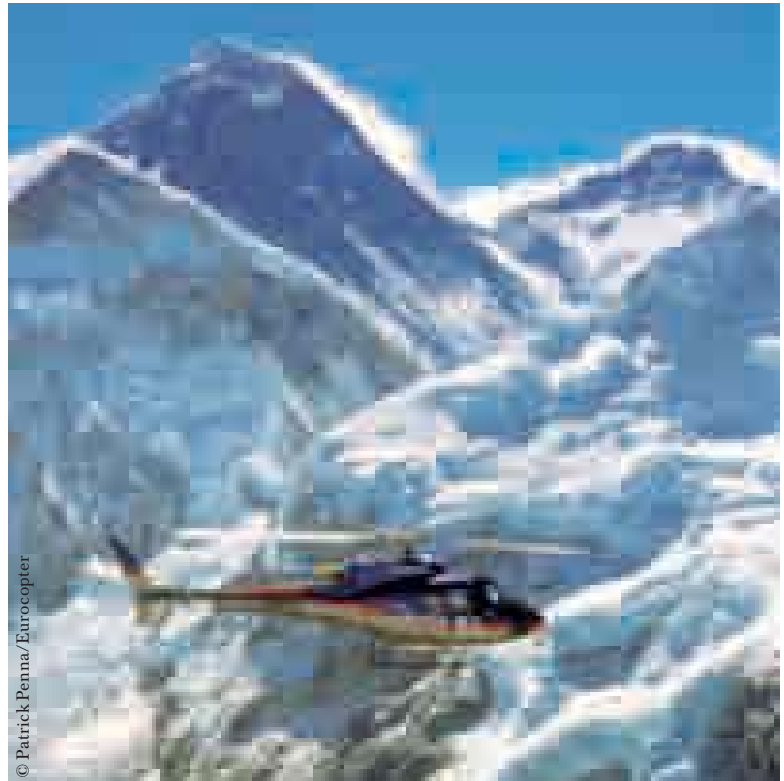
It certainly helps to be born into a good family. After quickly overcoming a few early hiccups, the Ecureuil soon conquered legions of new customers and managed to achieve the unthinkable when it replaced the Alouette III as the pilots’ helicopter of choice. The Ecureuil was also lucky enough to be the founding father of an extremely successful family of products. The development work on the twin-engine version, for example, resulted in newly designed blades that would then go on to provide better performances for the single-engine models as well. The AS350 B1, B2 and then the B3 Ecureuils all have the same dimensions, the same lines and the same MGB⁽¹⁾. But over time, as performance levels continued to reach new heights, operators realized that the Ecureuil could

wear many hats: limousine, police car, ambulance, tank, moving truck...the list goes on and on.

In 1987, a Fenestron shrouded tail rotor was added to create a new Ecureuil prototype, the AS350 Z. The Z version was also equipped with a larger tail boom to provide higher speeds, but the transplant was rejected: it would take a few years before this initial development work would result in the arrival of the B4, better known as the EC130. This beautiful machine, which offers an extremely sleek profile, an exceptional transmission system and unparalleled discretion, quickly won over tourism operators. What could be next in line?

“The Ecureuil certainly will be a hard act to follow,” admits Mr. Certain, “but that doesn’t mean we can’t continue to improve it.” He’s already got plenty of suggestions on that score: lower operating costs and improved safety are but two avenues of exploration. Progress has already been made in these areas, as Eurocopter has introduced the B3e version on the market. Other developments on the Ecureuil will certainly follow in the years to come, as this 40-something has no plans for an early retirement.

(1) Main Gear Box



© Patrick Penna/Eurocopter

FOCUS ON

A Helicopter at the Summit

The Ecureuil has made a name for itself not only because of its excellent sales figures. It has also set a series of spectacular altitude and rate-of-climb records, culminating in one of the most extraordinary exploits in the history of aeronautics. On May 14, 2005, Didier Delsalle touched down on the summit of Mount Everest behind the controls of a series-produced AS350 B3 Ecureuil—the only helicopter to have ever accomplished this amazing feat.

MARKET, MISSIONS

Article **ERIN CALLENDER**

With 4,262⁽¹⁾ aircraft currently in service for 1,610 customers in more than 100 countries, the Ecureuil remains one of Eurocopter's longest-selling family of aircraft.

NO MISSION IMPOSSIBLE



© Anthony Pecchi

© Olivier Balmain

The global fleet has clocked more than 22 million flight hours to date, and in 2010 almost half of all total Eurocopter flight hours were performed in an Ecureuil. The current market for these multi-role aircraft remains strong, as the Ecureuil offers an ideal solution for Eurocopter's customers. With its excellent performance and versatile mission capabilities, it's not surprising that more than half of all Eurocopter customers have at least one Ecureuil in their fleet. In fact, 44 percent of all customers operate a fleet made up entirely of Ecureuil aircraft.

A GLOBAL FLEET

The Ecureuil has made its mark all around the globe, with the majority of its fleet located in North America, followed closely by Europe, then South America and finally Oceania⁽²⁾ and Asia. The single-en-

gine AS350 is the most widely operated Ecureuil helicopter, and with 3,152 aircraft in service, it accounts for 74 percent of the overall in-service Ecureuil fleet. The highest concentration of these aircraft is also located in North America. The dual-engine AS355, however, is primarily operated in Europe, mainly due to the fact that the European Aviation Safety Agency (EASA) operational regulations impose stricter dual-engine requirements for commercial air transportation missions. There are a total of 659 dual-engine Ecureuils in service. The single-engine EC130 fleet consists of 360 in-service aircraft and is located primarily in North America, Europe and then Oceania.

Maintenance, operation and even customization with the multitude of optional equipment available remain relatively simple and cost-effective for the Ecureuil, which is why Eurocopter's world-



“The Ecureuil family has seen more than 10 version evolutions to provide the best value for money for our customers – this trend continues with the AS350 B3e that began production in April. We also intend to celebrate this fantastic helicopter range with our customers during the next Paris Le Bourget Air Show.”

Janick Blanc, vice president Light Helicopters program.

wide network of subsidiaries and distributors are able provide these services for this range, making operations easier and in closer proximity for Eurocopter customers wherever they are located. It is also interesting to point out that customers can benefit from having a mixed Ecureuil fleet, reducing complexity since approximately 70 percent of the parts are the same for both the AS350 and AS355. Activities for the Ecureuil family continue to expand around the world, as their use is expected to increase in regions such as India, the CIS⁽³⁾ and China (see inset).

THE GO-TO AIRCRAFT

From 1999 to 2010, Eurocopter secured on average 65 percent of all worldwide intermediate single-engine deliveries in the civil and parapublic market- underscoring the international success of the in-demand Ecureuil family.

The versatility of the Ecureuil is the reason for its popularity, as it can perform almost any mission imaginable with a high level of performance and safety. These machines are most commonly called on for commercial operations (aerial work and passenger transportation). Its single-engine version remains in highest demand and has maintained an average market share of 80 percent over the competition for the past 10 years in this specific segment.

The Ecureuil is also highly popular in law enforcement, Emergency Medical Services (EMS), business and private aviation, and light armed reconnaissance and aerial scout missions in the military sector. The AS350 B3 is ideal for the most extreme conditions, excelling in high and hot conditions. The AS355 is not only the most affordable dual-engine aircraft on the market, but it is also proof of the versatility of the Ecureuil family, as it is particularly suited for specific aerial work missions such as power line or windmill inspections, news gathering, air taxi transportation and law enforcement, where the additional engine makes all the difference. The polyvalence of the Ecureuil has even been called on for such atypical missions as planting trees, rescuing large animals or even parachute dropping and bungee jumping.

ORDERS AND DELIVERIES

Orders for the Ecureuil remained in line with recent trends for overall

Eurocopter bookings – stable growth with a boom in activity from 2006-2008, followed by a decrease in orders in 2009 due to the global economic crisis. But as the demand for this family of aircraft remains high, orders are picking up again, as last year’s results confirm: In 2010, the Ecureuil family made up 41 percent of Eurocopter’s total bookings, with 143 machines ordered. Of these orders, 110 were for the AS350, an increase of 50 percent from 2009 figures. In terms of deliveries, 194 of the 527 total aircraft delivered in 2010 belonged to the Ecureuil family, compared to 240 in 2009. So far, some 70 Ecureuils have been delivered in 2011.

(1) All figures are as of 12/31/2010.

(2) Oceania is comprised of Australia, New Zealand and the Pacific Islands.

(3) Commonwealth of Independent States

FOCUS ON

The Utility Reference in China

Since the first delivery of the AS350 B2 in 1991, the Ecureuil family has been widely solicited in China for various missions including aerial work, forest fire fighting, power line surveillance and operations in China’s mountainous regions with altitudes of more than 2,500m. Thanks to its high performance in difficult environments, the AS350 B3, which was certified in China in 2009, is becoming the reference aircraft in the country. The first machine of this kind was also delivered that same year. Six additional AS350 B3s have since been delivered, bringing China’s current Ecureuil fleet to 22. This number is on the track for rapid growth, with the recent Chinese certification of both the EC130 and AS355 NP giving the green light for the entire Ecureuil family in the country. The first EC130 was ordered in 2010 for a delivery in 2011.



© South Electricity Power Grid

EC135 AND EC155

Article **CHRISTIAN DA SILVA**

Rotor Journal takes a look at some of the new features available for the EC135 and EC155.

WHAT'S NEW?



Eurocopter is looking to extend the SBAS capabilities to its full range of IFR-compatible products before the end of 2013.

Eurocopter Conducts Test Flights on the EC155 for WAAS and EGNOS Certification

In December 2010, the EC135 and EC145 obtained the Supplemental Type Certificate (STC) from the FAA for the WAAS⁽¹⁾, which enables them to perform the IFR approach procedures currently enforced in the U.S. while in LPV⁽²⁾ mode.

This new certification marks the first step in Eurocopter's efforts to offer LPV approach capabilities for its range of IFR products wherever the SBAS⁽³⁾ system is currently available (WAAS in the U.S., MSAS in Japan). The European equivalent of WAAS, known as EGNOS, has been in

service since March 2, 2011.

In order to incorporate LPV capabilities on other products in the range, Eurocopter conducted a series of flight tests on an EC155 on April 13, 2011 at the Pau-Pyrénées Airport. The goal of the test flights, which lasted a total of 4 hours and 40 minutes and included 13 IFR approaches, was to certify the helicopter's ability to perform an LPV approach with the EGNOS system. During the test campaign, the excellent operational capabilities of the EC155's 4-axis Automatic Flight Control System (AFCS) were also confirmed. With the AFCS, approach procedures are much easier to manage as they can be performed with the instruments completely coupled to the system. The flight tests also laid the groundwork for the LPV capabili-

ties of the 4-axis digital autopilot that will be installed on the EC145 T2.

The LPV procedures offer ILS-type lateral and vertical guidance, which means that the minimum approach altitude can be lower than with GPS alone. In addition to airport runways, the LPV procedures can also be used to rally a Point-in-Space (PinS) to reach isolated helipads and hospitals in IFR mode.

Because the WAAS and EGNOS systems are fully compatible, Eurocopter is looking to extend the SBAS capabilities beyond the EC135, EC145 and EC155 to its full range of IFR-compatible products before the end of 2013.

(1) Wide Area Augmentation System

(2) Localizer Performance with Vertical guidance

(3) Satellite Based Augmentation System

A key feature of the GNS530 WT is its large display screen that makes it much easier for the pilot to assess the situation.



© ECL/Vitek Zawada

Certification of the Latest Standard H-TAWS⁽¹⁾ System

The H-TAWS system by Garmin (the GNS530 WT) has been available since March 16, 2011 on the EC135⁽²⁾. Adapted from the TAWS systems, H-TAWS is specifically designed for helicopter flight profiles (low speeds and low altitude). Eurocopter has developed this option in order to comply with the most stringent FAA⁽³⁾ regulations, which call for H-TAWS systems to be installed on-board helicopters in order to improve safety for EMS⁽⁴⁾ flights.

A key feature of the GNS530 WT is its large display screen that makes it much

easier for the pilot to assess the situation. The equipment, which is installed in the central console, is compatible with night vision goggles and can be NVIS⁽⁵⁾ certified.

- (1) Helicopter Terrain Awareness and Warning System for low-altitude flight protection
- (2) Following the EGPWS MK XXI and the Russian Transas TTA 12H
- (3) Federal Aviation Administration
- (4) Emergency Medical Services
- (5) Night Vision Imaging System

The New HUMS⁽¹⁾

The EC135 now offers a comprehensive solution for the HUMS system that continuously monitors the helicopter's operating status. The new system is based on the "Usage Monitoring" function included in the M'ARMS system, the solution used on the medium and heavy-lift twin-engines in the Eurocopter range (the AS365 N3 Dauphin, EC155 and EC225/EC725). On the EC135, vibration levels are monitored by the VXP⁽²⁾ system, which received a Supplemental Type Certificate (STC) from the FAA⁽³⁾ for Pratt & Whitney and Turbomeca engines and is currently being reviewed for an EASA⁽⁴⁾ certificate extension. The VXP system has already been installed

on a number of helicopters in the United States, where it has been extensively tested in the field.

This important function monitors dynamic assemblies by analyzing vibration levels. By anticipating transmission failures, it improves helicopter availability rates and flight safety.

- (1) Health and Usage Monitoring System
- (2) Vibration eXPert
- (3) Federal Aviation Administration
- (4) European Aviation Safety Agency



© Anthony Pecchi



WATCH A VIDEO
OF THE NH90 MISSION
PERFORMER
ON ROTOR ONLINE
WWW.EUROCOPTER.COM



© Anthony Pecchi

NH90

Article REGINA LANGE

MEDEVAC EQUIPMENT

With the MedEvac⁽¹⁾ equipment that Eurocopter has developed for the NH90, the wounded can be quickly evacuated and administered intensive care right onboard the helicopter. No matter what type of crisis, the NH90 can effectively carry out its mission. It takes just thirty minutes to install the kit, which includes two intensive care stations. Its installation has no effect on the helicopter's ballistic protection, proving once again

the NH90's full multi-mission capability. The armed forces now have a multifunctional transport helicopter to evacuate the wounded from theaters in the best possible conditions. The NH90 can also perform combat support missions if the situation calls for it.

The NH90 was presented in its MedEvac configuration at the 2010 ILA Air Show. The first series helicopters equipped with the kit are to be delivered to the German Armed Forces (Bundeswehr), which will be deploying them in Afghanistan.

(1) Medical Evacuation

FOCUS ON

NH90 in Finland One Year of Operational Readiness

In early February, the Utti Jaeger Regiment and Eurocopter representatives celebrated one year of operational readiness for the NH90 in Finland. During this time, the NH90s performed some 25 missions, including SAR⁽¹⁾ and support for Defense Forces. The first NH90 arrived for the Helicopter Battalion of the Finnish Army in March 2008, and nine additional aircraft have since been delivered. The arrival of the NH90 marked a new era in Finnish Army aviation, and the regiment's NH90 fleet has clocked up more than 2,130 total flight hours to date. The Utti Jaeger Regiment is a unique military organization as both helicopter search and rescue and Army Special Forces work together, allowing for an efficient way to create Techniques, Tactics and Procedures [TTPs].

(1) Search and Rescue



© Charles Abary/Eurocopter

IN NUMBERS

NH90: 10,000 Flight Hours

In early February 2011, the fleet of NH90s in service reached the 10,000 flight hour mark in operation. These flight hours were built up over the past three years by the 68 NH90s delivered in three different configurations for the TTH and NFH versions. The operational hours that have gone into reaching this milestone have helped gain a

better understanding of the helicopter's initial flight behavior, contributing to its successful entry into service. The feedback will also help the manufacturers and operators to implement further upgrades, to obtain the most pertinent information from the operational data and to properly prepare for the upcoming introduction of the contractual NH90 standards [FOC⁽¹⁾].

(1) Full Operational Capability: the final configuration



Réseau de transport d'électricité

Article **CHRISTIAN DA SILVA**Photo by **RTE**

Two EC225s recently joined the fleet at RTE⁽¹⁾, which flies exclusively Eurocopter helicopters. The new arrivals provide the operator with the groundbreaking technology it needs to expand the scope of its activities – both in France and abroad.

GOING ONE STEP FURTHER

It was 59 years ago that EDF first decided to acquire a helicopter, which was mainly used to reconstruct France's power grid. Then, in 1957, the energy company became the largest civil operator of the Alouette II. It has been a loyal customer ever since, and will soon be receiving its 14th Eurocopter aircraft.

RTE, a wholly-owned subsidiary of EDF, is responsible for France's electricity transmission network comprising 100,000 km of 63,000 to 400,000-volt power lines. RTE's heliborne operations unit, known as STH (see inset), operates and maintains nearly a dozen single and twin-engine Ecureuils. The STH has a three-fold mission: line inspections, aerial lifting, and maintenance work on power cables.

The department has its own EASA-certified design office that was set up to develop new technologies for heliborne missions. The STH engineers have developed unique and innovative equipment recognized around the world: airborne baskets to carry technicians (the first experiments with

4-man baskets date back to 1986), individual work gear (conductive helmets and clothing) and special tools (such as hydraulic presses for connecting cables and insulated ropes).

"The helicopter offers countless advantages," explained Régis Magnac, director of STH. "It makes the work much less strenuous, helps reduce costs, and guarantees that we can quickly be on site to perform live-line repairs in even the hardest-to-reach places on the grid. We can operate with surgical precision without having to mobilize any ground resources."

OPENING NEW DOORS WITH THE EC225

In 2009, RTE decided to rejuvenate its fleet with more modern helicopters and placed an order for three single-engine Ecureuils (two AS350 B2s and one AS350 B3) and an EC135. But the company has also turned to the EC225 to perform heavy lifting (the first was delivered in August 2010 and the second is slated for March 2012). The EC225 can carry out extremely precise maneuvers and also lift loads of up to 4.5 metric tons, making it the perfect choice for transporting electrical tower parts. What's more, the new helicopter offers cutting-edge technology: Its 4-axis autopilot can nail down precise positions in hover flight, and its power-to-weight ratio

meets the most exacting requirements for heavy lift work. The EC225 will be opening the door for RTE to the international market and new foreign customers with power line maintenance needs. A new chapter has begun for the company – with a little help along the way from Eurocopter. ■

(1) France's Electricity Transport Network Operator

IDENTITY CARD

Name: STH - Services et Travaux Hélicoptés

Staff: 120 employees

6,000 flight hours per year

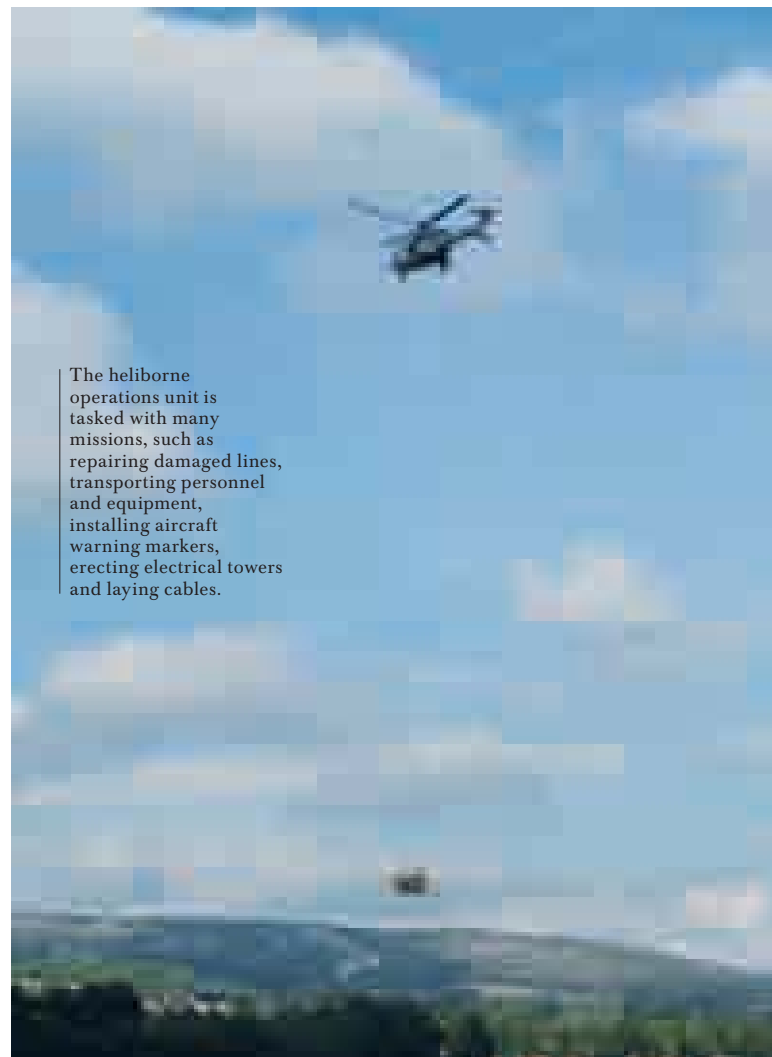
250,000 total flight hours

12 pilots

13 technicians

On call 24/7

Fleet: 11 Ecureuils, 1 EC135 and 1 EC225
(with a second one to be delivered in 2012)



The heliborne operations unit is tasked with many missions, such as repairing damaged lines, transporting personnel and equipment, installing aircraft warning markers, erecting electrical towers and laying cables.

THE GERMAN FEDERAL POLICE CELEBRATES 60 YEARS OF SERVICE



Since 2007, 16 EC135s have replaced the BO105 for air rescue work.

The German Federal Police celebrated its 60th anniversary on March 16, 2011. To mark the occasion, *Rotor Journal* looks back at Eurocopter's successful partnership with one of its oldest and most important civil customers in Europe.

Article **REGINA LANGE** Photos by **BUNDESPOLIZEI**

When it was first created in 1951, the Federal Border Protection Force (Bundesgrenzschutz), as its name would suggest, was primarily tasked with protecting the country's borders. Over the years, however, the agency's missions have grown increasingly diverse in response to the changing times in Europe: the need for counter-terrorism units, the increasing threat posed by organized crime, the disappearance of borders in Europe following the Schengen Agreement⁽¹⁾, the fall of the Berlin Wall, and new responsibilities for railroad

police services. The agency's name was changed to Bundespolizei (federal police) in 2005 to reflect its expanding role, and the Grenzschutz-Fliegergruppe – the aviation division of the border police that was created in 1962 – was also renamed the Bundespolizei-Fliegergruppe, the Airborne Unit of the German Federal Police.

A EUROCOPTER CUSTOMER FOR NEARLY HALF A CENTURY

During his speech at the 60th anniversary celebration, German Interior Minister



The Airborne Unit has been operating the Super Puma since 1973.



The Airborne Unit was the world's first customer to use the EC155 designed to the specific requirements of the federal police.

Hans-Peter Friedrich stressed that the civil helicopter fleet of the Airborne Unit is truly unique in Europe, enabling it to respond to a wide range of missions.

"Faced with an ever-increasing array of operational requirements in all aspects of its work, the Airborne Unit continuously strives to improve its services and develop new concepts," explained Ralf Schnurr, PR and press relations agent at the unit, where he has worked for the past 34 years. "Eurocopter has been and still is an essential partner in our efforts, as

their teams have incorporated our feedback and operational requirements into their development activities. We will continue to work closely with Eurocopter in the years to come, and next year we'll have even further cause for celebration: 50 years of successful cooperation together."

(1) Not including airports or the North and Baltic Sea borders.

IDENTITY CARD

Name: Bundespolizei-Fliegergruppe

Current fleet: 83 Eurocopter helicopters (20 Super Pumas, 16 EC155s, 41 EC135 T2s, 6 EC120 Bs), with another 4 EC155s slated for arrival before the end of 2012.

Size of the force at the Airborne Unit: Over 900 (including approximately 200 pilots and 113 flight technicians).

Mission profiles: Large-scale operations (surveillance during transport of radioactive waste to Gorleben, NATO summit meetings, major sporting events), air patrols and protection, disaster relief work in Germany and abroad, transportation of specialized units and special forces, transportation of heads of state and government officials, training.



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OF THE BUNDESPOLIZEI
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EMERGING MARKETS

Article
BELÉN MORANT

EUROCOPTER GAINS GROUND IN ARGENTINA

With the help of its subsidiary Eurocopter Cono Sur, Eurocopter has managed to steadily expand its market share in Argentina in recent years, thanks to the success of its light and medium-lift helicopters. Details below about this booming market.

With a surface area of 2.7 million square kilometers, Argentina is the second largest country in Latin America. Not only is the country vast, it also has many different landscapes and a wide variety of climates that include tropical conditions in the Northeast and arctic cold in the Southern Andes. With its 7,000 km of borders and 4,600 km of coastline, this country of contrasts is ideal for the helicopter industry. Argentina currently has a fleet of more than 200 turbine helicopters, the fifth largest in Latin America. There are now 77 Eurocopter helicopters in service in the country, and the Group is the leader in the public services segment. The subsidiary Eurocopter Cono Sur, which has a staff of 90, is responsible for the region.

PUBLIC SERVICE AND SECURITY

Public security and community services are two key priorities for Argentina's government agencies, which operate helicopters equipped with cutting-edge technology to carry out their many different missions: law enforcement, medical evacuation, air rescue, traffic patrol, border control, the war on drugs, firefighting, and relief work during natural disasters.

Three different public agencies in Argentina have been longstanding Eurocopter customers. First the Gendarmería, which is responsible for border patrols, has been operating the Lama since the 1970s and is currently renewing its fleet with the Ecureuil AS350 B3. Its powerful engines and high-altitude capabilities make this aircraft the perfect choice for these missions.

Second, the Prefectura Naval (Argentina's coast guard) uses its fleet of Dauphins and Pumas to perform long-distance rescues, and recently opted for the twin-engine Ecureuil AS355 NP to perform patrols in northern Argentina. Third, the Policía Federal (Federal Police), which has been flying the BO105 since the 1970s, recently launched its own fleet renewal plan. The BO105's successor, the EC135, was the logical choice, as its ultramodern equipment packages make it the perfect tool for surveillance missions.

Another distinctive feature of Argentina is its 23 separate provinces, many of which have their own aviation division. The main missions in the provinces are law enforcement, medical evacuation and firefighting. Eurocopter has been making good progress in this market over the past five years, in particular with the Ecureuil AS350 and the EC130 B4. The EC135 and EC145 have also been popular. Eurocopter helicopters are now flying in six provinces⁽¹⁾, including the province of Buenos Aires, which has become Eurocopter Cono Sur's biggest customer for air ambulance missions with the EC145.

CORPORATE

The private market has developed rapidly as more and more private customers are looking for helicopters to commute between their homes and places of work in order to avoid the traffic and security problems that plague the big cities. Eurocopter first entered this market in 2008, when it delivered four helicopters.



© EC Chile



© Helicópteros Marinos

© Provincia de Mendoza

A total of 23 Ecureuils are in operation in Argentina. The Mendoza province uses two AS350 B3s for public service missions.

The EC120, EC130 B4, EC135, EC145 and the EC155 B1 have everything it takes to gain new ground in this promising sector.

OIL & GAS: A BRIGHT FUTURE

Helicópteros Marinos, a subsidiary of Héli-Union, is the only oil and gas operator in Argentina. The two EC145s it flies for Total Austral provide services to oil fields located between 10 and 40 nautical miles off the coast of Tierra del Fuego. However, new exploration activities are underway in the deep waters off the southern tip of the country, 200 nautical miles from Tierra del Fuego. If substantial oil reserves are located, long-range

helicopters such as the EC225 will be needed to continue with the work.

“The Argentinean market has enormous potential,” said Alexandre Ceccacci, managing director of Eurocopter Cono Sur. “Before the end of the year, Eurocopter will have a tech rep on permanent assignment in the country. By increasing our presence and our responsiveness, we’ll be able to get closer to our customers in Argentina and ensure more added value for their missions.”

(1) The Ecureuil AS350 in Córdoba, Mendoza, La Rioja, Buenos Aires and Santa Fé; the EC130B4 in Misiones; the EC135 in Córdoba; and the EC145 in Buenos Aires.

IDENTITY CARD

- Name:** Eurocopter Cono Sur
- Main offices:** Tobalada Airport, Santiago de Chile
- Date of creation:** July 12, 2001
- Managing Director:** Alexandre Ceccacci
- Number of employees:** 90
- Area of activity:** Argentina, Bolivia, Chile, Peru and Uruguay
- Activities:** Sales, support, maintenance, training for pilots and technicians
- Fleet:** 255 helicopters



© Eurocopter Malaysia

EC225

Article
ERIN CALLENDER

The EC225 is yet again expanding its range of operations and is joining the fleet of two customers in Malaysia.

A NEW HOME IN MALAYSIA

The first aircraft of this kind arrived at Eurocopter Malaysia in December 2010, and after finishing completion in February 2011, it was delivered to Awan Inspirasi, a new operator for oil and gas missions in the country. Operating out of their base on the island of Borneo, Awan Inspirasi has ordered a total of three EC225s with an option for a fourth aircraft.

MHS Aviation has also signed on for a total of five EC225s, three of which were ordered just this past December during the acceptance phase for the company's first EC225 at Eurocopter in Marignane. This initial aircraft

was delivered to the customer by Eurocopter Malaysia on March 28. "The fact that MHS Aviation, a pioneer in the provision of helicopter services for the offshore industry in Malaysia with more than 1,000,000 flights completed, is again enlarging its fleet with the addition of these five EC225s shows the level of confidence they have in Eurocopter," explained Pierre Nardelli, CEO of Eurocopter Malaysia.

Supporting the steady growth and increasing popularity in Malaysia of the EC225 as well as the EC725, for which the Royal Malaysian Air Force (RMAF) has ordered 12

machines, a new EC225/EC725 Full Flight Simulator (FFS) is expected to be in place by mid-2012 to cater to the needs of simulator training in the Asia Pacific region. This simulator will be located at the new Helicopter Center, which will also be the new home of Eurocopter Malaysia, the future Boustead AeroServices⁽¹⁾, and the new Technician Training Academy.

(1) A Maintenance, Repair and Overhaul (MRO) joint-venture between Eurocopter Malaysia and Boustead Heavy Industries Corporation (BHIC) for the support of Eurocopter's governmental helicopter fleet.

AIR RESCUE AT 3,500 METERS

SUMA AIR

Article **REGINA LANGE**

"I love you, Perico": this was all the José Auil could muster up to say to his former classmate Eduardo Boisset, who was behind the controls of the Ecureuil AS350 B3 that came to save him three days after his disappearance. On November 21, 2010, Mr. Auil was flying in his glider over the Chilean Andes near the border with Argentina when he had to make a forced landing at an altitude of 3,500 meters. With the tail of his glider broken and no GPS available, he had to survive as best he could, protecting himself from the wind and rain with his

parachute and drinking water from a nearby brook. Mr. Boisset, a specially trained pilot at Suma Air with 21 years of experience in the Chilean Air Force, was alerted by the local air rescue service. He had to perform a series of delicate maneuvers with his Ecureuil AS350 B3 to save his friend. To honor him for his courage, Eurocopter Chile awarded him a decoration on April 18 of this year.

Alexandre Ceccacci, managing director of Eurocopter Chile, honored Suma Air pilot Eduardo Boisset for the rescue he performed in his Ecureuil AS350 B3.



© Eurocopter Chile



The manufacturer's responsibility for a helicopter doesn't end when it's delivered to the customer. Once its products enter service, Eurocopter takes every necessary measure to ensure quality technical support and honor its warranty commitments.

Article
RÉGIS NOYÉ

HELI INVEST: SERVING CUSTOMERS WITH PRIDE

When Eurocopter and its Polish partner Heli Invest delivered 23 EC135 P2is between September 2009 and December 2010 to Poland's state air ambulance operator LPR⁽¹⁾, Eurocopter entrusted Heli Invest with the task of providing warranty services for the customer. The new fleet, which was purchased by the country's Ministry of Health to replace the Mi-2, has made Poland the world's largest operator of the EC135 in the EMS⁽²⁾ configuration, and has also helped bring the country's emergency medical network up to European standards. It will now be the benchmark for other countries in Eastern Europe.

Based in Warsaw, Heli Invest was created in 2002 and went on to become an exclusive Eurocopter distributor and service center in 2005, the same year its maintenance organization received Part 145 certification. The company now offers a complete range of customer support services that covers the various engines and equipment packages of nearly every type of Eurocopter helicopter. In addition to the 23 EC135s operated by the LPR, Heli Invest currently services more than 30 other Eurocopter aircraft that

are operating in Poland. No doubt about it, Heli Invest is proud to have been tasked with such an important mission: servicing one of the largest deployments of civil helicopters in all of Europe.

(1) Lotnicze Pogotowie Ratunkowe

(2) Emergency Medical Service



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FOR AN INTERVIEW
WITH JUREK WILCZYNSKI,
CEO OF HELI INVEST
WWW.EUROCOPTER.COM

FOCUS ON

COHC GAMEC in China Adds a New Feather to Its Cap

As part of a protocol agreement signed at the end of 2010 by Eurocopter and the other two shareholders in COHC General Aviation Maintenance & Engineering Co., Ltd. (CGAMEC), the Chinese company will begin implementing a five-year development plan this year to increase its helicopter MRO⁽¹⁾ service offer for the benefit of Eurocopter customers and operators in China. Over time, CGAMEC will develop the necessary capabilities for performing helicopter assembly and painting work using kits, and will also be repairing blades, avionics systems and dynamic components for all models in the Eurocopter range.

The agreement was signed after Eurocopter increased its share in the company from 21 to 34% [the other shareholders are Citic Offshore Helicopter Co. Ltd. (COHC) with 51% and Samwell Aviation with the remaining 15%], and is further evidence of Eurocopter's firm commitment to increase its activities in China. Created in 2001, CGAMEC is an official Eurocopter service center and the only helicopter maintenance company that is both CAAC⁽²⁾ and EASA certified. The company currently employs a staff of 45 at its site in Shenzhen, Mainland China.

(1) Maintenance, Repair and Overhaul

(2) Civil Aviation Administration of China

Articles
ALEXANDRE MARCHAND
REGINA LANGE
BELÉN MORANT

DELIVERIES

WHEN THE CUSTOMER IS KING

A key factor in satisfying Eurocopter's customers is to make sure they are given the best possible welcome when receiving their helicopters.



The new facilities for the customer-dedicated zone in Marignane will be operational as of early 2012. In this photo, the current helicopter delivery hanger.

© Eurocopter

IN MARIGNANE

Following the inauguration of delivery centers at American Eurocopter and Eurocopter España and the new Customer Center in Donauwörth, the time has come for Marignane to invest in new facilities to make its customers feel more at home. The Customer Center at the site is scheduled to open its doors in January 2012. More than 750 customers from approximately 100 companies and operators in 65 countries visited the Marignane delivery center in 2010. The numbers are encouraging, but also demonstrate how important it is for the French site to provide its customers with more modernized facilities to fully meet their expectations.

“Work is already underway on the new Customer Center,” explained Elisabeth Carrillo, who is in charge of the delivery and planning center. “It’s scheduled to open in January 2012, and will be very similar to the center in Donauwörth. We’ll be making the necessary investments to make sure we can take care of all the customers’ needs, from their first visit to the plant up through the signature of the contract and the helicopter delivery.”

The Customer Center in Marignane will have a separate entrance from the industrial facilities in order to facilitate access, and will include a showroom and reception rooms.

The goal is to present the helicopters and selected equipment packages in the best possible conditions. “The new facilities will also make it easier for us to manage the reception activities, as they can take several days for the more complex helicopters,” said Ms. Carrillo.

The building that will house the showroom and other customer spaces is currently under construction. Over time, it will be linked to the current delivery hangars and facilities to form a harmonized and coherent unit – the perfect tool for presenting helicopters to the customers and providing them with the services they’ve come to expect from Eurocopter.



© Eurocopter

The new Spanish delivery center includes meeting rooms and offices where customers can benefit from the comfort of their own VIP area.

IN ALBACETE

“The delivery center in Albacete, which was inaugurated on July 16, 2009, is where we present civil and military customers with their new helicopters, or helicopters that have undergone maintenance.

The Spanish delivery center required an investment of €700,000 and was built according to Eurocopter standards in order to strengthen the Group’s corporate image. It includes a hanger with ultramodern equipment and direct access to the flight lines, several meeting rooms and offices that form a true VIP space for our customers. Eurocopter España has also designated a Delivery Manager who ensures that the delivery process is up to Group standards and that the customers receive their helicopters in the best possible conditions. Thirteen EC135s, five Super Pumas, one EC225 and two light helicopters have already been delivered to Spanish operators and private owners at the center. An additional 12 deliveries will take place before the end of 2011, and beginning in 2012, all of the Spanish Tigers and NH90s will be delivered at the center.” Javier Sánchez, director of operations at Eurocopter España. ■

IN DONAUWÖRTH

The new delivery center in Donauwörth opened its doors on October 13, 2010, and now welcomes customers for helicopter deliveries, conferences, contract negotiations and product presentations. The number of visitors since its opening has clearly demonstrated the need for such a facility. Between September 2010 and March 2011, no less than 1,142 customers from 155 companies in 45 countries came to the center.

“The project is about much more than just a new building,” said Friedrich Pitschl, who is in charge of project planning and implementation. “It also represents a new philosophy in customer relations.” Taking its cue from the automobile and business aviation industries, the new 1,500 square-meter space is both elegant and functional, and provides personalized services for each customer.

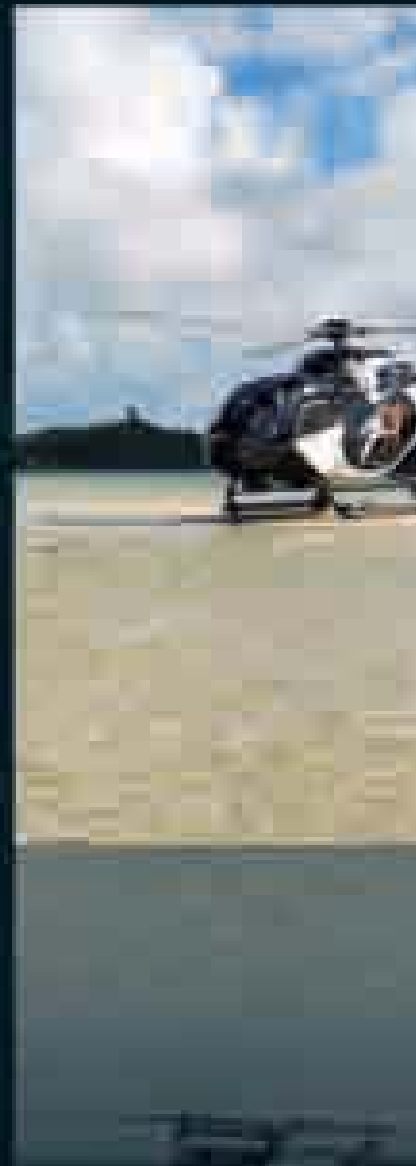
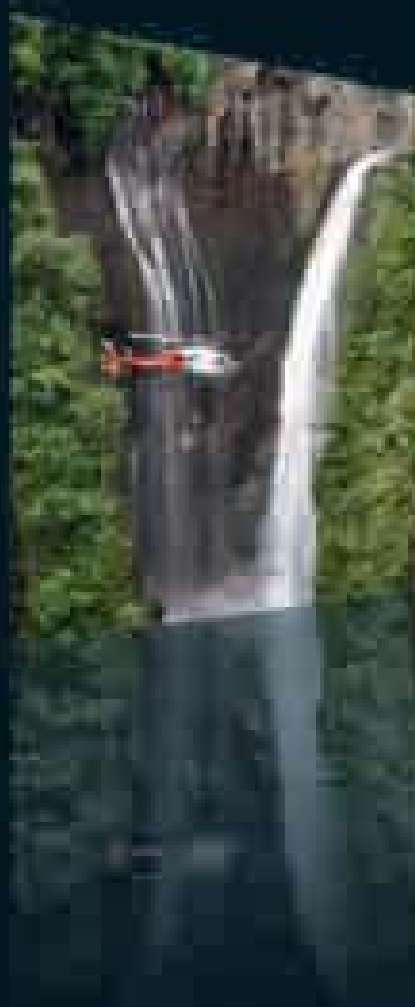
In addition to a 600 square-meter presentation hall that can hold four helicopters, the delivery center also has eight conference rooms, three reception rooms and 17 parking spots reserved for customers.

“With this new concept, we’ve already set a new standard in the field,” added Mr. Pitschl. “At Eurocopter, the customer is king and it is only right that our facilities reflect this.” ■

The new C9 building in Donauwörth welcomes customers for helicopter deliveries, conferences, contract negotiations and product presentations.



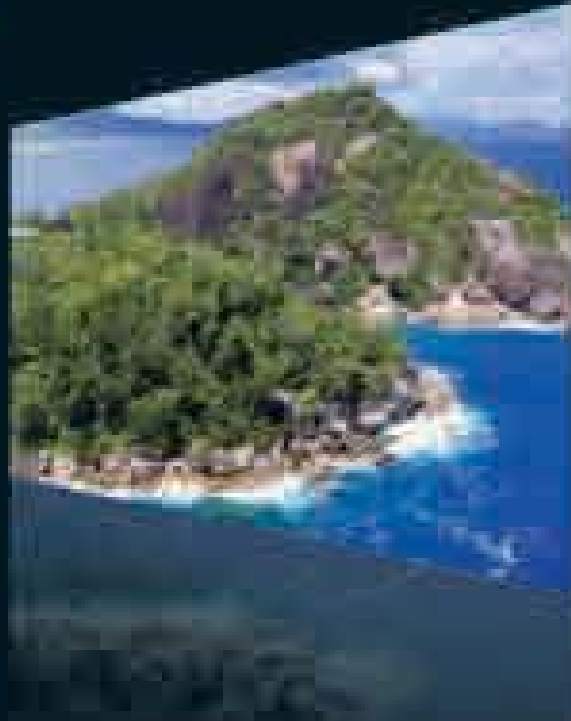
© Charles Abarr/Eurocopter



MORE THAN JUST A FLIGHT

It's your ticket to paradise. This slogan, coined by the company Zil Air, could just as easily apply to the operator Corail Hélicoptères, (“corail” meaning “coral” in English), whose name alone evokes a dream destination. Both companies also share the same vocation: providing unforgettable experiences for their customers.

Article **RÉGIS NOYÉ** Photos by **ZIL AIR AND CORAIL HÉLICOPTÈRES**



CORAIL HÉLICOPTÈRES

The company Corail Hélicoptères, which flies out of Réunion Island, has discovered the perfect mix: exotic locations combined with exceptional service. The operator offers its customers flexible flight schedules over stunning landscapes, and also offers quick and comfortable air taxi services between the airport and local hotels. Corail Hélicoptères is also looking to expand its services to include nearby Mauritius, offering both local flights on the island and inter-island connecting flights with Réunion.

"In terms of our 'Vanilla Islands' concept, Mauritius and Réunion complement each other," explained Alfred Chane Pane, CEO of Corail Hélicoptères. "One offers some of the world's most beautiful beaches, and the other has spectacular mountain landscapes. By helicopter, it is possible to travel from one island to the other in just over an hour."

Corail Hélicoptères initially began flying out of the airport in Saint-Pierre in 2004, and then out of Saint-Gilles in 2009. The company operates four Ecureuils, including two twin engines (an AS355 N and NP), for all types of transport and lifting work. On February 20 of this year, it was the Ecureuil NP

that performed an initial trial flight to Plaisance on Mauritius, marking the first time a helicopter had performed a civil passenger flight between the two islands.

"The twin-engine AS355 NP Ecureuil is perfect for these types of missions," said the company's Director Fabrice Lourme. "No twin engine on the market offers more operational flexibility and reliability. Because it can fly at night, it will be able to transfer passengers for the night flight out of Plaisance. What's more, it can easily be equipped with emergency flotation equipment, life jackets and a life raft."

Corail Hélicoptères should soon be receiving the green light from authorities for its subsidiary on Mauritius to start operations. As a result, one or possibly two more helicopters will need to be added to the current fleet. "We would like Mauritius to enjoy the same quality service we've always offered, based on our many years of experience performing twin-engine lifting work," summed up Mr. Lourme.

ZIL AIR

Since being established in 2008, the company Zil Air has provided discerning visitors

to the Seychelles with privileged access to more than twenty different dream destinations on a selection of the 115 small islands in the region offering landing pads. Whether it be world-class golf courses, excellent fishing spots or observation sites for the islands' exceptional flora and fauna, all the destinations are less than a 40-minute flight from the international airport on the main island of Mahé.

Zil Air has entrusted these missions to the EC120 B Colibri, and recently added a third unit to its fleet. "We chose the Colibri because of its exceptional reliability and simplified maintenance," explained Francis W. Savy, the company's executive director. "It also offers excellent comfort for the passengers, a great view from anywhere in the cabin and a large luggage compartment."

The only helicopter operator in the Seychelles, Zil Air was already performing approximately 2,000 flight hours per year with its first two Colibris for many different types of operations, including public service and support missions. With its third Colibri now in service, business is set to expand.

Thinking without limits



A helicopter designed to meet every operational challenge. Even the future.

Designed in collaboration with our customers to cope with anything from a business trip to the most advanced SAR mission, the EC175 sets a benchmark for decades to come. The largest and quietest cabin. The highest levels of comfort, accessibility and visibility. The lowest fuel cost and CO₂ emissions per seat. The EC175 is first in its class for them all. When you think future-proof, think without limits.



THOMSON