



SAAB



SIRIUS GBAD

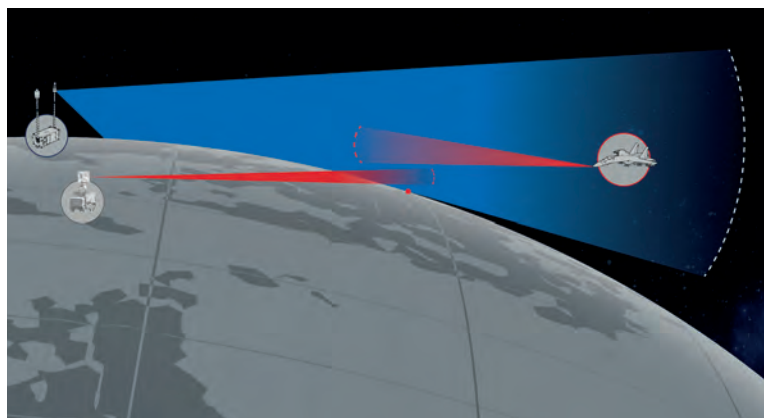
Sharpen your senses

Passive Sensors for Air Defence

When it comes to air defence, guesswork is not an option. To make critical decisions Ground Based Air Defence (GBAD) units are increasingly dependent on understanding the complex signals environment of the modern battlefield. By complementing and reinforcing your existing GBAD resources with our automated passive sensor system Sirius GBAD, you will significantly sharpen your senses, turn signals into knowledge and increase your survivability.

Detect without being detected

Sirius passive sensor systems provide your GBAD units with the silent power of early warning and air situation picture without the use of active radars until it is time for engagement, thereby reducing the risk of detection and engagement by hostile forces.





ENHANCEMENT BY INTEGRATION

Sirius passive sensors can be fully integrated into existing GBAD structures for command and control as well as sensor management. Sirius GBAD will enhance the local air situation picture supporting the tasks of early warning, target identification and cueing of acquisition and fire control systems.

AUTOMATED OPERATION

Sirius GBAD is a highly automated passive sensor system providing capabilities that enhances awareness by long range detection, tracking and classifying platforms based on the signals they emit, in both communication and radar domain.



SENSOR SUPREMACY BY SAAB

Saab has decades of experience from developing complex systems encompassing passive sensors and data fusion. Today, these systems provide armed forces and intelligence services around the world with the silent power they need to detect, locate and understand signals, without revealing themselves.

Sirius GBAD features

- Independently operating sensors, geographically distributed
- High probability of intercept and rapid reaction time
- Long detection range for signals emitted by airborne targets including radar, SIF/IFF, transponders, TACAN, datalinks and voice communication
- High precision direction finding and target tracking
- Robust emitter and platform classification based on joint signal library
- Mission controlled automated operation
- Advanced multi sensor network for coordinated sensor tasking and track data fusion
- Interoperability with co-located transmitting equipment
- Supports rapid deployment and operates with minimum manning requirements
- Unmanned or manned self-supporting sensor stations or sensors integrated onto existing platforms

Technical data

Frequency coverage:
1-18GHz (30MHz-18GHz)

Azimuth coverage:
360° instantaneous and/or 120° sectors electronically switched

DF and Geo location:
1-2° rms DF accuracy, geo location by triangulation

Tracking of: Airborne radar and communications radio, transponders and tactical data link signals

Emitter tracking:
> 500 emitters

Classification:
Emitter and platform types

Sensor deployment:
Independent sensor stations connected to sensor management, 30 min deployment/decamp time

One family, every signal, any domain

Sirius is a family of innovative and networked passive sensor systems based on common architecture and with a domain specific edge. It provides a complete synergistic capability for Intelligence, Surveillance and Reconnaissance – beyond

the scope of individual sensors. Today these systems provide Armed Forces and Intelligence Services around the world with the silent power required to turn signals into knowledge, whilst remaining undetected.