NH90

Reaping the Benefits of Ten Years of Experience

NETHERLANDS AND FRAM Qualification of the NH90 NFH

MAIDEN FLIGHT OF THE

JOURNAL





Helicopters that can fly when others can't. Because that's when you need them most.

Fire power and self armour. All-weather capable, supreme agility and formidable nap-of-earth flight ability. Eurocopter military helicopters are built for today's operations, taking on infiltration, evacuation and rescue missions in hostile environments throughout the world with the maximum discretion. When you think battlefield conditions, think without limits.

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Designed with You and For You: The EC175 Takes Flight

By Lutz Bertling, President and CEO of Eurocopter

Just four years after launching the development of the EC175, the helicopter performed its maiden flight this past December, right on schedule. This brand-new, unmatched helicopter joins the seven metric ton class, and fits perfectly into the Eurocopter range between the Dauphin/EC155 and Super Puma families. Constantly adapted to suit your needs and take into account your suggestions throughout its design phase, the EC175 has truly

been designed with you and for you. Our overriding goal has always been to meet your highest standards regarding mission capabilities, performance, costs, versatility and safety.

The EC175 has also been a major challenge in terms of cooperation, as Eurocopter has developed and produced it with Chinese industrial partners. The helicopter's developmental success has been made possible thanks to the close ties Eurocopter has nurtured with them for nearly thirty years. The EC175's recent maiden flight provided clear proof of Eurocopter's impressive ability to handle cooperative agreements of ever-increasing complexity due to the sophistication of the products and the long distances and cultural differences between the partners.

This major achievement was facilitated by our international deployment strategy and encourages us to continue pursuing our goals, constantly striving to provide optimized solutions that better meet your needs. We are extremely proud of the EC175, which truly embodies the benefits of these policies.

Bete.



In operation

Since August 10, 2009, three Tigers in the Standard 1 version have been flying in the Afghan theater of operations. The Tigers are operated both day and night by the 5th Combat Helicopter Regiment (RHC) of the French Army Air Corps for reconnaissance, escort and combat support missions. Their flawless availability and high-precision weapon systems have won unanimous praise from the operational units.



THE ALOUETTE IN THE NETHERLANDS

45 YEARS IN SERVICE

On November 6, the entire Alouette squadron of the Royal Netherlands Air Force (RNLAF) was Eurocopter's guest in Marignane to celebrate the 45th anniversary of the first Alouette III delivery. A total of 70 Alouettes were delivered to the RNLAF, and four remain in service to this day. They are in a remarkable state of preservation and still serve the Dutch Royal House. The RNLAF also operates 17 Cougar helicopters for military and humanitarian transportation missions, and the Netherlands has placed an additional order for 20 NH90 NFH helicopters. ■





CANADA A NEW TRAINING PROGRAM

In late September, Eurocopter Canada Limited and the British Columbia Institute of Technology (BCIT) signed a Memorandum of Understanding to develop a training program covering airframe and engine maintenance. "Eurocopter has been steadily increasing its presence in British Columbia and has expanded the activities of its logistics center in Richmond," explained the former President and CEO of Eurocopter Canada Marie-Agnès Vève, the predecessor to Guy Joannes who took over the post on October 1 this year. "This new agreement is an excellent opportunity for both Eurocopter Canada and BCIT to strengthen the training capabilities in British Columbia in order to increase flight safety and develop further interest in the helicopter industry."

EUROCOPTER TRAINING SERVICES NEW AGREEMENT WITH THE FRENCH CIVIL DEFENSE

On September 24, Eurocopter Training Services (ETS) signed an agreement with the French Civil Defense Training School as part of its work within the French Interdepartmental Agreement to protect the Mediterranean region from forest fires. The new contract relates to the water bomber training program recently created by ETS to accompany the entry into service of its EC225s equipped with the firefighting equipment package. The French Civil Defense is recognized throughout the world as an expert in this field, and its cooperation with Eurocopter provides further proof of the indisputable quality of ETS training. The new program is comprised of two modules. The first is a ground training module that includes classroom.

modules. The first is a ground training module that includes classroom work and a flight simulation phase, in which the goal is to teach students the basics about forest fires and how to fight them. Professional



firefighters, Canadair pilots and pilots from the French Civil Defense will all participate in this phase. The second module covers the actual flight training at the ETS facilities. This specialized training is available for all the products in the Eurocopter range. ■

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The number of EC145 helicopters already delivered to countries in the Commonwealth of Independent States (CIS). The most recent was handed over on September 15. Five EC145s are now in service in Russia. three in Ukraine and two in Turkmenistan. They are used in a variety of roles, including corporate transportation, emergency medical services (EMS) and multipurpose missions (patrol and evacuation). Despite the current economic crisis. CIS countries represent a market with enormous growth potential for helicopter manufacturers.

AGENDA

Over the next few months, Eurocopter and its subsidiaries will be participating in several different air shows and conventions throughout the world.

FEBRUARY 20 TO 23, 2010 ► HELI-EXPO, Houston, Texas, USA

MARCH 23 TO 28, 2010 ► FIDAE, Santiago, Chile

EC155 NEW CONTRACT WITH THE ROYAL THAI POLICE

At the Asian Aerospace Expo held in Hong Kong September 8 to 10, Eurocopter South East Asia (ESEA) and the Royal Thai Police (RTP) signed a contract for the purchase of three EC155s.

"We are delighted by this new show of confidence from the RTP," declared Bernhard Brenner, president of ESEA. "We have been present in Thailand for nearly 20 years and have recently opened a branch office in Bangkok to provide better support to our customers in the region." "This is not the first time we've purchased the EC155," added Captain Chesda Indrasthitya, Aviation Commander of the RTP. "We already have two in our current fleet and past experience has shown that it is a truly versatile helicopter that fully meets our mission requirements."

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NEW AGREEMENT WITH KAZAKHSTAN

During French President Nicolas Sarkozy's visit to Kazakhstan in early October, EADS and Eurocopter signed a cooperation agreement with the sovereign wealth fund Samruk-Kazyna as part of the strategic partnership concluded between the two countries. The goal of the new agreement, which calls for the creation of a public-private joint venture in Kazakhstan involving both European and Kazakh partners, is to develop an integrated and autonomous helicopter service industry in the country.



The initial EC175 prototype performed its first official flight in Marignane on December 17, 2009, precisely as planned in the production schedule. Many guests were on hand as it took to the air: customers, government representatives, partners, subcontractors, members of the press and Eurocopter employees. The moment seems ripe for *Rotor Journal* to provide an update on the newest member of the Eurocopter range.

ARTICLE: MONIQUE COLONGES

he EC175 represents a major innovation at Eurocopter, and clearly demonstrates the enormous progress the Group has made in both its development and technology integration processes. Every aspect of the machine has benefitted from the best Eurocopter has to offer in terms of technology: dynamic assemblies, avionics, electrical systems and the air frame. To name just a few new features, it comes equipped with a five-blade Spheriflex rotor and a new main gearbox that offers significant noise reduction and enhanced safety. Its roomy cabin has no competition in its class, with large windows that can be jettisoned and room for 16 passengers. It is also extremely flexible, as it can be readily reconfigured for a wide range of missions. Its completely revamped avionics include a highly efficient man-machine interface that significantly reduces the pilot's workload. Philippe Legendre, chief engineer of the EC175 program at Eurocopter, talked about what he considers the major innovation of the new helicopter: "The high-quality integration of the standard and optional equipment packages on the EC175 really sets it apart. Each option has its own specific location set aside in the aircraft definition, which will really help us reduce production cycles and increase quality." The program has another new feature that also represents a major

The EC175 (in the foreground) accompanied by the EC120: Both of these Eurocopter helicopters were designed and manufactured in cooperation with China.

Identity Card

Name: EC175

Class: 7 metric tons

Number of passengers:

16 in oil & gas configuration

Key program dates:

- Signature of development contract between Eurocopter and HAIG: December 5, 2005
- Commercial launch: Heli-Expo Air Show, February 24 to 26, 2008
- Powering up of first prototype: April 6, 2009
- First flight: December 4, 2009
- First flight presentation: December 17, 2009
- Development and certification flights: 2010
- EASA⁽¹⁾ certification: 2011
- First deliveries: 2012

(1) European Aviation Safety Agency

breakthrough: The Digital Mock Up (DMU), a 3D digital helicopter that includes every component of the machine down to the slightest detail. The DMU is being used to develop the helicopter together with Eurocopter's Chinese partner working 10,000 km away across several time zones, and is the common work platform for all the participants in the development work. It will also be used to create the necessary documentation and 3D simulations that are vital elements in Eurocopter's efforts to provide interactive and modern training tools, and to optimize planning for future maintenance operations. "The DMU allowed us to work out any interference problems between the subsystems very early on in the process, which made it much easier to assemble the first prototype. It will also simplify the manufacturing process," explained Mr. Legendre. In the new process, partners will manufacture the subassemblies that they themselves developed. This phase began in the fourth guarter of 2009 for parts with the longest production cycles to ensure that the first deliveries slated for 2012 will be right on schedule. The 114 intended purchases signed for the EC175 prove that it has already convinced many operators, and more than a few made the trip to Marignane on December 17 to see the innovative new prototype's maiden flight. ■



(from left to right): Louis Gallois, president of EADS, Alain Di Bianca, Eurocopter test pilot, Patrick Brémond and Michel Oswald, flight test engineers, and Lutz Bertling, president and CEO of Eurocopter during the ceremony organized in celebration of the official maiden flight of the EC175.

"I AM REALLY IMPRESSED BY THE EC175'S CAPACITIES AT THIS STAGE, AS WE ONLY HAVE A FEW FLIGHT HOURS UNDER OUR BELT. IT'S **EXTRAORDINARY** TO SEE THE MANEUVERS WE CAN PERFORM WITH THIS HELICOPTER. WE FELT **VERY COMFORTABLE** AND SAFE, AND WE ARE VERY PROUD THAT WE WERE ABLE TO PULL OFF SUCH A FLIGHT DEMONSTRATION IN FRONT OF YOU." Alain Di Bianca, Eurocopter test pilot





The Eurocopter stand turned many heads at the Helitech 2009 helicopter show, which was held from September 22 to 24 in Duxford, England. The EC135 "Helicoptère par Hermès" was presented for the first time in the country, and no less than nine helicopters from the Eurocopter range were on static display.

During the show, a contract was signed with the West Midlands Police Air Support Unit for the purchase of an EC135, confirming Eurocopter's strong presence in the UK: 75% of the helicopters used for police and law enforcement missions in the country bear the Eurocopter name. With a total of 450 helicopters in service for 130 customers, the Eurocopter fleet is currently the largest in the United Kingdom.



UH-72A PRODUCTION

► FINAL STEP ACHIEVED

American Eurocopter's LUH program for the US Army has been praised as one of the top American military programs. After successful implementation of the Light Assembly Line (LAL) and Final Assembly Line (FAL) in Columbus, Mississippi, the LUH program reached its final stage of production duplication in October. This means that the production of UH-72As in Columbus and Germany is now identical. Parts are shipped from directly to Columbus, where all of the assembly stations are completed.

American Eurocopter has already delivered 90 UH-72As; the 100th UH-72A is scheduled for delivery in February 2010. These aircraft, stationed throughout the US, are equipped in both MEDEVAC and passenger transport configurations and fly disaster relief, support and other missions. So far, the deployed fleet of UH-72As has accumulated more than 17,500 flight hours with an overall operational readiness rate of 93 percent.



NOVEMBER 15 TO 19, 2009

> EUROCOPTER IN DUBAI

Eurocopter recently participated in the Dubai Air Show: a life-size mockup of the EC175 in oil and gas configuration was shown at the Group's static display, and an HAP version of the Tiger wowed the crowds with daily flight demonstrations. The show marked the first time that the two helicopters were presented to the general public in the region.

Eurocopter has been active in the Middle East for more than thirty years now, and 650 of the Group's helicopters are currently in service in the Arab world for civil and military operators.



EC225: AN AUTOMATIC PILOT FOR HOVER FLIGHTS

ENSURING SAFER APPROACHES

Beginning in March 2010, EC225 pilots will be able to couple the GSPD groundspeed mode with the helicopter's automatic pilot. This new system will provide exceptional stability and precision at low speeds during approaches.

ARTICLE: BELÉN MORANT

A s part of its continuing efforts to improve flight conditions for its operators, Eurocopter has once again demonstrated it is leading the way in terms of innovation. Beginning in March 2010, pilots of all helicopters in the EC225/EC725 family will benefit from a new system which couples the GSPD groundspeed mode with the automatic pilot. All EC225/EC725 helicopters already in service will be able to receive the retrofit free of charge. Recent events have clearly demonstrated that a clear and precise groundspeed display is indispensable during hover flight

► ADS-B EXTENDED SQUITTER: DANCOPTER, THE LAUNCH CUSTOMER

In June 2009, Eurocopter delivered the first EC155 B1 equipped with the ADS-B Out function to the operator DanCopter. Eurocopter has added an additional function to the standard transponder modes—the 1090 MHz Extended Squitter, which automatically transmits real-time information such as the helicopter's position, identification and velocity vector to air traffic control and other aircraft. This new function will help air traffic controllers increase safety and optimize air traffic management. The first flights of the EC155 in Den Helder allowed DanCopter to validate the new functions in true operating conditions. The EC155 B1 is the first helicopter to comply with the recommendations of the Dutch aviation authorities, which are pioneering the use of ADS-B Out in the North Sea. The ADS-B Out function will soon be required by other authorities, such as the FAA, and Eurocopter has already begun studying retrofit solutions for helicopters currently in service.

and final landing. There can be no doubt that pilots need the maximum amount of assistance when performing a landing in poor visibility (at night or at sea, or in dust and snowstorms). The GSPD mode allows the pilot to initiate speed reduction while maintaining the coupling between the automatic pilot and the hover mode. This piloting method, in association with an intuitive groundspeed display, reduces risks during the transition between the coupled/ uncoupled modes when the pilot takes over the controls. The new system affords the pilot better control when reducing speed, reduces the workload, and frees up time to evaluate the operational environment.

This one-of-a-kind system was derived from the hover mode already employed for search and rescue (SAR) missions, which has proven extremely effective in Afghanistan on EC725s landing in dust storms. ■

TIGER PROGRAM

Soaring with the Australian Army

Australian Aerospace's Armed Reconnaissance Helicopter (ARH Tiger) program recently reached an important milestone, reinforcing the company's role as a significant defense contractor.

ARTICLE: NATHAN PICK

he Initial Operational Test and Evaluation (IOT&E) Readiness Milestone of the ARH Acquisition Contract was achieved on time, on September 30, 2009, drawing congratulations from the customer.

Speaking about the milestone, Dr. Jens Goennemann, the CEO of Australian Aerospace, said: "The ARH Tiger platform will serve Australia for many years with future missions expected across the globe. Australian Aerospace is proud to support the nation with one of the most technologically advanced combat helicopters in the world."

The IOT&E milestone marks the point where the project transitions from individual military flying, maintenance and support qualifications to collective training and the development of Army Aviation warfighting skills in order to prepare the ARH system for operation.

Reaching the milestone included delivery of aircraft, as well as availability and reliability parameters being met, configuration of functional blocks (including night flights and weapons tests), integrated logistics to support the fleet and end-user training. Aircraft testing was undertaken at facilities across Australia to test the Tiger and support systems in different environments.

Australian flight test and operational crews have flown over 4,300



hours and fired 16 hellfire missiles, 475 rockets and 4,000 rounds of the 30 millimeter canon.

The Australian Army's crews of the 1st Aviation Regiment in Darwin will now focus on team training with multiple aircraft and using the Tiger's sensors and weapon systems in the landforce battlespace. Training will include use of the Hellfire missile system which provides the Tiger with accurate firepower up to eight kilometers.

With the IOT&E Readiness Milestone met, Australian Aerospace is turning its attention to the next ARH Tiger program milestone: the Initial Readiness Milestone in March 2010. ■



INCREASED SUPPORT FOR AUSTRALIA'S ARMED FORCES

Australian Aerospace recently strengthened its industrial presence when it inaugurated a vast storage complex entirely dedicated to logistics support for the 46 MRH90s to be delivered to the Australian Armed Forces. "The inauguration of this storage facility for spare parts marks an important step in Australia's helicopter assembly activities," declared Jens Goennemann, CEO of Australian Aerospace. "The MRH90 project, through a comprehensive Australian Industry Capability (AIC) plan, will generate 400 new highly-skilled jobs in Australia, including new management positions at the facility." The new complex, which is located in Ingleburn, will be the main site used by Australian Aerospace to store MRH90 spares and will ensure procurement for the military's operational units throughout the country.

QUALIFICATION OF THE NH90 NAVAL VERSION

Rising to the Challenge

The naval version of the NH90 recently obtained the Step A qualification, clearing the way for deliveries to the Netherlands and France. The news provided a welcome shot in the arm for all the customer countries.

ARTICLE: CHRSTIAN DA SILVA

When the directors of France and the Netherlands' armament agencies sat down together at the ILA Berlin Air Show in May 2008, they decided on a bold plan: To implement an ambitious new work schedule to qualify the NFH⁽¹⁾ version of the NH90 for both countries. As part of the decision, NHIndustries made firm commitments to respect the Step A qualification dates for a precisely defined version that would allow customer countries to use their helicopters for their most vital missions, such as sea search and rescue (SAR). The final qualification dates were set for September 2009 for the Netherlands and November 2009 for France.



The Keys to Success

A two-fold plan was launched. First of all, the configuration had to be defined as quickly as possible in cooperation with the customers to set up a workable data package. Negotiations were quickly held in the summer of 2008 to freeze the definitions on the Step A naval version and its technical baselines, which were set down in an amendment to the initial production contract. Jean-Brice Dumont, who heads the technical activities at NHIndustries, looks back at those busy days: "We had to quickly review the entire definition and the planning, while at the same time we were putting the finishing touches on the aircraft's design and the ground and test flights for the qualification process." The second part of the plan called for the production units to manufacture the helicopters and bring the initial production aircraft as close as possible to the final version in record time. The work teams all successfully rose to the challenge.

"The industrial partners and the customers all really pulled together to move forward on the work and respect the Step A target dates," stresses Mr. Dumont. "It really made the difference for the program, which can sometimes fall prey to the individual interests of each partner company." The final wrap-up meetings were held right on schedule, on September 18 for the Netherlands and on November 17, 2009 for France.

A Step in the Right Direction

One obvious lesson learned from the Step A process was that the experience gained through this cooperative effort could be built on and used to complete the final qualification work for the TTH version in 2010 and for the Step B⁽²⁾ qualification of the NFH in 2011. There are still two major hurdles ahead for the Step A qualifications. First of all, two other versions must be qualified in 2010 – the Norwegian version of the NH90 in the first quarter of the year and the Italian NFH version in the second quarter. Secondly, both production of the helicopters and subsequent support activities (flight crew training, spare parts procurement, etc.) must continue right on schedule to guarantee that the NH90s can successfully enter service in the respective navies of the customer countries. ■

(1) Nato Frigate Helicopter

(2) The weapons systems are currently undergoing tests, an enhanced radar system is being integrated, and the overall flight envelope for deck landings is being defined.



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NHUSH NH90 REAPING THE BENEFITS OF 10 YEARS OF EXPERIENCE

Helisim has remained a frontrunner in the flight simulation sector by offering high-quality equipment, training and services. If further proof were needed, the arrival of the Full Flight Mission Simulator (FFMS) for the NH90 has only strengthened the center's leading position.

ARTICLE: CHRISTIAN DA SILVA

"Www le began discussions back in 2006 to develop the simulator to progressively train pilots as the NH90s entered service, and to offer a training package to NHIndustries customers," explained Guy

Dabadie⁽¹⁾, the former CEO of Helisim. In July 2007, Helisim's shareholders gave the green light for the development of an FFMS for the TTH⁽²⁾ version of the NH90. Two years later, Helisim officially declared the FFMS was ready for training, and the first sessions were completed by the Australian Army in mid-October 2009.

Cutting-Edge Technology

Mr. Dabadie talked about what sets the FFMS apart from the rest: "It may be the same system that was developed for the PFI⁽³⁾ contract with Germany, but the FFMS has a major difference: Its extraordinary database of visual images." This exceptional resource uses extremely high-definition satellite images of Southeastern France to offer unparalleled representations of land and sea-based military missions. The database contains twenty times more data for the operational training zone than those currently used in Full Flight Simulators! The simulator has two separate tools: One for mission management, such as offshore and night vision goggles (NVG) flights, and another for tactical scenarios in which firing and target detection phases can be recreated. Both the pilot and the tactical coordinator can receive complete training on the simulator, and navy crews can learn to perform deck landings and a wide range of SAR missions, including night hover flights. The simulator is also equipped with helmets offering HMSDB visor displays of both NVG and panoramic FLIR⁽⁴⁾ images.

Personalized Services

The NH90 simulator is operational 20 hours a day, seven days a week, 51 weeks a year, for a total of more than 4,000 annual





To provide the most effective training possible, it is essential to use the most realistic cockpits, flight loops, movement simulations and image databanks available " Guy Dabadie

training hours. "The quality of Helisim's products and services are recognized throughout the world," insisted Mr. Dabadie. "Despite the intense competition in the market segments for the AS365 N2 and N3 Dauphin and the EC225, Helisim will continue to make headway by providing the high levels of training that its customers have come to expect."

As part of the five-year NAHEMA contract signed in October 2008 on behalf of the French defense ministry, Helisim will begin training pilots from the French Navy and the ALAT⁽⁵⁾ in early 2010. The agreement calls for 3,300 total hours of training, with an option for an additional 2,000. The Dutch Navy has also signed on to train its pilots. Discussions are also underway with countries such as Oman, Greece, Belgium and Spain. In related news, Helisim's shareholders are cooperating to create a comprehensive training package for the French armed forces as part of the joint NH90 training center. Bernard Josseaux, who heads Helisim's technical programs, and Alain Salendre, CEO of Helisim since October 2009, are optimistic about the future: "With its track record of proposing innovative cooperation models and the top quality training and tools it offers, Helisim's role in Eurocopter's training policy is likely to increase even further in future-particularly when it comes to new products such as the EC175." ■

(1) Guy Dabadie has stepped down as CEO of Helisim after ten years of service. Alain Salendre took over the reins on October 1, 2009. Mr. Salendre was one of the founders of the Franco-German Tiger Training Academy and then took over the functions of military advisor for Eurocopter's government programs.

- (4) Forward Looking Infra Red
- (5) French Army Air Corps



"THE ENTRY INTO SERVICE OF THE NH90 SIMULATOR DEMONSTRATES YET AGAIN THAT EUROCOPTER IS DETERMINED TO DEVELOP INNOVATIVE NEW MODELS FOR COOPERATION WITH DEFENSE ORGANIZATIONS AND CUSTOMERS. AS A MEMBER OF THE DEFENSE INDUSTRY, EUROCOPTER IS FIRMLY COMMITTED TO PROVIDING SUPPORT FOR ITS GOVERNMENT CUSTOMERS ALL AROUND THE WORLD, INCLUDING IN THEIR THEATERS OF OPERATIONS."

Lutz Bertling, President and CEO of Eurocopter

⁽²⁾ Tactical Transport Helicopter

⁽³⁾ Private Finance Initiative

CAMO⁽¹⁾

NEW OPERATIONAL SUPPORT

Eurocopter has assembled the new CAMO team to take on jobs that operators once had to perform themselves. Customers can now count on the extensive experience only a manufacturer can provide to guarantee airworthiness maintenance for their fleets.

ARTICLE: CHRISTIAN DA SILVA

he CAMO complies with the European Aviation Safety Agency's requirements as defined in the Part M European regulations. In September 2009, Eurocopter received authorization to perform airworthiness maintenance on behalf of helicopter operators for their aircraft in service (Subpart G of the Part M regulations), and can also perform airworthiness review inspections upon request to renew airworthiness certificates (Part M Subpart I). Up until now,

The CAMO certification was presented to Derek Sharples, executive vice president of Support & Services at Eurocopter, by Olivier Lenoir, representing the French agency GSAC (Group for Civil Aviation Safety).



these reviews were only performed by national civil aviation authorities.

The new services offered by Eurocopter now provide an alternative to operators who wish to outsource these operations. In addition, Eurocopter will be able to develop this new service with a "European seal of approval" as the Group has set up a structured organization based on timetested operational processes and a specially adapted quality system.

"Our goal is to expand these activities beyond our civil operators," explains Jacques Demassieux, who heads Eurocopter's External Assistance department. "We can now provide these services to any of our military customers who want to apply these same standards to insure the highest levels of safety for their fleets." The CAMO team members have a great deal of operational experience and are also well-versed in the ins and outs of the Eurocopter organization. These unique qualities make the CAMO the perfect interface between the helicopter operations and the definition work for the scheduled maintenance programs. It can also provide consulting services to help operators optimize maintenance costs. "Through the CAMO, Eurocopter can guarantee even better flexibility and responsiveness because we have complete control over the data generated by the service," summed up Mr. Demassieux. ■

(1) Continuing Airworthiness Maintenance Organization

Puma HC1 Life Extension Program

The contract signed with Britain's Ministry of Defence (MoD) on September 18 for the modernization of 28 Royal Air Force Puma HC1 helicopters between now and 2014 marks another important milestone in Eurocopter's drive to expand its business in the UK.

ARTICLE: REGINA LANGE



he successful bid was based on a work-sharing approach, combining the different skills within Eurocopter's worldwide network to provide a tailored solution for the specific needs of the UK MoD. Eurocopter UK has been entrusted with the general contract management and coordination of a vast array of suppliers, thanks to its local presence, knowledge of the UK market as well as the customer. This subsidiary will also be in charge of receiving, inspecting and dismantling the helicopters before transferring them to France and Romania, and will be responsible for integrating secret military components as well as handover



to the customer at the end of the upgrade process. Eurocopter in France, which has already participated in numerous Puma upgrade programs, will be responsible for development and industrialization and as well as for the manufacturing of four helicopters. The remaining 24 helicopters will be manufactured in Eurocopter Romania, Eurocopter's Puma competence center, which has a long and successful record as a high quality, low-cost maintenance, repair and overhaul (MRO) provider.

Success on Two Fronts: Upgrades and Future Support

The contract to upgrade 28 Pumas with new engines, a glass cockpit, new communications, navigation and defensive systems, and a digital autopilot, is significant on two fronts. As well as its considerable volume in the immediate term, it also represents a source of future additional revenue from support services for the helicopters, which are expected to remain in service until well after 2020.

Markus Steinke, managing director of Eurocopter UK, comments: "This contract

underlines. Eurocopter's ability to offer bespoke solutions leveraging the Group's worldwide skills, even for the most difficult market environments. I am grateful for the trust that the Royal Air Force and UK MoD have placed in our partnership."

► HELIBRAS: FULLY MODERNIZED ECUREUIL/ ASTARS

Two Ecureuil/AStars recently underwent retrofits at Helibras, Eurocopter's subsidiary in Brazil, to be upgraded to the B2 version. The first, an AS350 BA Ecureuil/AStar owned by Helisul, was delivered to the customer in July, and the second, an AS350 B Ecureuil/ AStar operated by the military police of Brasilia, was delivered in October. "Some of our customers prefer modernizing the helicopters they already own rather than replacing them with new ones—especially considering the current financial crisis," explains Julien Negrel, who is in charge of Support and Services at Helibras. "The retrofits offered by Helibras are the perfect solution, as they provide our customers with considerable added value over the long term."

An Unforgettable Journey

Eleven thousand kilometers by helicopter: A ferry flight to Vietnam is never a piece of cake, but the performance of the EC225 made it much easier to swallow. "EC225 Echo Yankee requesting takeoff, heading east. Destination Vung Tau..."

> e may never know the reply of the air traffic controllers at Marseille Provence International Airport, but we



ARTICLE: ALEXANDRE MARCHAND

can easily imagine their surprise on July 27, 2009: An EC225 requesting takeoff with Vietnam as its final destination! The Vietnamese operator Southern Service Flight Company (SSFC), which has been operating four AS332 L2 Super Pumas for many years now, reaffirmed its trust in Eurocopter at the last Paris Air Show when it officially confirmed its order for two EC225s. Like their predecessors, the new helicopters will be used in the oil and gas sector to serve platforms off the coast of Vietnam. There were two possible ways SSFC could receive its new aircraft: Delivery by Eurocopter, or via a ferry flight. In the end, the company chose the latter. "The ferry flight was a great opportunity for the SSFC pilots to perfect their training," explained Bernhard Brenner, president of Eurocopter South East Asia (ESEA), the Group's subsidiary in Singapore that is responsible for the Vietnamese market. "The SSFC pilots had already completed their training on the EC225 and received their qualifications in Marignane, but the hours they logged on the ferry flight were extremely rewarding as well." The EC225 is particularly well adapted to

> The ferry flight spanned three continents and totaled 11,006 kilometers. The EC225 logged 49 hours and 32 minutes of flight time, at an average speed of 146 kts.

such an exploit With two ferry tanks in the cabin and two external tanks, the EC225 can carry 3,300 kg of fuel at a maximum takeoff weight of 10,600 kg. The journey included several legs that will certainly go down in the books: Rhodes,

Greece—Alexandria, Egypt: 529 km across the Mediterranean in 2 hours 28 minutes; Riyadh, Saudi Arabia—Muscat, Oman: 1,125 km flown non-stop in five hours; and let's not forget Muscat—Karachi, Pakistan: 790 km of flight over the Indian Ocean in 3 hours 29 minutes. FRANCE

ulv 27, 2009

The first EC225 left Marignane on July 27. After 49 hours and 32 minutes of total flight time, it finally landed at the SSFC base in Vung Tau, east of Ho Chi Minh City, on 5 August. The helicopter covered 11,006 kilometers spanning three continents, at an average speed of 146 knots. The flight plan was followed down to the letter and not a single technical incident was reported. In October, the second EC225 successfully followed the same itinerary. ■



► THE VIETNAMESE MARKET

Eurocopter is well positioned to take advantage of the dynamic economy of Asia's next dragon. Vietnam's economy is booming and the future looks bright for the country. Some observers are already predicting a rapid development path similar to that of its Chinese neighbor. But the road will be long, and the country's helicopter market is no exception. Only 21 civil and parapublic helicopters are currently in service, and the market, which at present is split between Eurocopter and Russian helicopters, remains relatively closed. A true private or corporate market has yet to take hold, but times are changing—as the scheduled arrival of the first EC135 in 2010 attests. It will undoubtedly be the first of many. And the military market also has enormous potential. The 21 helicopters operating in Vietnam work mainly in the oil and gas industry. It was this sector that first allowed Eurocopter (Aérospatiale at the time) to enter the Vietnamese market nearly twenty years ago when the Service Flight Company (SFC) purchased four AS332 L2 Super Pumas to serve oil platforms in the south of the country. "SFC is the cornerstone of our presence in Vietnam," says Bernhard Brenner, president of Eurocopter South East Asia (ESEA). "The entry into service of the two new EC225s at Southern SFC (SSFC) will help ESEA expand its services to oil and gas companies, and even extend its reach beyond the country's borders." SSFC also operates two EC155s, and its sister company in the northern part of the country, Northern SFC (NSFC), received its first EC155 B1 last June as the first step in its fleet modernization efforts. A second EC155 B1 for search and rescue (SAR) missions is slated for delivery in 2010. Mr. Brenner also talked about the current strategic opening in Vietnam: "The Vietnamese have clearly demonstrated their willingness to work with Europe, and Eurocopter can benefit from the EADS development policy in the region⁽¹⁾. Our longstanding partnership with SFC is also an excellent starting point for future development. We now must review our development strategy in Vietnam to deal with the increasing number of helicopters entering service."

(1) Vietnam Airlines has ordered a total of 41 airplanes from Airbus, and signed a memorandum of understanding for twelve A350s. The airline has also been flying ATR aircraft since 1992, with a total of sixteen airplanes in service or on order with the company.

26th International Helicopter Forum

The German Army Aviation School in Buckeburg played host to the 26th International Helicopter Forum September 30 to October 1.

ARTICLE: REGINA LANGE

espite the current economic crisis, the forum, which has been organized regularly since 1961, attracted as much interest as ever this year-a fact borne out by the attendance of 300-plus helicopter specialists, industry representatives and civil and military helicopter operators from ten different countries. The two-day event included 32 workshops covering a wide range of topics, such as international air space, piloting at obstacle clearance heights, and new operational and logistical requirements for helicopters over the next 10 to 15 years. At the trade show held in tandem with the forum, thirty exhibitors presented the latest technological developments available on the market.

In his opening speech, Ralf Barnscheidt, senior vice president of Eurocopter Germany and President of the German Helicopter Center, explained how the forum seeks to promote "the dovetailing of user requirements with the many solutions our industry has to offer."

He then talked about the many challenges the industry faces in the future and called for an open dialogue between operators and industry representatives "to achieve superior performance with everdecreasing resources and accomplish the impossible against all odds."

Eurocopter is one of the main sponsors of the forum, which will be held again in Buckeburg on June 29 to 30, 2011.

In recognition of the long-standing ties between Eurocopter and the host town, Mr. Barnscheidt presented Reiner Brombach, Mayor of Buckeburg, with a BO105 that will soon be the talk of the town. ■

► THE HELICOPTER MUSEUM

The Helicopter Center is an association that promotes the activities of the Buckeburg Helicopter Museum. Run by Wolfgang Raschke, the center also works to further dialogue in the scientific community on topics related to helicopter technology. But that's not all: It also helps attract visitors to the museum, which welcomes 40,000 people each year. Housed in the oldest building in town, the museum first opened its doors to the public in 1971 with a collection of helicopters from the Aviation School. The only museum of its kind in the world, it now contains more than 40 helicopters and over 400 other exhibits, and is a veritable gold mine for amateur helicopter enthusiasts and experts alike.

Key figures from the 26th International Helicopter Forum: 300 experts from 10 countries, 32 workshops and 30 exhibitors.



CENTRAL AMERICA

HELICOPTER SAFETY SEMINAR

On October 9, Eurocopter held its first seminar in Central America to discuss ways to improve safety for helicopter operations.



ARTICLE: ALEXANDRE MARCHAND

95% had been involved in an accident, an incident or a risk situation. "Tools have been developed elsewhere to improve safety. The solutions exist, and Central America can and must adopt them," insisted the EHEST co-chairman before the audience. Jacques Delom, chief pilot at EMSA, played a pivotal role in the seminar. He urged his listeners to set up a regional steering committee to improve flight safety, and a target date in 2010 was agreed on. He also talked about the efforts Eurocopter is making in this area, such as the creation of the Heliescuela flight academy in Mexico and the development of lightweight, affordable flight recorders that are perfectly adapted to the needs of smaller operators. "All the helicopters in the Ecureuil/AStar family delivered by American Eurocopter will be equipped with the Alert Vision system," added

The studies couldn't be clearer: Central America, from Mexico to Venezuela, suffers from helicopter accident rates that are two to three times higher than those found in the rest of the world. "A true safety culture has still not been adopted by many operators, local aeronautics authorities are poorly coordinated, and the region still lacks the kind of framework that is needed to create a virtuous circle like we have in Europe and North America," explains Jean-Pierre Dedieu, former executive vice president at Eurocopter and the current co-chairman of the European Helicopter Safety Team (EHEST). "We thought the moment was opportune to organize a safety seminar with the help of our Mexican subsidiary EMSA so that local players would be more aware of the issues."

Around a hundred delegates were in attendance in Guatemala City when Mr. Dedieu gave his recommendations concerning the cardinal rules for flight safety: Invest in training for pilots and technicians, develop better means for factoring in the human element, and implement true safety management systems amongst operators. A survey conducted with the seminar's participants revealed that



Mr. Dedieu. "The Supplemental Type Certificate issued by the FAA should quickly be approved by aviation authorities in Central America, which will facilitate the installation of the equipment in the region." ■

ALFA HELICOPTER

A NEW EUROCOPTER CUSTOMER

The Czech operator Alfa Helicopter, a specialist in Helicopter Emergency Medical Services (HEMS), recently received its first EC135. *Rotor Journal* talks with Pavel Muller, the company's managing partner.



Could you briefly present Alfa Helicopter, its history, ambitions and values?

Pavel Müller ▶ Founded in 1991. Alfa-Helicopter Ltd was the first non-governmental provider of HEMS in the Czech Republic. We flew our first mission in 1992 and have so far completed 27,623 missions and 22,074 flight hours. For the past 18 years, Alfa-Helicopter has conducted HEMS flights from 3 Czech bases—with operations starting from a 4th base in January this year-providing coverage for a significant part of the Czech Republic. We first flew with a Mi-2 helicopter in 1992, and then modernized our fleet with Bell 206s and later 427s, and this year we took delivery of a new EC135. Our ambition is to provide a safe, stable service and we are

INTERVIEWED BY: LIONEL DE MAUPEOU

constantly looking for ways to improve this. Currently, we would like to increase night service coverage in the Czech Republic, and possibly start night vision goggle (NVG) operations. As for values, I appreciate our company's excellent team spirit and traditionally friendly and supportive environment. I believe that we are able to do a lot for our country, both in HEMS and also by supporting socially beneficial activities.

Alfa Helicopter has recently taken delivery of its first EC135 despite the fact that the company has always operated Bell helicopters. Can you explain this choice?

P. M. → We have been operating Bell helicopters since 1992. However, we have clearly seen what Eurocopter has been doing for HEMS providers. This is why we purchased the EC135. Moreover, the opportunity to share operational, maintenance and training experiences with Czech and international colleagues who operate this type of helicopter is of great value to us. Also, I shouldn't forget to mention that the EC135 is preferred by our medical colleagues, and we are glad to accommodate them.

What are your expectations of Eurocopter regarding Support and Services?

P. M. ► Eurocopter has undergone rapid

positive development in the area of aftersales support for its customers. The EC135 is a low-maintenance aircraft, and we feel that Eurocopter continues to make progress in this area. It is our belief that Eurocopter will provide us with the proper level of support to enable us to meet our commitments regarding the Czech EMS System. We can also rely on our colleagues from ÖAMTC with whom we have entered into a maintenance cooperation agreement. The Parts-by-the-Hour program allows for good operational and financial planning.

What is your point of view regarding the future of the EMS market in Eastern Europe?

P. M. ▶ I'm sure the importance of HEMS in this part of Europe will grow. But as HEMS is an expensive service, we can't expect rapid development. The trend is, nevertheless, obvious. It's a beneficial and necessary service. The provision of high quality medical care to the patient on-site, efficient use of the medical facilities network, and a quick response to changes in medical science and practices-are all more important aspects than cost. I should add that I don't see any direct relationship between the level of economic development and the level of HEMS provision. Instead, I believe in the influence of individual professional efforts



on the establishment and development of this service. That is why it is so important to support it.

You've recently been appointed to the EHAC Board of Directors. Could you briefly present this institution and tell us your expectations from this new position?

P. M. → EHAC is the trade association representing European organizations engaged in providing emergency medical services involving helicopters and air ambulance aircraft. Generally, I would like to work with my colleagues on fulfilling EHAC's aims, such as optimizing training, drawing up standards for training and equipment, and supporting research and results analysis. Moreover, at the forefront of our efforts has to be an active approach towards creating a suitable legal environment for our work. I would also be happy if I could add a small personal contribution, such as the improvement of cooperation between individual

providers and the further development of our relationship with our US colleagues.

In your estimation, for better EMS services what should the EASA improve?

P. M. It is important to keep in mind the real situation while working on legal aspects: New legal regulations must be created through a professional and constructive interaction between the authors and those subject to these rules. EASA, in my opinion, is moving in this direction, which is indeed positive.

Any development projects for Alfa Helicopter?

P. M. Currently, we are working on entering one more EC135 into service, setting up a fixed-wing aircraft air ambulance project, building a new base in Brno and extending the base in Olomouc. We also want to improve internal procedures, and crew training is and will continue to be an important part of our activities. So there are always things we can work on. ■



► DELTA SYSTEM AIR

Eurocopter relies in the Czech Republic on a major and historical EMS customer: DSA (Delta System Air). Created in 1992, the company owns today three EC135 T2, one EC135 T1 and one EC135 T2+ as well as one Ecureuil AS355 N and two AS355 F2 and performs mainly air rescue services in four EMS regions covering about a half of the country. In addition to this main business, DSA provides services such as Air Taxi, Flight Training and special mission flights thanks to a large fleet of helicopters and fixed wing aircraft. DSA a.s. is a Part 145-approved center performing repairs and maintenance on both helicopters and fixed wing aircraft. DSA a.s. is also an official Cessna representative for the Czech and Slovak Republic.



KOÇOGLU AVIATION

EMERGENCY MEDICAL SERVICES IN TURKEY

In May 2008, Koçoglu Aviation, which operates 11 Eurocopter helicopters, officially became an Emergency Medical Services (EMS) operator for the Ministry of Health in Turkey. Interview with Ugur Koçoglu, the director of Koçoglu Aviation.

INTERVIEWED BY: REGINA LANGE



What role does Koçoglu Aviation play in EMS activities in Turkey? Ugur Koçoglu >>

Koçoglu Aviation is the sole national Helicopter Emergency Medical Services (HEMS) provider in Turkey. We have built and operate our own hangars and stations in 16 cities with our own helicopters and personnel in medical, aviation, technical and administrative fields. In short, we play a central role in the Turkish HEMS system.

What factors led you to choose the EC135?

U. K. EC135 is an efficient helicopter that was built for EMS missions and which offers low operating costs. More than half of the EC135s in the world are used for EMS activities, which is a very solid and convincing argument.

What has been the most challenging part of developing the first HEMS service in Turkey in only two years?

U.K. → It has not been two years, but rather 10 months to be exact! We've experienced many challenges throughout this sleepless period: At first, there was a shortage of helicopters available for purchase. As a consequence, we were hit with a two million Euro fine by the Turkish Ministry of Health for not starting operations on time, and we also operated the whole HEMS system using our own resources for a period of three months. Then came one of the biggest global economic crises in history, putting us in an even trickier situation.

5 new EC135s were delivered and deployed in a record four months in 2009: the last machine was handed over to Koçoglu Aviation on August 13 in Donauwörth. In addition, 5 pre-owned EC135s and EC145s were put into service early 2009.



How did you manage to find highly qualified employees in such a short period of time?

U. K. → All of our pilots are from Turkish land forces and have a great deal of experience, as they were involved in hundreds of operations in the army throughout the '80s and '90s. Our medical personnel are from the Emergency Ambulance Systems of city administrations. Our technicians are the most experienced in Turkey: Skyline Inc., which we fully acquired in 2008, is an older helicopter maintenance facility than Turkish Airlines! We have the most qualified teams in all fields.

How do you see your future in the HEMS market in Turkey?

U. K. I see a brighter future in Turkey after 2010 in conjunction with the growing number of state and private hospitals, infrastructure projects and industry. I also expect the demand for EMS and SAR helicopters to rise, assuming we have a better economic environment for 2010 and 2011. We have already started serving neighbouring countries for maintenance, flight operations and training, with the aim of becoming the leader in those geographical areas. ■

At a Glance

Name: Koçoglu Aviation Headquarters: Ankara Director: Ugur Koçoglu

Type of activities: EMS, on/offshore, passenger and VIP transportation, maintenance, training

Number of bases: 16 cities throughout Turkey with 18 hangars

Employees: 250

HELI AND CO

AN OPERATOR

Already widely recognized for its aerial work, the Belgian operator Heli and Co has quickly made a name for itself providing media coverage for major sporting events.



ARTICLE: RÉGIS NOYÉ

he company got off to a flying start when it began specializing in television broadcasting for Belgium's most prestigious cycling races. Thibault de Coster, who is managing director of Heli and Co and one of its founders⁽¹⁾, takes a look back at his company's rapid success: "Thanks to our first two Ecureuils - a twin engine and a single engine - we were able to respond to an invitation to tender from the RTBF⁽²⁾, which awarded us our first contract three years ago. We also used the Ecureuils to fine tune our broadcasting equipment and bring it up to EASA standards." Each Ecureuil has a specific role: The AS350 BA retransmits ground images taken by cameras on motorcycles, and the AS355 N provides original aerial footage using the Cineflex gyro-stabilized camera system. An EC120B Colibri joined the fleet last January, and its recording equipment (rack, antennas, etc.) is currently undergoing certification. Heli and Co quickly expanded its activities outside Belgium to other sports such as Grand Prix automobile races (Spa Francorchamps and Nurburgring), triathlons in the European championship series (London and Madrid), and other prestigious cycling events such as the Eneco Tour of Benelux and the Presidential Cycling Tour of Turkey. The company provided aerial broadcasting services for 11 major events in 2009.

"The Ecureuil really makes the difference for this type of mission," explains Mr. de Coster. "The roomy cabin offers a lot of space for our equipment and technicians, and the Ecureuils are so reliable that we can leave for missions far from home in complete confidence. They also offer excellent performance in terms of speed, maneuverability and stability, which makes for a much more comfortable flying experience. That's something our crews really appreciate when they're on eight-hour missions that can often be quite hectic. These same qualities have also allowed us to use the AS355 N to lay high-voltage electricity lines in complete compliance with Belgian regulations, which are extremely strict." Mr. de Coster certainly knows what he's talking about: He has logged more than 10,000 flight hours himself, and in his role as chief pilot at Heli and Co he oversees training and testing. A new contract may be forthcoming that would add an additional single-engine and a twin-engine Ecureuil to the Heli and Co fleet. This "dynamic duo" would serve as the company's standard platform for the retransmission of sporting events. ■

Together with Antoine and Philippe Cornet de Ways-Ruart
Radio Television Belge Francophone: The French-language Belgian television and radio network.



Helicopters Fly to the Rescue in Asia

When a series of tropical storms ravaged a wide swath of Southeast Asia last summer, the helicopter demonstrated once again that it is one of the only effective search and rescue (SAR) means available to provide aid for disaster victims.

aiwan was the first location to be struck when Typhoon Morakot caused widespread flooding and a series of landslides on August 7, 2009. Nearly 25,000 people were affected by the storms. From August 8 to 18, ten Dauphins⁽¹⁾ from the National Airborne Service Corps (NASC) performed 123 SAR missions—often without respite, as they proved to be the only hope for many of the victims. Over eleven consecutive days, the helicopters performed a total of 51 fights and logged 93 flight hours, evacuating or rescuing 220 people and transporting 1,700 kg of food and water to survivors. The Eurocopter South East Asia team in Taiwan worked tirelessly to provide support for the operations. Its crews ensured line maintenance on the aircraft, drew up flight plans

ARTICLE: RÉGIS NOYÉ

and performed any technical inspections or minor repairs that proved to be necessary. To express his gratitude to the Eurocopter team members, Captain Tung, who commands the 3rd squadron of the NASC, presented them to President Ma Ying-jeou during his visit to Kaohsiung International Airport on August 16. It was only a few weeks later, on September 8. that a violent storm lashed the Chinese province of Hainan and crippled several boats at sea. Two fishing boats in difficulty 30 nautical miles southwest of the town of Sanya sent out distress calls during the night. It was then that China Rescue & Salvage (CRS), a department of the Chinese Ministry of Transport, set off on an extraordinary SAR mission.

Despite the atrocious weather conditions-

the strong winds had reached gale force 9 and the waves were over ten meters highan EC225 managed to hunt down one of the two boats through radio contact, but only one hour and twenty minutes after having taken off from Sanya. Flight conditions were extremely difficult (a cloud ceiling of 200 feet and 500 meters of visibility), but the CRS team still managed to hoist all 11 seamen from the ship up to the helicopter. When the crew members returned from the nerve-wracking flight 2 hours and 35 minutes later, they had only good things to say about the hoist and the automatic pilot, both of which functioned flawlessly. Without these systems, the rescue mission would have been quite simply impossible. (1) Two AS365 N1s, three AS365 N2s and five AS365 N3s

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CHILEAN INVESTIGATION POLICE

Ecureuil, A Formidable Ally in the War on Drugs

The two AS350 B3 Ecureuil/AStars operated by the Chilean Investigation Police have provided staunch support for the agency's unflagging war on the country's drug traffickers.

ARTICLE: BELÉN MORANT

n Chile, plantations of cannabis sativa (commonly known as marijuana) are now hidden away in some of the most inaccessible regions of the country. To avoid the suspicion of local authorities, drug traffickers now plant their crops high up in the mountains, and plantations have already been identified at altitudes above 1,800 meters. In 2002, the Chilean Air Police Brigade purchased the first helicopter in the organization's history-an AS350 B3 Ecureuil/AStar. With this formidable new arm at their disposal, the police were able to intensify their efforts in the country's war on drugs by detecting new plantations from the air. They added a second AS350 B3 to their arsenal

"For the Cannabis 2009 plan that we launched from March through December, one of our helicopters logged 166 flight hours. It allowed us to identify numerous plantations and confiscate some 70,000

in mid-2009.

plants," says Hans Eberl Agurto, who is in charge of the Air Brigade. "We estimate that 95% of the plantations can be detected from our helicopters."

The Air Brigade currently operates its two AStars mainly in central Chile, but plans on expanding the scope of its operations. In such a case, a third AStar would be a must: "This helicopter is perfectly suited to our needs," declared police chief Hans Eberl. "It offers excellent power, can adapt to changing weather conditions, is extremely maneuverable and has full multirole capabilities. The AStars operated by our brigade have also been equipped with ultramodern equipment (FLIR, searchlight, hoist, etc.) that has proven to be extremely useful during our missions."

The two helicopters are also used for many other missions: to transport dangerous prisoners, provide support for law enforcement operations, and for medical transport. Another key role they play in the war on drugs is to perform patrols to detect deliveries.

► EUROCOPTER CHILE

Eurocopter Chile is a wholly owned Eurocopter subsidiary that covers Argentina, Bolivia, Chile, Peru and Uruguay. Its staff of 65 is responsible for sales and after-sales services, training for technicians and pilots, helicopter customization work, and a customer hotline. A fleet of 220 helicopters is in service in the region. Eurocopter Chile will participate in the FIDAE International Air and Space Fair from March 23 to 28, 2010. Eurocopter products will be on static display, and certain models will also be performing flight demonstrations. The company will also participate in a series of conferences.

SPANISH GENERAL DIRECTORATE OF TRAFFIC KEEPING WATCH OVER SPANN'S ROADS



After having received two new EC135s this year, the government agency responsible for keeping watch over Spain's roads now has a fleet of 21 helicopters—all Eurocopter products. *Rotor Journal* talks with Jesús Guardia, who heads the Helicopter department at Spain's General Directorate of Traffic (DGT).

INTERVIEWED BY: BELÉN MORANT

he DGT now has 21 Eurocopter helicopters: 13 Ecureuils (4 AS355 NPs and 9 AS355 Ns), 6 EC120 Colibris, and two EC135s that we received in June and September 2009. We perform approximately 7000 flight hours each year for a wide variety of missions, but 80% of our work is traffic management and surveillance. During our traffic management flights, we monitor traffic conditions and transmit the information back to the command station via radio or images.

On our surveillance flights we detect infractions, which are then recorded and sent out as traffic citations to the offenders. We detect approximately 7,000 infractions each year with our helicopters, which represents an average of 3 to 5 traffic citations per hour of surveillance flight. The Wescam systems installed on our helicopters make it possible for us to automatically track a vehicle, record any infractions, note its license plate number and even see if the driver is talking on a cell phone! It is a key element for our surveillance missions.

The other 20% of our flights are for training, maintenance, aerial photography and for special operations concerning road traffic. For these types of mission, we monitor large gatherings such as protest marches, cultural and sporting events, or even transportation strikes.

But the main advantage of the helicopter is how dissuasive it is: A radar can only dissuade a handful of drivers, but a helicopter is visible for miles around and can affect many more drivers. This role is important because dissuasion and education are the two main areas that the DGT is focusing on in its current policy to reduce the number of traffic infractions.

The EC135s that recently joined our fleet are operating out of our main base in Madrid. The new helicopter offers cuttingedge technology, an increased payload, excellent visibility and a modular design that makes it possible to completely remove our operator workstation whenever necessary. We have only completed 130 flight hours on the EC135⁽¹⁾, but we have already been impressed by all it has to offer in terms of flight safety and specialized equipment." ■

(1) As of October 2009



34 IN THE COCKPIT



SOUTH TYROL

Since mid-2003, the operator Aiut Alpin Dolomites has saved countless lives with its EC135. This past summer alone, the organization performed no less than 287 rescue missions. *Rotor Journal* spent a day with two of the operator's pilots, Davide Subrero and Raffael Kostner.

iut Alpin Dolomites is an emergency response team that operates much the same way as firefighters: When an emergency call is received, it only takes a couple of minutes for the helicopter to fly off

to the rescue. A call comes over the radio: A woman has fallen on a mountain cliff. Pilot Davide Subrero is the first to climb aboard to power up the engines. Next to take their places are an alpine rescuer, a medic and the hoist operator. In just a few minutes the EC135 is over the Dolomites, but the climbing party is nowhere to be seen. "The directions we receive at the beginning of a mission are often quite scanty," explains Raffael Kostner, who has a dual role as both pilot and technical director at Aiut Alpin Dolomites. In this case it was a mountain guide who issued the emergency call, but the precise details that he initially provided somehow got lost in transit.

They finally locate the climbing party: 50 meters beneath the heli-

ARTICLE: DIRK VON NAYHAUSS

copter, the guide and the injured woman are huddled along a cliff ledge. No problem for the EC135—it can hoist descend more than 90 meters. The pilot remains concentrated on his task as the rock face is just a few meters away from the blade tips. Mr. Kostner opens the side door, grabs hold of the hoist hook and attaches it to his harness. The hoist operator lowers him down to the guide and the victim, whom he quickly equips with her own harness. Over the radio, he asks the flight crew to hoist him up with the patient, and just a few seconds later she is safe and sound in the cabin. They will set her down on the ground a short time later to be examined by a physician. "The guide will wait for a while and we'll go back to pick him up later," explains Mr. Kostner. "That way, we avoid taking any unnecessary risks."

If no helicopter had been available, it would have been necessary to descend the injured woman via rappelling, one small and excruciating step at a time. But the helicopter has changed all that, says



57-year-old Mr. Kostner: "This type of rescue mission used to take a whole day—sometimes even longer, and we would have to set up a bivouac on the cliff with the victim." Despite all the means at their disposal, the rescue team would often have no other choice.

It was these painful experiences that led Mr. Kostner and other alpine rescuers in the valleys around the Dolomites to found Aiut Alpin Dolomites in 1990. In the early days, the association was an independently-run rescue unit with its own emergency telephone number, but since 1998, its teams are contacted via the Bozen call center by dialing "118". Aiut Alpin Dolomites has an official status as "a nonprofit organization for the public good," and works through sponsors and volunteer rescuers. Only the pilots are salaried employees, and the medics are paid a daily rate. All the others are volunteers—like Mr. Kostner, who for twenty years now has been generously donating his time, and is often called on several days a week. He works in the restaurant industry to earn a living, but has found time to perform some 8,000 missions. This experienced rescuer is also an admirer of the EC135: "It is perfectly suited to rescue missions-especially in the mountains. Its cabin is large enough to hold two patients on stretchers and a four-member flight crew, and the hoist makes it much easier to reach victims." Mr. Subrero has also been won over: "This helicopter is a technological marvel," he says. "It offers high reliability at a reasonable price." After returning to its base in Pontives (near St. Ulrich in Groden), the EC135's blades have hardly stopped spinning before the next call has come in: A man in a small village in the Dolomites has a head injury. And the day is far from over: The crew will soon be off to locate a mountain biker who has had a heart attack, a woman walking in the mountains who has fallen and hurt her head, and last but far from least, a child with a high fever who has briefly lost consciousness. In these remote valleys, the helicopter often serves as an air ambulance when road transport is too slow: An hour-long ride by road only takes a helicopter about five minutes by air.





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