

Safran showcases solutions that address emerging maritime challenges at Euronaval 2018

From October 23 to 26, 2018, Safran Electronics & Defense will be showcasing its innovative and proven naval and naval aviation solutions at the Euronaval 2018 trade show and exhibition. Building on seven decades of constantly refined expertise, in conjunction with navies from around the world, Safran Electronics & Defense offers products and services with the reliability, autonomy and versatility needed for successful naval missions. Spanning navigation, deterrence protection, intelligence and even coercion, the company delivers solutions tailored to each customer's needs. From surface ships and submarines to drones, its mission is to guarantee operational and strategic technological superiority on, under or over the world's seas.

SURFACE SHIPS SOLUTIONS

Maritime environments are increasingly areas of conflict, and are seeing the emergence of so-called "asymmetric" threats, in particular originating from non-state players: terrorism, piracy, trafficking, etc. Navies are therefore facing dangers of all kinds, not only at sea (speedboats, jet skis, etc.), but also in the air (drones) and along coasts (high-speed launches, missiles, rocket launchers). Safran Electronics & Defense has therefore developed a complete range of optronic (electro-optical) systems featuring latest-generation sensors, to give operating units an effective solution for all seasons.

VAMPIR NG, PASEO XLR and VIGY ENGAGE: FIRE CONTROL AND SURVEILLANCE



AWD

With **Vampir NG**, Safran Electronics & Defense provides a **very-long-range infrared surveillance system** that gives naval combat systems an advantage in reaction times. Featuring automatic tracking and detection of multiple targets, the Vampir NG covers a 360° field-of-view with a single infrared imager. Easy to integrate, it immediately communicates with the ship's Combat Management System (CMS), to tell it what type of threat has arisen (surface, air, conventional or asymmetric).

The **PASEO XLR**, designed for frigates, corvettes or aircraft carriers, offers **long-range detection, identification and engagement of threats**, day or night. Thanks to its optional automatic sector tracking function, it can detect potential threats at very low altitude and can also be easily integrated in naval artillery systems. It was selected by the Naval Group in 2017 for five medium-size frigates to be deployed by the French navy, with launch slated for 2023.



Daniel Linares;

For smaller vessels such as rigid-hulled inflatable boats (RHIB), or coast guard patrol boats of different types, Safran Electronics & Defense developed the **VIGY ENGAGE**, a **medium-range sighting and surveillance system**. Light and modular, the VIGY ENGAGE includes a cooled thermal channel, a daytime channel and a laser rangefinder. Its main advantage is its ability to take very clear images in all weather conditions, including at high speed and on small boats.

SUBMARINES SOLUTIONS

Guaranteeing national independence means being able to assess threats and anticipate changes in the global geopolitical environment. Navies therefore need their own assessment, decision-aid and even deterrence systems.

OPTRONIC MASTS AND RADARS



Ewan Lebourdais

Safran Electronics & Defense outfits a number of submarines, both conventional and nuclear, in France and worldwide, with innovative and stealthy solutions. The company's Series 30 includes **attack optronic masts (AOM)** and **search optronic masts (MOV)**, all non-hull penetrating, which stand out because of their low-observability, perfectly integrated and compact multi-sensor design, and high-definition optronic modules covering the spectrum from visible to infrared. Safran Electronics & Defense now offers the "stealthiest" attack mast in the world. Used in conjunction with sophisticated image processing algorithms, these modules feature a high degree of autonomy, a real advantage for safety at sea, self-protection and the classification of threats. The Series 10 CSR LPI radar mast includes all the functions of a conventional navigation radar, with maximum stealth. Used together or separately, these products contribute to the success of submarine intelligence and deterrence missions, by providing reliable and discreet solutions in terms of navigation, self-protection, identification and targeting.

NAVAL AVIATION SOLUTIONS

Given the intensification and diversification of seaborne threats around the globe, navies and fleet air arms are in the midst of a race for technological superiority. With countries naturally wanting to defend their national interests – both territorial and economic – they are seriously considering the digitization of their navies, and especially the introduction of drones in their fleets. Safran Electronics & Defense is the sole French player in tactical drones with proven expertise, a position it has established over a number of years. Today, it is involved in the French navy's drone programs.

PATROLLER™: THE LONG-ENDURANCE MULTI-SENSOR, MULTI-MISSION DRONE



Safran

Developed and produced in France by Safran Electronics & Defense, the **Patroller™** is a long-endurance, multi-sensor drone system, designed for surveillance and intelligence missions within the context of foreign deployments and homeland security missions (including the surveillance of borders and coasts), while maintaining complete discretion. Offering endurance in the 20-hour class, the Patroller can carry a payload of up to 250 kg, with a ceiling of 6,000 meters and an airspeed between 100 and 200 km/h. Its communication range of 200 km can be extended to 1,000 km with a Satcom datalink.

EUROFLIR™ 410: A NEW, VERY-LONG-RANGE OPTRONIC SYSTEM

The **Euroflir™ 410** new generation is a very long-range Electro-Optical System (EOS) enabling the Navy forces to cover the large spectrum of missions they face day after day: fight against piracy, trafficking of all kinds and terrorism. This system offers unrivalled observation and designation capabilities by day/night and in all weather conditions. The Euroflir™ 410 equips the Patroller™ UAV and has been designed to fit all current and future platforms used by the Navy such as: NH90 NFH, Panther Mk2, HIL, Falcon 50 and AVSIMAR.