Eurosatory 2012: defense and security innovations from Sagem

Paris, Eurosatory exhibition, June 11, 2012

At the Eurosatory 2012 international defense show and exhibition (Paris-Nord Villepinte), Sagem (Safran group) is showcasing its latest defense and security solutions, designed to meet the evolving needs and expectations of all customers. Sagem draws on operating feedback to design its new solutions, along with breakthrough technologies in both the civil and military sectors, and innovative architectures.

Sagem is teaming up with fellow Safran group company Morpho, a security specialist, to spotlight its Eurosatory 2012 offering in the following areas: air-land combat, mounted and dismounted combat, drone systems, high-performance infrared imagers, guidance, support, missile seekers, combat vehicle modernization, optronics for defense systems and homeland security.

Sagem will be unveiling the following products at Eurosatory 2012:

**JIM-UC.** The new uncooled (UC) version of Sagem’s multifunction infrared binoculars is based on an uncooled infrared sensor. Designed to meet the needs of front-line units, it combines day/night vision, rangefinding, laser pointer, compass, GPS and data transmission in a single tactical package. Light and ergonomically designed, JIM-UC incorporates the lessons learned from JIM family products already deployed in theaters of operation. A total of 8,000 JIM binoculars are now in service or on order, including 6,500 in France.

**Sword Light and Sword Medium.** These two scopes were developed around an uncooled infrared sensor. They are designed to meet the modern warfighter's needs, through its compact shape, light weight, ease of use and accurate night firing over the rifle's entire range. Already in production since early this year, Sword Light and Sword Medium have been tested on the assault rifles M4, IA2, HK416 and AK-47, and the marksman rifles HK-417 and Dragunov.

**Multifunction Euroflir Console.** A workstation that maximizes the capabilities of Sagem's Euroflir gyrostabilized optronic pod, by integrating high-performance mapping control, AIS marine transponder receiver and distress beacon detector. It also offers a mission planning and replay function, which can also be used for training exercises. This system allows aircraft to be used on both military and homeland security missions, for example.

**Lukeos,** vehicle driving aid and local vision. A multi-sensor system with uncooled infrared detectors, Lukeos gives drivers high-quality panoramic vision, and gives the crew an image of their immediate surroundings, to ensure self defense day or night, even in bad weather. The system’s design also means that it satisfies the "see and avoid" function for helicopters and drones, while providing navigation aid
and protection for merchant ships.

**Epsilon**. A new family of land navigators. Epsilon is designed to cover all tactical applications, from logistic to observation vehicles, as well as telecommunications via "satcom on the move". By incorporating advanced hemispherical resonator gyro technologies, these navigators are extremely compact and offer exceptional reliability.

**Sterna™**. A compact precision target location system, Sterna helps forward observers accurately locate ground targets and designate them for land and air supports. Marking a breakthrough over existing technologies, Sterna features a patented North Seeker from Sagem. Sterna is a "high first round accuracy" system that can be used in conjunction with multifunction binoculars from Sagem or Vectronix AG (JIM, Mosquito, Vector). Sterna was developed by Vectronix AG, the Swiss subsidiary of Sagem.

**An "Innovation" space** on the Sagem stand underscores the company's dynamic innovation strategy concerning technologies and designs, contributing to the dynamic performance of the French defense industry. This space is showcasing the Cristal hemispherical resonator gyro, which paves the way for the design of highly reliable, extremely compact inertial navigation systems; image fusion equipment; a multispectral camera and several demonstrations of real-time image processing functions in Sagem products along with a battlefield simulation system for tomorrow's dismounted combat operations; and a twin-mode seeker for future antitank missiles. Sagem will also be spotlighting the prototype of a fuel cell for infantry soldiers, an invention that won the 39th IGA Chanson award this year.

Sagem's solutions in optronics, navigation and tactical information systems have been chosen for major land and air-land defense programs in France and around the world. These include soldier modernization programs (Sagem is prime contractor on the FELIN integrated equipment suite), armored vehicles (Leclerc, VBCI, BMP3, Caesar, Archer, etc.), the Rafale and Mirage 2000 fighters, Caracal, NH90 and Tiger helicopters, and tactical and theater drone systems.

***

**Sagem**, a high-tech company in the Safran group, holds world or European leadership positions in optronics, avionics, electronics and safety-critical software for both civil and military markets. Sagem is the No. 1 company in Europe and No. 3 worldwide for inertial navigation systems (INS) used in air, land and naval applications. It is also the world leader in helicopter flight controls and the European leader in optronics and tactical UAV systems. Operating across the globe through the Safran group, Sagem and its subsidiaries employ 7,500 people in Europe, Southeast Asia and North America. Sagem is the commercial name of the company Sagem Défense Sécurité.

**Sagem (Safran group)**
Communication