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.
05. Up Above
   Posters

08. Events
   Delivery of the First “Helicopter by Hermès”
   The EC175 is Powered Up
   Eurocopter at LAAD and EBACE 2009

10. At a Glance
   Eurocopter News

12. Innovation
   Helicopter Flight Data Monitoring
   and the Alerts Vision 1000 System

14. In the Spotlight
   Creating Unique Spaces

16. Featured Articles
   Eurocopter’s Environmental Policy

29. Landmarks
   Eurocopter: The Oil & Gas Market Leader
   Tiger and NH90 News

32. Services
   American Eurocopter: New Maintenance,
   Repair & Overhaul Services
   EC725: Periodical Inspection

34. Around the World
   Eurocopter Canada Celebrates its 25th Anniversary

36. In Operation
   Elitellina: An Italian Affair
   Eagle Helicopter AG: Lord of the Skies

38. In the Cockpit
   Australia: Black Saturday
Like any other power-driven vehicle, the helicopter must become more environmentally friendly. As part of the European Clean Sky project, Eurocopter is working on different ways to produce greener helicopters. Introducing active rotor control, optimizing the shape of main blades, making airframes more aerodynamic, reducing empty weight, thus improving the power to payload ratio, integrating a new, greener engine on light helicopters to slash average fuel consumption and reduce CO₂ emissions—these are some of the many projects we are carrying out to protect and preserve the environment. For many missions, low noise levels are a top priority when neighborhood-friendly helicopters are required. Just as for noise, our aircraft have set the standard in several areas, and will soon usher in further breakthroughs. In fact, we aim to raise the bar for environmental standards higher. But our environmental policy does not focus solely on the development of our products: It also integrates the requirements of the EU’s REACH regulation and the certification of our plants according to the strictest standards. Over the last ten years, the efforts made at our European production sites are a perfect illustration of our commitment to this continuous improvement drive: All our European plants have now received the ISO 14001 certification.

At the end of 2008, we created an Environmental Affairs department that is tasked with coordinating and harmonizing all the measures we take to protect and preserve the environment.

More than ever, we are harnessing our forces so that our products and services meet your expectations—particularly where the environment is concerned.

Lutz Bertling, President and CEO of Eurocopter
The Ecureuil Fighting the Flames

Often used on the edges of fires, or just after fires have started, the Ecureuil has numerous advantages for firefighting missions: It is easy to operate and extremely reliable.
68-year-old former stuntman Pierre Rosso jumped from an Ecureuil helicopter to set the world record for the highest bungee jump. Pierre jumped from a height of over 800 meters in front of the port of Monaco.
EBACE
At the European Business Aviation Convention & Exhibition (EBACE) in Geneva, Eurocopter unveiled the first Stylence version of the EC145. The latest addition to the Stylence family, the EC145 combines ergonomics and sophisticated technology to offer companies and business people fully equipped flying offices. The EC145 is the fifth Eurocopter helicopter in the Stylence range, which already includes the EC120, the EC130 and the AS350 B2, AS350 B3 and AS355 NP Ecureuil/AStar. Five Stylence versions of the EC145 have already been sold in Germany, Brazil, France, India and Luxembourg.

FALCON AVIATION SERVICES
Deliver of the first “Hélicoptère par Hermès”
The first Hélicoptère par Hermès was recently delivered to Falcon Aviation Services, an aviation service provider in the United Arab Emirates and the Persian Gulf. This luxurious version of the EC135 was unveiled at the Emirates Palace hotel in Abu Dhabi on May 4, 2009. Eurocopter and Hermès created this top-of-the-range product for business travelers. The helicopter will soon be operating in the region, offering passengers an atmosphere of comfort and sophistication.
EC175

POWER UP!
The first EC175 prototype was powered up right on schedule on April 6, 2009. After an initial assembly phase, and a few preliminary checks, this was a major step marking the start of the electrical and avionics ground tests, which will verify that the aircraft equipment and wiring are operating correctly. Finalizing the assembly and tests will take a few more months. The aircraft will then be transferred to the flight line, where the ground run-up phase can begin. The maiden flight is set to take place before the year is out.

EC725

LATIN AMERICA AEROSPACE & DEFENSE

During the Latin America Aerospace & Defense (LAAD) show in Rio de Janeiro, Brazil, from April 14 to 17, 2009, Eurocopter and its Brazilian subsidiary, Helibras, announced the introduction of the first helicopter flight simulator in Latin America. The simulator, which will be operational in two years, has been designed to represent the cockpits and missions of the EC725. It will be primarily used to train the pilots who will fly the 50 EC725s ordered by the Brazilian government at the end of last year. Helibras will build the EC725s at its Itajubá plant in the state of Minas Gerais.
On March 13, 2009, an SA365 C2 Dauphin s/n 5009 registered D-HOPE, celebrated 30 years of service for the police helicopter squadron (PHUSt) of the federal state of Lower Saxony. In 30 years, the aircraft has notched up almost 9,000 flight hours. The operator is equally satisfied with its second Dauphin, which has recorded 8,500 flight hours in 29 years of service. Both aircraft are ideally suited to the work of the Lower Saxony police, which took part in operations connected with the recent NATO summit by flying 20 hours of patrol duties with one of its helicopters. “Overall, we are very happy with the reliability of our two aircraft and with the technical support and help we receive from Eurocopter,” declared Police Chief Werner Ritterbusch, head of the squadron’s technical unit.

On March 26, 2009, the King of Spain, Juan Carlos I, paid his third visit to the Spanish Air Force Helicopter School at the Armilla Air Base in the province of Granada, where his son, Prince Felipe, trained to be a helicopter pilot. The King of Spain, who has 4,000 hours’ worth of flight experience piloting Puma, Super Puma and Cougar helicopters, flew himself to the base in an AS532 Cougar, which has a VIP configuration and belongs to the Spanish Air Force. His Majesty then flew over Granada for 15 minutes in an EC120 B Colibri — just enough time to appreciate the flight handling qualities of the lightest helicopter in the Eurocopter range. The ASPA aerobatic team, which has five EC120 B Colibris, then performed an aerobatic display to celebrate the visit of the Spanish Head of State.
The company Heli Travel Munich GmbH (HTM) has been operating a new EC135 P2i from the Emden commercial airfield since early April 2009. The aircraft flies to the Alpha Ventus offshore wind farm, 50 km to the north of Borkum Island.

The wind farm operator, Deutsche Offshore Testfeld und Infrastruktur GmbH&Co KG, is planning to build twelve 5 MW wind turbines, and is playing a pioneering role by being the first company to work in this sector. People and equipment are currently being transported to the wind farm’s transformer station, and construction of the first wind turbine should be completed by mid-June. From this date, the company HTM will perform lifting operations at sea over the generator building, which is almost 100 meters high.

“HTM chose the EC135 because of its superior single-engine performance and its multipurpose capability. We already operate eight Eurocopter helicopters,” explains Bernd Brucherseifer, operations manager at HTM.

**NATO SUMMIT SUPPORT AND ASSISTANCE FROM EUROCOPTER**

During the NATO summit in Strasbourg/Baden-Baden in early April, almost 70 helicopters from French and German law enforcement agencies were mobilized from March 26 to April 5 to provide aerial support to units on the ground, and to perform detection and prevention duties. Throughout this period, Eurocopter provided support and assistance to the different types of helicopters operated, and technical sales representatives were sent to the airfields in Lahr, Offenburg and Strasbourg to resolve any issues. The Donauwörth, Kassel and Motorflug maintenance centers were also put on alert, ready to step in and lend a hand if required. Assisted by strategic suppliers, teams from the Customer Service Center, the Logistics Centers (in particular Fiege) and the Maintenance, Repair & Overhaul department set aside inventories and did everything necessary to ensure that any parts were delivered to where they were needed within a maximum of four hours—day and night.

**AGENDA**

Over the next couple of months, Eurocopter and its subsidiaries will be participating in various air shows and events all over the world.

**AUGUST 13 TO 15, 2009**

- LABACE, Sao Paulo (Brazil)

**AUGUST 18 TO 23, 2009**

- MAKS, Moscow (Russia)

**SEPTEMBER 8 TO 10, 2009**

- ASIAN AEROSPACE, Hong Kong (China)

**SEPTEMBER 8 TO 11, 2009**

- MSPO, Kielce (Poland)

**SEPTEMBER 8 TO 11, 2009**

- DSEI, London (United Kingdom)

**SEPTEMBER 7 TO 13, 2009**

- JETEXPO, Moscow (Russia)

**SEPTEMBER 22 TO 24, 2009**

- HELITECH, Duxford (United Kingdom)

**SEPTEMBER 23 TO 26, 2009**

- AVIATION EXPO CHINA, Beijing (China)

**SEPTEMBER 23 TO 26, 2009**

- MONACO YACHT SHOW, Monaco (Monaco)
As part of its innovation policy, Eurocopter is offering new solutions to improve operational flight safety. The Professional Ground Station (PGS) software suite is already available for medium- and heavy-lift helicopters, and light helicopters will soon be equipped with the Alerts Vision 1000 system.
The Helicopter Flight Data Monitoring system, also known as the Helicopter Operation Monitoring Program (HOMP), is a preventive system for improving safety. Data recorded during the flight is systematically analyzed on the ground, and used to identify and quantify risks related to operations. The principle is based on the automatic detection of previously defined events. A more in-depth analysis then leads to the implementation of corrective actions through training programs or changes to operational procedures. For the moment, this type of program is not mandatory for helicopters from a regulatory point of view. However, it is systematically being implemented for Oil & Gas operations: Shell, for example, has already included it in its 7/7 program(2).

Eurocopter offers flight data recording and analysis systems that are adapted to each type of helicopter.

The PGS Software Suite: For the Dauphin and Super Puma Families

In addition to the flight data recording systems available as optional equipment, Eurocopter has been offering Dauphin and Super Puma operators the PGS software suite since mid-2008. The PGS suite encompasses Vision System, Analysis System and 3D Replay software, and is used to run the HFDM program. The suite was developed by the supplier Flight Data Vision, and finalized by Eurocopter. It has been validated by Shell and chosen by operators including Dancop and Heli-Union. “The idea is to be able to assist customers who want to run a flight analysis program based on solutions that are supported by Eurocopter, and to provide the resources and services to get them quickly up to speed with the system,” explains Luc Daures of the Eurocopter Technical Support Department. Luc is in charge of introducing the PGS software suite.

Alerts Vision 1000: For Light Helicopters

Co-developed with Appareo Systems, Alerts Vision 1000 has two functions: It constantly records high resolution images of the cockpit, as well as the aircraft’s GPS position, acceleration and attitude. This data can then be used for flight debriefings as part of training sessions, where the flight path is displayed and used as a teaching aid. This data set, which is analyzed on the ground via an easy-to-use web portal, provides the basis for the HFDM program.

Furthermore, because images are recorded together with sound in the cabin, Alerts Vision 1000 can also be used for investigative purposes, following incidents or accidents, just like a “black box” flight data recorder. The stand-alone system is compact, light and can be installed on any type of helicopter.

“The Vision 1000 certification is expected to come in the form of a Supplement Type Certificate (STC) in the United States later this year,” explains Frédéric Moha, Head of the Vision 1000 Program at the Commercial Helicopters Department. “The system will then be installed in the standard aircraft configuration for the AS350 B2/AS350 B3 AStar range in North America from 2010 onwards. This clearly shows Eurocopter’s determination to improve operational flight safety: The Fleet Safety Department and the Group’s subsidiaries are working tirelessly to achieve this goal.”

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1. Aircraft Logging and Event Recording for Training and Safety
2. Shell has introduced 7 key safety initiatives
On April 1, 2009, Eurocopter delivered the second EC225 in corporate configuration to the government of an African country. The customer wanted a top of the range VIP interior and entrusted the work to Avitrade, a company that specializes in aircraft decoration and interior fitting. The EC225 was the natural choice of helicopter because the customer was looking for an extremely reliable aircraft that was capable of making long journeys with a large carrying capacity.

**Reconciling Decoration and Directives**

Fitting out helicopters with a VIP configuration is difficult because the government’s wishes in terms of decoration must be squared with ever stricter aeronautical requirements. Avitrade is a Belgian company that was established in 1987. It specializes in designing solutions that perfectly balance VIP requirements with airworthiness rules. To do this, Avitrade relies on interior designers and decorators, as well as technicians who know the aircraft, technical certifications and safety directives like the back of their hand; They also know that the rules must be followed to the letter.

“The helicopter is the ideal complement to the private jet for VIP and government transportation,” explains Albert Bloem, CEO of Avitrade. “When a helicopter is fitted with a VIP layout, the aircraft interior is smaller and its weight restrictions are much stricter than they are for an airplane. You therefore need to study the project closely, before making the right decisions. With the EC225, we wanted to offer the customer a very high quality product. We explained our ideas to Eurocopter, whose teams were constrained by their manufacturing lead times, but they still worked very closely with us at every step of the way. The Eurocopter people were very open minded and didn’t balk at the new ideas that we came up with. The team spirit between us was fantastic: We were able to develop the product together and create something that is truly remarkable.”

**State-of-the-Art VIP Equipment**

To fully satisfy the customer, Avitrade and Eurocopter looked for flightworthy equipment that could be installed in the helicopter’s cabin. The inside of the VIP EC225 therefore has an espresso machine, china crockery, a Wi-Fi connection and a printer, which can be used by passengers as they fly over Africa at speeds exceeding 250 km/h. “We want passengers to feel as comfortable as they would do in their offices. Eurocopter also wanted to install more sophisticated, flightworthy VIP equipment, and we were able to do that without any problems.” The last word goes to Albert Bloem who cannot hide his satisfaction: “What we have created is a truly first-class VIP helicopter!”
Eurocopter has been taking measures to protect the environment for many years. The creation of the Environmental Affairs Department in November 2008 is now adding fresh impetus to this commitment. *Rotor Journal* met up with Olivier Jouis, head of the new department.

**Interviewed by: Monique Colonges**
What about Profit and Perception?
O. J.  

Profit will take on its full meaning from 2012 onwards, when Eurocopter will have to reduce its carbon footprint or buy increased quota allocations. This way of putting a price on environmental performance will provide a powerful reason for financing projects to reduce our carbon dependence. As for Perception, this area is crucial because this is where we make sense of what we do and add value to all our hard work. Eurocopter’s reputation is very good and must remain so. Perception is therefore about credibility and consistency: Walking the walk and talking the talk.

The environment is on everyone’s lips at the moment and people’s expectations are high. But Eurocopter is putting itself in a good position to integrate environmental performance in its economic model. We have a goal: We want to turn environmental restrictions into a competitive edge so that we stay world number one.

How has the creation of an Environmental Affairs Department upped the ante?
Olivier Jouis  

Eurocopter didn’t wait for the environment to become a pressing issue for society: A long way back, the Group was already making significant efforts to improve the environment, either by lowering noise footprints through the Fenestron, which then set the standard for the industry, or by complying with the strictest environmental requirements (ISO 14001). What’s new is the way the environment is perceived at Eurocopter: It is now considered a strategic tool, which is likely to be a springboard for growth, and will provide an opportunity to create value for our clients. But implementing this strategy will be a long and complex process: We have to re-examine all our procedures from an environmental point of view.

My mission can be summed up like this: To make sense of and add value to Eurocopter’s environmental performance. We won’t see results straightaway. This is a continuous improvement drive built around seven dimensions, the seven Ps: Product, People, Procurement, Process, Plant, Profit and Perception.

Which are the priority dimensions for Eurocopter?
O. J.  

Plant and Procurement, where Eurocopter has already laid the foundations through the ISO 14001 certification of its European sites and compliance with the EU’s REACH regulation. Concerning Process, Eurocopter wants to build an environmentally effective organization—the goal is to ensure carbon neutral growth by lowering our emissions and consumption of non-renewable resources. Product is the most visible dimension, where the expectations of our customers are the highest. To meet these expectations, Eurocopter has launched a major innovation program including important technological breakthroughs. With the support of EADS, we are exploring several avenues of applied research: hybrid engines, “greener” engines and active blades. But the cornerstone of everything we do is still People, because nothing will be achieved unless everybody gets behind these environmental goals. To reach our goals, environmental criteria will be included in the annual targets set for every member of staff.
Several avenues of research are being explored to reduce the noise levels and gas emissions of Eurocopter helicopters, all of which attest to Eurocopter’s environmental commitment. The Group has already played a pioneering role in reducing noise with the EC120, EC130 and the EC135, and is pursuing efforts to make its aircraft even quieter. One current project concerns a new rotor equipped with main blades whose shape has been optimized. Initial results forecast that gains could be comparable to those obtained between an aircraft from the 1970s/80s and the EC130. Another major project is active rotor control, which has been tested on an experimental EC145. This technology produces a simultaneous reduction in noise and vibration, but is more complex and will require maturing before it becomes economically viable.

Making airframes more aerodynamic is another avenue being explored. Reducing the fuselage’s aerodynamic drag means less power is required in flight, gas emissions are reduced, and mission performance is not affected in any way.

Like any other power-driven vehicle, the helicopter must become more environmentally friendly. As part of several programs, including the European Clean Sky project in particular, Eurocopter is working on different ways to produce green helicopters.

**GREEN HELICOPTER**

**Almost a Reality**

**ARTICLE: MONIQUE COLONGES**
The electrification of functions is also a promising area that will optimize the energy balance in each flight phase, resulting in less demand on the engines and reduced gas emissions. Electric actuators for the flight controls and auxiliary functions (landing gear, hoist, etc.) will replace hydraulic systems and completely eliminate the need for hydraulic fluids, which are toxic and not easily biodegradable. A new cabin heating system could also be introduced that does not use bleed air from the engines, significantly improving engine performance once again. Given the probability of another rise in the price of kerosene despite the present lull, optimizing helicopter energy by electrically powering the helicopter’s tail rotor and is currently being studied in anticipation of this rise.

Integrating a new, greener engine on light helicopters is another area with high potential, and a demonstrator (see article on page 22) is being built to prove the feasibility of this concept. The EADS Group as a whole is examining the use of alternative fuels. Studies have been carried out by and with engine manufacturers into second-generation biofuels. These biofuels could

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1/ Active rotor control, tested on an experimental EC145, produces a simultaneous reduction in noise and vibration levels.
2/ Electrification of functions will optimize the energy balance in each flight phase.
3/ Manufacturers and the regulatory authorities are looking at two ways in which the fleet is operated: Low noise flight paths and the most effective integration of helicopters in air traffic.

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Eurocopter must be environmentally responsible at every stage:

GREAT EXPECTATIONS

“Eurocopter has always endeavored to reduce the noise of its helicopters for environmental reasons. The development of our range has also led to major reductions in consumption and therefore gas emissions. We have to continue this work because climate change has become a major concern for everybody. We sense this concern in the requests from our customers, no matter how they operate our helicopters.

Our participation in European research programs and the creation of a group dedicated to environmental affairs show how seriously we take this issue. We’re looking at all the possibilities, including powering a light helicopter with a diesel engine, which could reduce CO2 emissions in flight by 40%.

To meet market expectations, we have to do more than just improve our products: Eurocopter must also be environmentally responsible at every stage from the design of new helicopters and their manufacture and operational use, through to the end of their service life. On request, we can already provide some of our customers with recommendations on how to operate their aircraft in the best conditions to minimize their impact on the environment.”

Dominique Orbec, market and development manager at Eurocopter
be used in helicopters with specially adapted engines. Beyond aircraft design, manufacturers and the regulatory authorities are also looking at how the fleet is operated: Low noise flight paths and the most effective integration of helicopters in air traffic are the avenues being explored here. What’s more, cockpits will soon offer pilots all the help they need to comfortably follow the recommended procedures, even in all-weather conditions.

“All of these actions are based on a long-term strategy implemented by Eurocopter,” explains François Toulmay, the man in charge of preparing European research programs at Eurocopter’s Technical Support department. “We want to see a significant and measurable reduction in our customers’ noise levels and gas emissions. The Emission Trading System will be operational from 2012 for certain types of aircraft and missions, and could seriously penalize operators that exceed their allowance. Operators will then be forced to buy gas emission allowances, whose price will inevitably soar.”

from design to manufacture.
Over the last 15 years, the automobile sector has made enormous progress with engines. As Christian Mercier, Head of the Integration Project at Eurocopter explains: “The automobile industry has developed a mature technology for us, and the power of some of the engines on 4X4s is similar to that of the engine used on the EC120. What’s more, certain types of engines can be run on kerosene, which is available at every airport in the world.” This study is a flagship project for Eurocopter. The target is to slash average fuel consumption by approximately 40% and to make a similar reduction in CO₂ emissions. Significantly reducing particle emissions and noxious gases like nitrogen oxide is another of the scheme’s goals. “The appeal of this project was therefore obvious,” continues Christian Mercier. “But there is a snag: Although the weight/power ratio has been significantly improved, we must develop a lighter engine.”

Several Challenges Ahead
In early June, engine manufacturers will be invited to bid to develop a new engine system for the Clean Sky project. And, to ensure that such an engine is economically viable, and produced in sufficient quantities, it could also be targeted at light airplane manufacturers.
But weight is not the only challenge: Eurocopter engineers must also work on reducing engine vibration and improving power transmission. The controllability of a helicopter equipped with a new engine system must also be checked, thermal problems must be resolved, the purchase price must be acceptable, and the engine must be 100% reliable.
As a Clean Sky partner, we should produce a demonstrator—an EC120 as it happens—equipped with a new engine system before the end of 2013.” Furthermore, EADS will be presenting a 3D conceptual model of a helicopter powered by a new engine system on its stand at the Paris Air Show.
The innovation will have two obvious advantages for customers. Firstly, reducing fuel consumption has a direct impact on the helicopter’s operating cost. Secondly, reducing CO₂ emissions is now a major concern for every operator.

As a Clean Sky partner, Eurocopter has agreed to produce a demonstrator—an EC120 as it happens—equipped with a new engine before the end of 2013.
Greener Sites

Since January 2009, all the Group’s European sites have received the ISO 14001 certification—the strictest environmental management standard. But Eurocopter wants to go further than the standard requires by introducing the “green site” concept.

We’re determined to make our industrial sites greener and have defined precise guidelines to do so,” explains Project Manager Philip Gottschalk. Seven areas of action have been identified: Enhancing the energy performance of sites, using environmentally neutral materials, reducing use of the heating, ventilation and air conditioning systems, using water sparingly, creating more green spaces, striving for zero waste and designing environmentally friendly buildings.

Tenders have been requested to construct new buildings at Eurocopter’s subsidiaries in Brazil, Malaysia and Singapore in line with the above recommendations.

Goals and Concrete Actions

Enhancing energy performance: Reducing the consumption of fossil energy by improving building insulation and developing the use of alternative sources of energy (geothermal energy).

Using environmentally neutral and safe materials: Introducing non-toxic materials, and locally-sourced materials to minimize the pollution caused by their transport.

Stabilizing indoor temperature: Improving window insulation or installing roofs covered in plants.

Using water sparingly: Avoiding any waste of this precious resource, and reducing the burden on the community, by using rainwater for everything apart from drinking water.

Sustainable plant management: Offsetting the plant’s environmental footprint by creating green spaces, for example, or by prioritizing low consumption cars when allocating parking spaces.

Striving for zero waste: Using recycled waste, for example, in manufacturing processes.

Designing environmentally-friendly buildings: Choosing construction sites close to public transport, or choosing the construction company according to “green” criteria.
Eurocopter’s dynamic environmental policy has been matched by ten years of concrete achievements at its various sites, showing how the Group is fully committed to its continuous improvement process.

**1999**

**AIR**  

**WATER**  
Upgrading and modernization of the detoxification plant and the installation for treating contaminated effluent before it is released into the environment.

**2000**

**WATER**  
The anti-pollution tank is built at the continuous water treatment plant.

**WASTE**  
Redevelopment of the sorting platform for special industrial waste.

**2001**

**WATER**  
Recycling rinsing water from galvanic baths to reduce the volume of effluent treated.

**ENERGY**  
Switch from wet cleaning to dry separation for the treatment of waste gas in the paint shops.

**2002**

**HAZARDOUS MATERIALS**  
Using frozen PRC sealant: Reduction of air emissions and quantities used; improved waste management.

**MANAGEMENT**  
Process launched to introduce environmental management system.

**2003**

**AIR**  
Preventive health care and safety at work: a new lubricant vapor extraction system is introduced for machine tools.

**2004**

**HAZARDOUS MATERIALS**  
A new installation for the storage of hazardous materials and special waste is introduced, in compliance with the strictest environmental requirements.
2005
**AIR**  Inauguration of the Large Blade Workshop in La Courneuve. The new buildings emit zero air pollution.
**WATER**  Water-based paint is introduced for civil programs using paint with a high solid content.

2006
**BEHAVIOR**  Launch of study for the Employee Commuter Plan at the Marignane site with the support of all the employees.
**WASTE**  Implementation of new waste management project, introduction and labeling of containers for each type of waste.

2007
**MANAGEMENT**  German sites certified according to the ISO 14001 international environmental management system standard.
**WATER**  Modernization of the electroplating waste water treatment system to comply with environmental requirements.
**ENERGY**  Installation of a heat recovery system in the military helicopter paint shop, leading to significant cost savings.
**WASTE**  Construction of the plant in Albacete, which complies with environmental restrictions, particularly for heating, ventilation and air conditioning.

2008
**MANAGEMENT**  The French sites and the Albacete plant receive the ISO 14001 certification.
**AIR**  Renovation of the surface treatment facility in Marignane.
**MANAGEMENT**  A contract guaranteeing continuous energy savings is signed with EDF as part of investments in the energy management system. An environmental campaign targeting selective sorting and waste reduction is also launched.
**HAZARDOUS MATERIALS**  Introduction of chromate-free sealants in the Airbus Doors sector.

2009
**AIR**  Launch of the Carbon Footprint project to measure Eurocopter’s impact in terms of CO₂ emissions.
**WATER**  Introduction of water-based paint for Tiger composite components.
**BEHAVIOR**  Launch of ISO 14001 training for all of the Group’s environmental ambassadors.
In 2008, the priority was to pre-register the substances used by Eurocopter. The accent was also placed on compiling a list of Substances of Very High Concern (SVHC) under REACH. Based on the Candidate List of the European Chemical Agency(2), this classification work identified the priority substances and established a plan of action to ensure their traceability all along the supply chain. Plans for the substitution of substances and future investments were also defined.

The goals for 2009 are different: This year Eurocopter must manage and build a durable supply chain, which will primarily require improved traceability of substances all along their life cycle (including, in particular, radioactive substances or even substances targeted by the RoHS(3) directive). The stated goals are to avoid disruption of supply and to provide customers and authorities with all the mandatory environmental information. Secondly, plans for the substitution of substances or future investments will be implemented for the Substances of Very High Concern identified on the list. To meet these two goals, the reference documentation must be made more comprehensive and integrated in the existing tools.

And representatives from the Purchasing, Procurement, Health, Safety & Environment departments, the Materials & Processes Laboratory, and the Design Office will join the REACH project where they will have more of a say in how things are run.

In the longer term, REACH is laying the groundwork for a broader goal, which is to eliminate every potentially hazardous substance used on helicopters. Eliminating these substances doesn’t just involve finding a substitute, but certifying that the substitute provides the same level of performance. This gives one an idea of the scope of the task and its impact on every step in the development of a product: From the earliest work at the Design Office (substituting the hazardous substances right from the get-go) through to customer delivery (informing customers where any potentially hazardous substances are located on the aircraft).

REACH is not therefore just about bringing substances into conformity with the regulations, but is providing the framework for a more strategic analysis of how helicopters are designed, built, sold and operated. This is a great chance for Eurocopter to put together a very persuasive sales offer and to turn a limitation into a golden opportunity.

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(1) Registration Evaluation Authorization and Restriction of Chemicals
(2) Regulatory list of the 14 Substances of Very High Concern
(3) Restriction of the use of certain Hazardous Substances in electrical and electronic equipment
A “carbon footprint” is the volume of greenhouse gas in metric tons of CO₂ emitted by companies, their activities, the combustion of fossil energies, transport, etc. From 2011, every company in France with more than 500 employees will have to measure its carbon footprint. Any company that exceeds its “carbon quota” will then have to purchase additional quotas on the “carbon market”. This is more than just an economic restriction—it firmly encourages companies to introduce strategies to reduce their carbon footprint. The regulatory pressure then takes on an economic incentive when bankers, insurers and investors are thrown into the mix. For the banks, would a borrower with “sober CO₂ emissions” be considered a lower risk? And, for investors, would a company reducing its carbon footprint be a sign of greater profitability?

For the moment, nothing is known for sure, but it seems that clear and unequivocal indicators are required. Eurocopter is getting ready. A work group of representatives from the different divisions of EADS has been set up: Its task is to define the right calculation perimeter and methodology. The challenge lies in the gathering of data as it is not just the Group’s processes that are concerned. Two types of CO₂ emissions must be calculated: Direct emissions (related to Eurocopter’s activities at its production plants) and indirect emissions (related to the activities of its customers and suppliers). The study is currently focusing on four areas (see inset) and partial simulations have already been conducted. The simulations have revealed that employee transport is a significant factor and one that Eurocopter has already addressed by helping to open a railway station near to one of the Group’s plants and by paying for some or all of the monthly season ticket fee for employees who come to work by train.

Once the carbon footprint measurement and calculation perimeter are in place, the next target will be to identify ways of reducing the footprint. Static footprint measurement will then give way to dynamic strategies to reduce carbon emissions.
The "Green" Team

Major cultural shift starts within: This is why Eurocopter’s environmental policy is based on a network of environmental specialists in every department and at every site.

The environment is a factor that concerns every aspect of the company: From Production and the Design Office, through to Finance and Human Resources. To “spread the word” throughout the Group, Eurocopter is counting on local experts in their specific field. A group of environmental ambassadors, consisting of 80 people, liaise between the operational sectors and the Environmental Affairs Department. These relays, who will receive special training throughout 2009 (see inset), are weaving an “environmental web” at Eurocopter’s main European sites. In 2010, the web will be extended to all of the Group’s plants outside Europe.

In-Depth Knowledge of the Field

The members of the network are nearly all supervisory staff with in-depth knowledge of the field—an irrefutable asset for identifying and implementing environmental action plans that are adapted to their sector of activity. They understand, for example, how to include measurable, attainable and personalized environmental criteria in the individual goals for each manager. They also know which environmental criteria must be included in each evaluation, project or investment review.

The environment network meets regularly to keep abreast of the latest regulatory changes, and to share best practices and feedback from the field concerning incidents, accidents, and process modifications with a direct impact on the environment.

Environmental training sessions have been organized in France, Germany and Spain for Eurocopter employees. For several years, foremen in Germany have been receiving regular training concerning the storage of dangerous substances. In France, approximately 1,000 workers received training in 2008 on environmental issues, and how the ISO 14001 certification is awarded and maintained. In Spain, almost 100 employees received training on the dangers of handling certain chemicals. Finally, a special eco-design course for the Design Office will inform engineers which materials and processes are the least harmful to the environment. This will allow engineers to design helicopters that are environmentally friendly throughout their life cycle.
With 45 aircraft delivered last year, Eurocopter has become the leading helicopter manufacturer on the oil and gas market. Over the last few years, the rise in the price of oil has caused the market to boom, which has, in turn, led to the increased use of helicopters for exploration and production activities. What’s more, many oil companies have called for fleets to be modernized to meet the certification, equipment and performance criteria fulfilled by the new generation of helicopters. Slowly but surely, the quality and diversity of the Eurocopter range has won over new customers and end users alike. The EC225, in particular, is the most popular aircraft in the 19-seat category, with 17 helicopters ordered by oil and gas operators in seven different countries. Up 40% on the previous year, 39 orders were taken on the oil and gas market in 2008—another record in itself.

(1) Calculation of market share based on registration of helicopters

Article: Belén Morant

AN EXPERT OPINION

This success is due to many things. Firstly, we have carefully taken on board the recommendations from oil and gas operators in order to meet their safety, performance and comfort requirements. For example, the fact that we have launched a network of ten or so training centers and flight simulators shows that we have made a significant response to the need to improve operational safety. Furthermore, we have a very wide range of helicopters, which can perform every type of mission throughout the world. The worldwide success of the EC225 confirms that its qualities are now widely recognized, making this aircraft the reference in its category.

Thierry Mauvais, business development manager for the oil and gas segment at Eurocopter
Over the last few months, several major events have taken place in the Tiger and NH90 programs.

Article: Regina Lange
On February 5, 2009, the German NH90 TTH’s 1,000th flight hour was celebrated at the Bückeburg base. To mark the event, which was attended by 200 members of the German Army and Eurocopter representatives, two NH90s kicked off the celebrations by flying over the base. Lieutenant Colonel Fendt, Head of Pilot Training, then officially announced to Colonel Plüß that 1,000 flight hours had been recorded. In his speech before the troops, Colonel Plüß described the NH90’s first operational missions, and stressed the importance of the helicopter for the future of the German army. Stefan Emig, head of the German army’s helicopter corps program, then summed up the program’s achievements, before speaking of the future. “The 1000th flight hour is above all the result of first-class cooperation between Eurocopter and the forces of the German Army,” explained Marcus Zimmermann, head of the NH90 maintenance corps at Eurocopter. “Since the first NH90 was delivered to the German army, we’ve been providing technical and logistical support from Bückeburg—with our 11 tech reps working full-time at the base.”

NH90 IN THE TTH VERSION IN BÜCKEBURG

1,000 Flight Hours

The national type certificate for the NH90 in the TTH version and in the IOC+ configuration for the German Army (the TGEA variant) was issued in March 2009. The Bundeswehr Technical and Airworthiness Center for Aircraft (WTD 61) awarded the certification following the issuance of the qualification in March 2008 and NAHEMA’s confirmation of the declaration of conformity in November 2008. A major step has therefore been cleared for the TTH-version NH90 to be delivered in the IOC+(1) configuration to the German Army Aviators School in Bückeburg. Four aircraft have been ready since March for final acceptance by the customer. The first delivery is scheduled for early July.

(1) Initial Operational Capability

SPAIN

Tiger Retrofit

Following the first deliveries of the HAP-E version of the Tiger to Spain for the training of Spanish crews, Eurocopter and OCCAR(1) signed an agreement on January 31, 2009, to retrofit six HAP-E Tigers into HAD-E versions. In total, the Spanish Tiger fleet will include 24 HAD Tigers (18 production and 6 retrofitted helicopters). The retrofit layups will be performed by Eurocopter at its Albacete plant once the production HAD-E Tigers are delivered.

(1) European Organization for Joint Armament Cooperation
American Eurocopter (AEC) is significantly expanding its maintenance, repair and overhaul capabilities (MRO) for gearboxes, rotor blades and airframes—enabling the subsidiary to offer improved service and shorter turnaround times to customers while generating new business opportunities.

AEC has made major investments in material, equipment and technical personnel at its headquarters in Grand Prairie, Texas, which includes upgrading one of its multi-function dynamic component test benches to perform EC135 main gear box overhauls, enhancing the blade shop’s capacity to accommodate EC135/EC145 main rotor blades, and adding an all-new heavy maintenance, repair and inspection activity for airframes. With the introduction of EC135 main gear box overhaul and repair, AEC is now able to service all EC135 dynamic components. The EC135 is a particular focus for AEC, as there are more than 200 EC135s flying in the United States. Previously, only the main gear box’s manufacturer, ZF Luftfahrttechnik (ZFL), could work on its product in Germany—creating a single-source repair situation that was a point of concern for the US operator base.

To accommodate AEC’s EC135 main gear box maintenance and overhaul activity, the company made heavy investments to upgrade the largest of its multi-purpose dynamic rotor component test benches. In addition, it acquired additional tooling, stocked up on the equivalent of spares for 20 gear boxes and had its personnel trained in Germany. Another AEC initiative is the growth of its already-extensive blade repair capabilities, adding the EC135 and EC145 main rotor blades to its portfolio. The repair capacity will be important for the already-substantial US EC135 fleet, and will position the subsidiary to support the U.S. Army’s 345 UH-72A Lakota Light Utility Helicopters being phased into service through 2016.

The third element of its MRO expansion is new airframe inspection, maintenance, heavy repair and conversion activity. AEC invested in a highly sophisticated airframe jig that allows this work to be performed in Texas for the AS350, AS355 and EC130—and which includes rebuilds for aircraft involved in hard landings and accidents. AEC’s strategy to grow its MRO activity is the result of close cooperation with Eurocopter in Germany and France. The common goal is to increase Eurocopter’s U.S. market share for MRO while also offering more reactive services to its customers. “American Eurocopter is now better able to respond to the needs of customers throughout the United States—and is also positioned to help support the global Eurocopter fleet,” explains Gilbert Sales, the company’s senior director of repair and overhaul.
Successful Periodical Inspections for the EC725

Eurocopter has cleared another milestone with the successful completion of the periodical inspections for all of the French armed forces’ EC725s(1).

Article: Alexandre Marchand

At the time of going to press, the 14th EC725 to undergo its periodical inspection is being delivered to the customer at Marignane. The periodical inspection currently occurs every two years or 750 flight hours in the life of the aircraft. All of the French armed forces’ EC725 fleet has now passed this time limit. “The 14 periodical inspections were performed on time and on schedule, demonstrating Eurocopter’s ability to successfully manage the cycle of inspections, despite the fact that the EC725 is a far more complex aircraft than the Super Puma,” explains Jean-Marie Trabucco, Customer Support Manager for the French government. While the grounded aircraft underwent their periodical inspections, other tasks were also performed, including completion work, finalization of development work, and any customer repair requests. The first periodical inspection was completed in December 2007 within the contractually specified lead time of three months (excluding the additional operations mentioned above). The lead time was progressively reduced between the first and 14th aircraft, and an even more drastic reduction in downtime is expected for future layups. “We’re going to optimize the planning for the periodical inspection by emphasizing the importance of a pre-inspection at the customer’s facilities, a month before the layup starts,” continues Contract Manager Robert Bellone. “We will then be able to prepare the provision of parts and organize deferred work more effectively. Roughly two weeks after the work starts, a layup meeting will also accurately review the progress on the aircraft.”

An even more radical reduction in the periodical inspection cycle will be achieved by organizing the layup directly at the customer’s premises as of the second half of 2009. “The goal is to obtain a cycle of just seven weeks by working with a bigger team and by delegating part of the ground and flight tests to the military customer,” concludes Jean-Marie Trabucco. The express periodical inspection is more costly than a conventional layup, but ensures greater aircraft availability. Jean-Marie Trabucco describes the effect of this improved availability: “It’s almost like having a 15th aircraft in the French armed forces’ fleet.”

FRENCH DEFENSE MINISTRY
Five EC725s Ordered

At the end of April, the French Defense Ministry ordered five additional EC725 helicopters from Eurocopter as part of the economic recovery plan introduced by the French government in December 2008. The five helicopters are scheduled for delivery between late 2010 and early 2012. The contract, which was awarded by the French Armament Procurement Agency (DGA), also includes the related support services. The French armed forces are already operating fourteen EC725s. Since December 2006, the aircraft are being used to support France’s NATO operations in Afghanistan, performing emergency medical services, search & rescue missions and escort duties, and providing humanitarian aid.

(1) Dubbed “the Caracal” by the French armed forces
ECL is responsible for some 540 aircraft based all over Canada and is therefore an integral part of the Canadian helicopter industry. Last year, 60% of sales of single-engine aircraft in Canada were made by ECL—placing the company well ahead of its nearest rival. ECL delivered 27 helicopters in 2008, including its 500th delivery: The first AS355 NP AStar to be operated in Canada.

The subsidiary’s 150 customers perform every type of helicopter mission in a country where, during the winter months, the helicopter is the only viable means of transport in the frozen provinces of the north. ECL has a 62%, a 75% and an 80% share of the aerial work, corporate transport and parapublic markets respectively, and the company’s most prestigious customers include the Coast Guard (16 BO105s delivered since 1985) and the Royal Canadian Mounted Police, which has been operating a fleet of AS350 B3 ASTARS since 1998. Furthermore, two Canadian customers have already ordered a total of nine EC175s.

In terms of resources, Eurocopter Canada now has a 12,600 m² plant in Fort Erie, which is home to 240 highly-qualified employees. The company provides extensive sales and support services, including assembly activities, repairs, training, retrofits and conversions. ECL also fits out interiors, distributes spares, and installs equipment and optional equipment. Finally, ECL is the only Eurocopter subsidiary that produces composite structural components for the assembly lines in Europe. Eurocopter Canada’s current sights are set on developing sales of the latest generation of twin-engine aircraft (the AS355 NP AStar and the EC135) in Canada, and conquering the military market. So after twenty-five years, the company is still going strong! 

EUROCOPTER IN THE SOUTHERN CONE
PRICELESS PRESENCE IN PERU

On April 2, 2009, the company Servicios Aéreos de Los Andes accepted its second AS350 B3 AStar in Lima. A third aircraft of this type is set to be delivered in December 2010 to the same operator, which specializes in high mountain operations, aerial work and passenger transport services. The AS350 B3 AStar was selected because of its ability to fly in ‘hot and high’ conditions—making it the perfect helicopter for the Andes. Eurocopter’s subsidiary in the Southern Cone, which covers Argentina, Bolivia, Chile, Peru and Uruguay, called a meeting in Lima, to which the civil aviation authorities from Chile, France and Peru were invited. The aim of the meeting was to promote the development of the region’s helicopter industry. European airworthiness and certification criteria were explained to assist the certification, operation and maintenance of Eurocopter aircraft in the Andes region, which will, in turn, create the right conditions for developing air transportation and lead to extremely high standards of flight safety.

STAT MEDEVAC

EC135/EC145 Simulator Training

In April 2009, STAT MedEvac, a Pennsylvania-based air medical operator and long-standing customer of American Eurocopter (AEC), signed the first long-term commercial contract to receive pilot training in the new EC135/EC145 full motion flight training device (FTD), which is now in service at AEC’s expanded training center in Grand Prairie, Texas. This full-motion FTD is part of AEC’s commitment to enhance its training solutions to support the flight safety requirements of helicopter operators. The FTD was recently certified by the Federal Aviation Administration (FAA) as a Level 6 FTD with motion, and will be FAA-approved later this year as a Level B full flight simulator (FFS). STAT MedEvac’s crews will use the simulator at Grand Prairie to practice emergency procedures in highly realistic conditions in a safe environment and improve their in-flight decision-making capabilities.
An Italian Affair

Since opting for the Alouette and Lama more than 30 years ago, Elitellina has always placed its trust in Eurocopter helicopters. The company has been operating an all-Eurocopter fleet since 1977 and recently bought two AS350 B3 Ecureuils.

ARTICLE: BELÉN MORANT

On April 15, Elitellina took delivery of two brand new AS350 B3 Ecureuils in Marignane. The event meant so much to the Italian operator that most of the 25 people in the company, including the executive committee and CEO Guido Fratta, came to accept the two new aircraft from the Eurocopter range.

Elitellina was set up in 1977 to perform passenger transport and aerial work in the high mountains. The company now has six Eurocopter aircraft—five AS350 B3s and a Lama—that carry out a wide range of missions in the Central Alps. Elitellina has considerably expanded in the last few years to keep up with the market, and heliski and firefighting activities have been added to its traditional hoisting missions. The company also offers a first-class passenger transport service.

The company’s 30-year faith in Eurocopter helicopters is all the more noteworthy given the fact that Elitellina operates in AgustaWestland’s homeland. Questioned on three decades of close and productive partnership, Signor Fratta is full of praise for the Group: “We’ve always been very happy with our relationship. Eurocopter trains our pilots and technicians, and the results have always been excellent. Elitellina’s main purpose is to offer completely safe services in the mountains—hence the fact that we leave nothing to chance. In 30 years, we’ve never had the slightest problem with our fleet.”

Managing Director Enrico Carraro continues: “We also love Eurocopter helicopters and want to operate a uniform fleet. The AS350 B3 Ecureuil is an extremely versatile and technically advanced helicopter.” And Elitellina doesn’t just talk the talk: In 2010, a further AS350 B3 Ecureuil will join the fleet. The Italian operator is also a Part 145 approved maintenance center.
EAGLE HELICOPTER AG

LORD OF THE SKIES

On March 31, the Swiss operator Eagle Helicopter AG took delivery of its new AS332 C1 Super Puma. Rotor Journal met up with company CEO Stephan Speiser and his wife, Anne.

**Why did you choose the Super Puma?**

**Stephan Speiser** We wanted to find a bigger helicopter to replace the K-Max and complement our two AS350 B3 Ecureuils. We looked long and hard at our options, and finally chose the Super Puma.

**Anne Speiser** Two factors were decisive in our choice. Number one: The first-class support provided by the Eurocopter sales team who helped us find the aircraft best suited to our needs. Number two: The fact that Eurocopter is always listening to its customers. Because of its high useful load, the Super Puma is particularly well suited to the aerial work we do in the high mountains, which is often performed in very tough weather conditions.

**How did you get ready to operate this new aircraft?**

**S. S.** Our pilots and technicians underwent training and we contacted customers to let them know about the additional services that we would soon be offering. On our website, we set up a “flight plan” for all the operations that we are going to perform. The flight plan is continuously updated to tell our customers when and where a mission can be organized.

**A. S.** Of course, this kind of reorganization does cause some disruption for a small outfit like ours. But we can rely on our highly motivated and dedicated employees.

**What type of work will your Super Puma do?**

**A. S.** Our main activity is heli-logging. But, thanks to its higher useful load, we can also use the Super Puma to install cell phone antennas and telephone lines. Passenger transportation is another service we can offer.

**Where do you see the greatest growth potential?**

**S. S.** In firefighting and installing high voltage power lines, for example. More and more, the demand for firefighting capabilities is coming from other countries in Europe, such as Spain and Greece, and we estimate that 70% of our work in this field should come from abroad.

**FACT SHEET**

- **Name:** Eagle Helicopter AG
- **Creation:** 2002
- **Employees:** 36 (including 5 pilots)
- **Management:** Stephan Speiser, CEO; Thomas Bolzli, Managing Director; Christian Gerber, Swiss German Project Manager; Rolf Strübni, Financial and Administrative Director
- **Bases:** Zweisimmen and Sion
- **Type of Activities:** Passenger transport (taxi flights, heliski, panoramic flights), aerial work (heli-logging\(^1\), special heli-logging operations\(^2\), construction/ removal, firefighting).

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\(^1\) Transporting wood by helicopter
\(^2\) Cutting and transporting live trees
In the wake of the 2009 Victorian Bushfires, Australian Aerospace continued its relationship with local charity the Day of Difference Foundation, donating money towards the charity’s purchase of equipment to treat burn patients in Victorian hospitals. As news of the bushfires reached Australian Aerospace, the organization banded together to provide meaningful relief and support on behalf of the company’s Australian and New Zealand staff.
The 2009 Victorian Bushfires brought devastation and destruction on a scale never before experienced in modern Australia. The “Black Saturday” firestorm claimed a harrowing 173 lives, destroyed over 1,800 homes and burned more than 400,000 hectares of regional Victoria’s landscape.

The impact of Black Saturday surpassed both the 1983 Ash Wednesday and 1939 Black Friday fires. Local families and communities will feel the tragic effects of the fires long after their homes, schools and workplaces are rebuilt. The response effort to contain and control a natural disaster of this size and scale requires a number of roles to be undertaken.

Eurocopter products played an active part in responding to the crisis. The flexibility of Eurocopter’s helicopters saw them engaged in the front line battle to fight the fires from the air, operate rescue missions airlifting residents in the fires’ paths and providing media footage that was beamed across the country and around the world.

Moorabbin, Victoria based Microflite exclusively flies Eurocopter helicopters. With their experienced pilots, central location and mix of cutting edge machinery, Microflite were well positioned to assist during the natural disaster.

Jonathan Booth, Managing Director Microflite is understandably proud of the role his team of pilots and helicopters took during the horrific event: “Microflite committed five helicopters to the response and containment effort. For all the Microflite pilots involved, the Black Saturday memories will remain with them forever. Black Saturday was a terrifying experience for many Victorians. However, out of the tragedy and turmoil came stories of great courage and bravery. We met many unique Australians during the response.

In particular, Microflite relocated a mother and her baby who survived the fire in Narbethong. The overwhelming look of relief on the mother’s face as she realized they were both safe will forever be etched in our minds. At an operational level, Microflite’s support to Australia’s emergency teams placed Eurocopter’s products at the frontline to the bushfire response. Our EC120 Firebird 316 provided aerial support to one of the Victorian Government’s firebombing helicopters. A couple of our choppers also supported media in getting footage and images out from the disaster area, helping to tell the story and raise awareness around the world. We sincerely hope this contributed towards the unprecedented groundswell of public donations immediately following Black Saturday.”

Education and preparation can go a long way towards minimizing the impact of bushfires in Australia’s dry landscape. However, the sheer size and magnitude of Black Saturday had never before been encountered. During times of natural disaster, Australian Aerospace and Eurocopter remain ready to actively work with emergency response teams to fight the threat, relocate survivors and restore a sense of normality into the lives of those affected.
Scientists surveying Antarctica. Oceanologists researching sealife. Maritime authorities tracking oilspills. Firefighters controlling bushfires. All of them rely on Eurocopter helicopters as essential equipment. Quiet, safe and dependable. Equipped with advanced sensors. Coupled with lower fuel consumption and reduced gas and particle emissions. When you think environmental conservation, think without limits.

When it comes to protecting the environment, no other helicopters go further.