## Eurocopter innovation puts the focus on safety with the world's first flight of a hybrid helicopter combining an internal combustion engine and an electric motor

Marignane, France, October 04, 2011

Eurocopter has successfully tested a hybrid helicopter that combines a turboshaft internal combustion engine with an electric motor for a world premiere, marking a new milestone in its innovation roadmap that opens the way for further enhancements in rotary-wing aircraft safety.

For this initial breakthrough in exploring the hybrid concept, Eurocopter is using the supplemental electric system to increase maneuverability of a single-engine helicopter during an autorotation landing – which is performed by helicopters in the event of a main engine failure.

The demonstrator helicopter is a production version of Eurocopter's highly successful light single-engine AS350, which has been equipped with a supplementary electric motor. In the event of an engine failure, the electric motor provides power to the rotor, allowing a pilot to control the helicopter very easily during the descent to a safe touchdown. The next step is to bring this concept to maturity and evaluate its implementation on Eurocopter's series production helicopters.

"Eurocopter's research and development efforts are used every day to push the frontiers by increasing helicopter safety and performance for the benefit of our customers, and we are proud to have brought the first helicopter equipped with an internal combustion engine and electric propulsion system to flight," said Lutz Bertling, Eurocopter President and CEO. "Hybrid propulsion is an important element of Eurocopter's innovation roadmap in developing the next generation of helicopters. It offers new opportunities for improvements in safety, along with the potential for reducing fuel consumption and emissions."

The AS350 hybrid demonstrator has its highly compact electric motor and lithium ion polymer battery installed in the center area of the helicopter. Electronic controls enable precise deployment of power delivered by the electric motor during the period of autorotation.

Eurocopter's AS350 is one of the most successful helicopters, with the more than 4,000 aircraft in service worldwide having logged more than a million flight hours as of 2010. It excels in hot conditions and very high altitudes, holding the record as the only helicopter to have landed on top of Mount Everest.

## About Eurocopter

Established in 1992, the Franco-German-Spanish Eurocopter Group is a division of EADS, a world leader in aerospace, defense and related services. The Eurocopter Group employs approximately 17,500 people. In 2010, Eurocopter confirmed its position as the world's number one helicopter manufacturer in the civil and parapublic market with a turnover of 4.8 billion Euros, orders for 346 new helicopters and a 49 percent market share in the civil and parapublic sectors. Overall, the Group's helicopters account for 33 percent of the total worldwide civil and parapublic fleet. Eurocopter's strong worldwide presence is ensured by its 30 subsidiaries and



participations on five continents, along with a dense network of distributors, certified agents and maintenance centers. There are currently 11,200 Eurocopter helicopters in service and some 2,900 customers in 147 countries. Eurocopter offers the largest civil and military helicopter range in the world.

For more information, please contact:

Stéphane Chéry Tel: + 33 (0)4 42 85 60 51 Mob: + 33 (0)6 23 93 71 23 stephane.chery@eurocopter.com

Julie Guérin Tel: + 33 (0)4 42 85 59 64 Mob: + 33 (0)6 22 00 34 73 Julie.guerin@eurocopter.com

Melanie Wolf Tel: + 49 (0) 906 71 57 39 Mob: + 49 (0) 151 17 12 63 18 melanie.wolf@eurocopter.com Pascale Fleury Tel: + 33 (0)4 42 85 62 38 Mob: + 33 (0)6 32 54 05 02 pascale.fleury@eurocopter.com

Gloria Illas Tel: + 33 (0)4 42 85 58 89 Mob: +33 (0) 6 31 47 08 99 gloria.illas@eurocopter.com

Priscilla Yip Tel: +65 6592 7217 Mob: +65 9660 7040 Priscilla.yip@eurocoptersea.com.sg

Website: www.eurocopter.com

