

Press Release – Omega technical contribution

OMEGA DELIVERS KEY TECHNOLOGIES FOR SOLAR-POWERED FLIGHT AROUND THE WORLD

Biel/Bienne, Switzerland, May 21, 2007. Swiss watchmaker Omega has announced the development of a performance simulation and testing system (system test bench) for the Solar Impulse project led by Bertrand Piccard and André Borschberg, whose objective is to develop and build an exclusively solar-powered airplane and to fly it day and night by 2009, and around the world by the end of 2011. Known for its precision-technology watches, the development of innovative timekeeping equipment and its historic role as Official Timekeeper of the Olympic Games, Omega has been deeply involved together with the Group Team in the development of the airplane's engine and of the system test bench used to test various components of the Solar Impulse airplane. A member of Swatch Group, the world's largest watchmaking Group and a leading provider of advanced technologies to a variety of industries, Omega contributes its high-profile brand presence, communication support and essential technologies developed by Swatch Group specialists in the areas of automation and the development of test equipment to the Solar Impulse project.

Solar Impulse System Test Bench

The system test bench is an electromechanical system designed to enable the Solar Impulse development team to simulate and test the performance of the airplane's electrical systems at the conceptual stage, i.e. before production of the respective components begins. In developing this bench, the OMEGA team made use of previous experience in Swatch automation and testing of hybrid cars. The team will test the airplane's electrical propulsion systems, including the batteries, the electric motors and the connections to the propellers. In particular, as full-sized solar panels for the airplane are not yet available for testing, the system test bench will allow the Solar Impulse team to simulate the performance of the solar panels destined to provide the sole source of energy to the plane's four electric motors. The tests will determine the effective energy delivered by the solar cells to the motors. The team will also analyze the performance of the motor under normal conditions and at temperatures ranging from -40°C to $+55^{\circ}\text{C}$; battery capacity; and the performance of the airplane's controls.

Hybrid Drive Propulsion Technology

Omega's support is of critical importance to the Solar Impulse project, in particular with respect to the airplane's electrical propulsion system. Omega is providing the technological expertise that enabled the development, initiated in the 1980s, of the Swatchmobile hybrid propulsion system, along with the services of one of the experts who oversaw development of the innovative automobile's hybrid-drive engine. The Swatchmobile was conceived - far ahead of its time - as a hybrid vehicle that combined a thermal motor with four electric motors powered by a rechargeable battery. The numerous technological challenges facing the Swatchmobile development engineers to conceive and implement totally innovative solutions in terms of propulsion electronics, electric motors, battery management and security. It is this

invaluable expertise and exceptional experience that Omega has made available to the Solar Impulse development team.

Omega Technology for Solar Power

Development of both the Solar Impulse electric motor and the related system test bench require extraordinary technological expertise and innovative solutions. As a Main Partner, Omega is pleased to support the Solar Impulse project through sponsorship funding and directly through the contribution of technology and the relevant expertise of experienced personnel, a combination that makes this contribution unique.

OMEGA

Luxury Swiss watchmaker OMEGA is a member of the Swatch Group, the world's leader watch manufacturer. Founded in 1848, the prestigious brand has been synonymous with excellence, innovation and precision for more than 150 years. It is the only watch brand associated with the conquest of space, having provided from 1969 the "Moon Watch" – the one and only watch worn on the Moon. OMEGA continues to make technical and watchmaking history with innovation in areas as diverse as sports timing, precision technology, and design. Most recently OMEGA became a Main Partner and a Technology Provider of Solar Impulse, a project to circumnavigate the Earth with a solar-powered aeroplane. Through numerous partnership agreements in sports ranging from athletics to golf, swimming and yachting, OMEGA has actively supported the ideal of perfection and precision. Since 1932 OMEGA has been the Official Timekeeper of 22 Olympic Games and will again serve as Official Timekeeper of the Beijing 2008 Olympic Games, the Vancouver 2010 Olympic Winter Games, and the London 2012 Olympic Games.