

Adding the quiet dimension

Ensuring the integrity and security of national and international territories in today's complex and shifting threat environments is challenging.

Special mission aircraft such as AEW&C, MPA and other ISR assets are one of the most important national assets when achieving that goal.

The Sirius Airborne EW suite is a cutting edge system based upon Saab's latest generation of common core multi-domain EW systems. It utilises ultra wide band digital receivers, Artificial Intelligence (AI) for robust signal processing and analysis; as well as interferometer technology for precise geo-location of emitters in a multi-threat environment.

Sirius Airborne EW Suite provides Electronic
Support Measures (ESM) supporting a C4I system
with enhanced situation picture and decision
support through passive long range detection and
emitter identification. The self protection capability
of the Sirius Airborne EW suite includes a multispectral warning capability integrated with both
passive and active countermeasures.

This highly capable suite adds another dimension in airborne surveillance enabling significantly improved decision support and the ability to stay one step ahead, while keeping a safe distance.

Enhanced situation picture and self protection is ensured by:

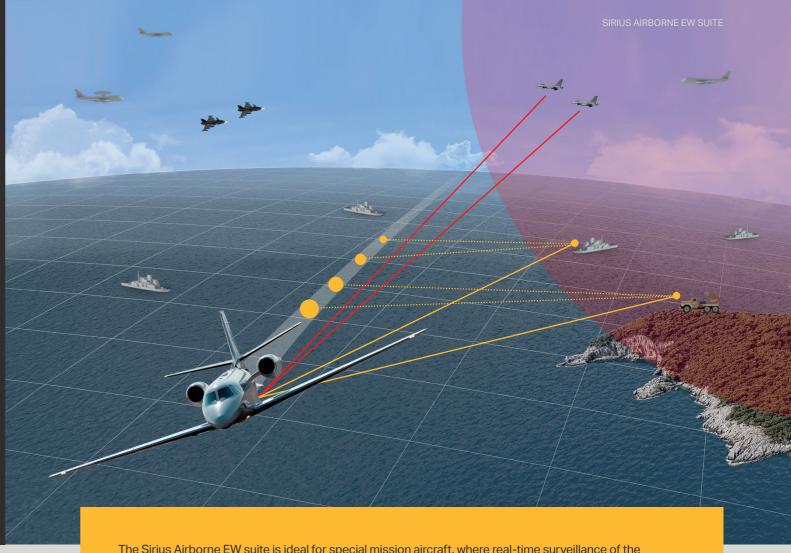
- Long range intercept of emissions
- Accurate direction finding and geo-location
- Automatic classification of emitting signals and support of platform identification
- Early warning to avoid threat areas
- Detection of imminent threats and automatic selection of countermeasures

Capabilities:

- Real-time intercept and classification of emissions for enhanced situation picture
- Stand-off airborne intercept/intelligence collection at all altitudes
- Electronic Order of Battle (EOB) confirmation
- Support to tactical signals intelligence
- · Extensive recording and playback
- Automated pre-planned recording of signals
- Provision for data link to/from the aircraft to ground
- Support for mission updates, receive external tracks or remote operation
- Post mission tools for signal and mission data analysis
- Fusion of data from external sources

System characteristics:

- Scalable EW system having a small footprint for easy installation
- Digital software defined system for easy upgrades and future growth potential
- Intercept of radar, communication, IFF, data links, navigation systems, AIS, ADS-B and more



The Sirius Airborne EW suite is ideal for special mission aircraft, where real-time surveillance of the RF-spectrum is key to create situational awareness in the air, land and naval domains.

In a dense signal environment, this comprehensive system-of-system solution provides early detections, accurate emitter classification and precise directional findings/geo-location of RF emitting sources.

- High DF accuracy interferometers for robust and selective intercept of agile signals in a complex signal environment
- Dedicated ESM HMI with advanced monitoring and analysis tools
- Detection of Low Probability of Intercept (LPI) signals
- Artificial Intelligence (AI) for optimal processing of signals
- Open interfaces to C4I and support systems
- Cyber secure platform
- Import/export to and from national EW database

Self Protection Suite

The Self Protection Suite (SPS) seamlessly integrates radar warning, laser warning and missile approach warning with countermeasures. The SPS defensive aids controller provides the selection and initiation of chaff/flares/Expendable Active Decoys (EADs)

dispensing and Directed Infrared Counter Measures (DIRCM). It uses weapon system data from the user-defined threat library.

The system ensures maximum survivability through a rapid response from detection and warning combined with effective countermeasures action.

SPS capabilities that can be configured as part of the Sirius Airborne EW suite:

- Threat Warning
 - Radar Warner Receiver (RWR)
 - Missile Approach Warning (IR or UV)
 - Laser Warning
- Countermeasures
 - Dispense of pyrotechnical IR flares
 - Dispense of pyrophoric IR cartridges
 - Directed Infrared Counter Measures
 - Expendable active radar decoys, EADs (add-on capability)

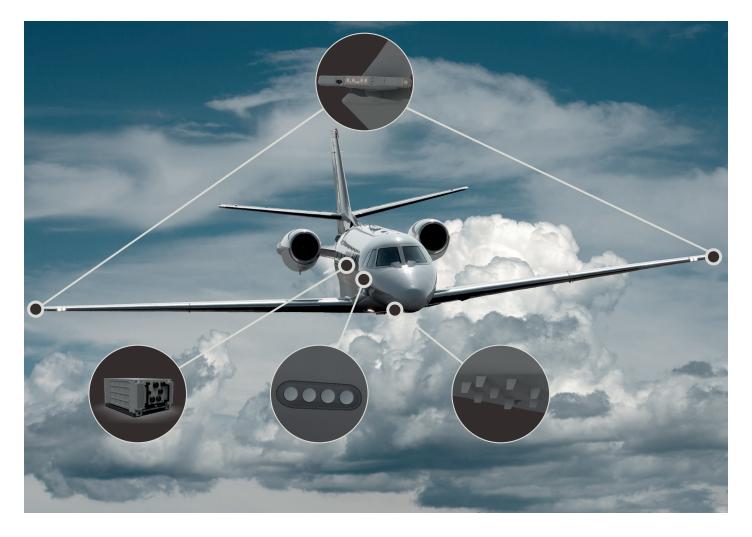












Summary

The Sirius Airborne EW suite includes state-of-theart sensors based on digital receiver and antenna technology in the Saab EW Systems portfolio.

The system provides capabilities such as ESM, RWR, MAWS, LWS, CMDS and meets the requirements in a rapidly changing and demanding signal environment. The support tools include capability for user-defined libraries ensuring true sovereign independence.

Both AI technology and cyber secure platforms are incorporated in the Saab portfolio and a common part of existing EW systems:

- Installed performance has been verified during extensive operational flights
- Scalable modular EW system having a small footprint for easy installation
- Supporting C4I systems with the passive situational picture
- Supports the platform's tactical situation picture with passive intercepts
- Provides early detection of threats for the protection of the airborne platform
- Wide frequency coverage for communications-, radarand data link signals
- Artificial Intelligence (AI) for effective processing of signals
- Extensive signal recording capability

One family, every signal, any domain

Sirius is a comprehensive suite of EW systems for the Air, Land and Sea domains. Sirius provides a complete capability for Electromagnetic Spectrum Operations,

beyond the scope of individual sensors. One sensor family, supporting all domains, across multiple applications.