

London, 15 September 2015

## **Finmeccanica – Selex ES launches Falcon Shield Counter-UAV system**

*System is the first of its type to offer an 'RF management' electronic attack option for operators*

- Falcon Shield enables an operator to effectively and reliably find, fix, track, identify and defeat the security threat posed by low, slow and small drones.
- The integrated solution includes Finmeccanica - Selex ES's unique electronic attack capability to take control of remotely piloted drones and land them safely.

At DSEi 2015, Finmeccanica – Selex ES unveiled its Counter-Unmanned Air Vehicle (C-UAV) system, named Falcon Shield. Falcon Shield provides users with a multi-spectral threat sensing capability and, uniquely through the integration of an electronic attack capability, a multi-layered threat response. This response introduces a capability to take control of a remotely-piloted drone and land it safely (a command-link control intervention capability) prior to the need to defeat the threat by simple jamming or kinetic solutions. Consequently, the potential for undesired collateral effects is greatly minimised. Falcon Shield is derived from Selex ES's heritage associated with the provision of short-range defence solutions against a variety of airborne threats.

The rapid proliferation of micro/mini UAVs, also known as drones, is recognised globally as a growing potential threat to national and commercial security. Easy to make, cheap to buy, simple to fly and hard to detect, commercially available drones are one of the most quickly evolving technological threats to both military and civilian environments. Falcon Shield addresses this threat by providing users with a rapidly deployable, scalable and modular system to find, fix, track, identify and defeat the potential threat.

Falcon Shield makes use of Selex ES's high-performance, passive electro-optical and electronic surveillance sensors, combined with scenario specific radar. These provide a fully integrated threat detection, identification and tracking capability which enables Falcon Shield to operate in environments that range from wide area through to high-clutter, 'urban canyons'.

Incorporated within the Falcon Shield system is Selex ES's unique electronic attack capability that provides users with the ability to disrupt or take control of the threat. Because Falcon Shield is inherently flexible, this electronic attack capability can be complemented by the integration of additional, optional kinetic effectors.

Ease of use, resulting in low user fatigue and reduced user training needs, is provided through use of the Selex ES Vantage Command, Control & Situation Awareness (C2SA) framework. This delivers an intuitive user interface and automated threat detection & tracking functions, including automated handover between detection and identification sensors.

The flexibility of the Vantage C2SA framework also enables the Falcon Shield system to be readily tailored and interfaced with existing customer specific security solutions as well as the customer's security infrastructure.

## **Falcon Shield at DSEi**

Elements of the Selex ES Falcon Shield integrated solution on display at DSEi include:

- **NERIO-LR**  
NERIO-LR is a Long Range, modular Electro-Optical (EO) Surveillance, Threat Acquisition (STA) and Reconnaissance system designed to satisfy a broad range of static and mobile customer requirements. NERIO-LR integrates the Selex ES high-performance Hawk Thermal Imaging camera as part of a fully flexible payload configuration together with a gyro-stabilised director mechanism that enables capability, cost and performance to be optimised according to specific customer needs.  
**Located at:** Land Zone N10-190
- **NERIO-ULR**  
NERIO-ULR is an Ultra-Long Range, modular EO STA and Reconnaissance system designed to satisfy a broad range of static and nomadic customer requirements. NERIO-ULR integrates the Selex ES very high-performance Horizon HD Thermal Imaging camera as part of a fully flexible payload configuration together with a gyro-stabilised director mechanism that enables capability, cost and performance to be optimised according to specific customer needs.  
**Located at:** Land Zone N10-190
- **Observer 100**  
OBSERVER is family of rapidly deployable, self-sustaining and networked surveillance deployment platforms to provide users with a flexible platform for operational delivery of an elevated surveillance and security capability.  
**Located at:** Land Zone N10-190
- **Vantage Framework & HMI**  
Vantage is a Command, Control & Situation Awareness (C2SA) application that is based on today's state-of-the-art Geographical Information Systems providing a flexible and intuitive system integration framework and intuitive user interface.  
**Located at:** Land Zone N10-190
- **Horizon HD**  
Horizon HD is a High-Definition, high sensitivity Medium Wave Infra-Red (MWIR) Thermal Imaging camera that employs Selex ES' patented, cooled focal plane array technology to affordably meet customer's very high-performance surveillance and identification requirements.  
**Located at:** Finmeccanica stand S5-110