

AviCom

Radio & Audio Management System



Air / Avionics Systems
saab.com



SAAB

More connected. More control.



Features

- High Quality Digital Audio
- Fault Tolerant Architecture
- Management of Standard Aviation Transceivers
- Management of Radio Navigation Receivers
- Management of ECCM Radios
- Intercom Audio Management
- Clear/Secure Audio Management, including national and coalition secure
- Distributed Digital Architecture
- Installation Flexibility
- Adaptable and Scalable Architecture
- User Friendly User Interface
- Night Vision Goggle (NVG) compatibility

AviCom is a powerful distributed and intelligent Radio and Audio Management System (RAMS) that puts the crew in full control of the aircraft communication assets.

AviCom's modular concept enables system scalability and adaptability to meet current and future requirements. AviCom effectively connects and manages communications assets, simplifying crew communication and improving flight safety.

Modular scalability

AviCom's modular concept, which consists of Operator Interface Units (OIU) and General Interface Units (GIU), allows integrators to customise the system to best meet customer and aircraft requirements.

Operator Interface Units are typically installed in the cockpit, and cabin area in larger aircraft, and provide the Human Machine Interface (HMI) for control of the AviCom System.

General Interface Units are typically installed in the avionics bays, and can be optimally located in proximity to radio equipment, thus reducing the need for multiple long cable runs.

The AviCom architecture can be scaled from small single seat installations to large complex mission aircraft installations.

Tailored to customer-specific requirements

AviCom can be tailored as follows:

- Integration of customer-specific radios, radio navigation receivers and other equipment.
- The Human Machine Interface (HMI) can be adapted to meet specific customer requirements.

System redundancy

Inherent redundancy is built into the system by means of AviCom's distributed architecture, ensuring continued operation in the event of various failure modes.

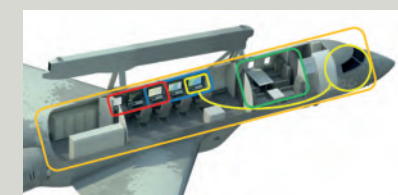
Secure voice

Audio is digitised and tagged as either RED or BLACK. Digital interlocks at the hardware level ensure the security of secure audio, independent of software. AviCom caters for multiple RED security levels, providing an ideal solution for clients who need to cater for both national and multi-national security requirements on a single platform.

Why AviCom?

- **Scalable & Adaptable Solutions**
Scalability and Adaptability is core to AviCom. AviCom can be installed in any aircraft, from single seaters, through to multi-operator mission aircraft
- **Adapted To Meet New Requirements**
AviCom allows a flexible installation configuration of up to 32 Nodes (with a maximum of 16 OIUs) to meet user requirements. AviCom is an ideal solution where commonality is required across multiple platforms.
- **Distributed Architecture**
AviCom's distributed architecture results in a redundant system, enhancing fault tolerance, system reliability and flight safety. Programmable Human-Machine Interface (HMI) makes the system flexible to be tailored after the HMI design of the rest of the specific aircraft avionics.

AviCom References



**GlobalEye
AEW&C**

GlobalEye AEW&C is the world's most advanced swing-role surveillance system. The aircraft carries a full suite of sophisticated sensors including the powerful new extended range radar (Erieye ER) as well as a complete AviCom system for all intercom and radio management functions.



**Augusta
Westland
109LUH**

The previous generation of AviCom (ACMS) is installed on over 100 AW109LUH aircraft. The application software was customized by both Saab and Leonardo to the unique requirements of various customers. TEMPEST certification was achieved on the AW109LUH platform.

AviCom System Overview

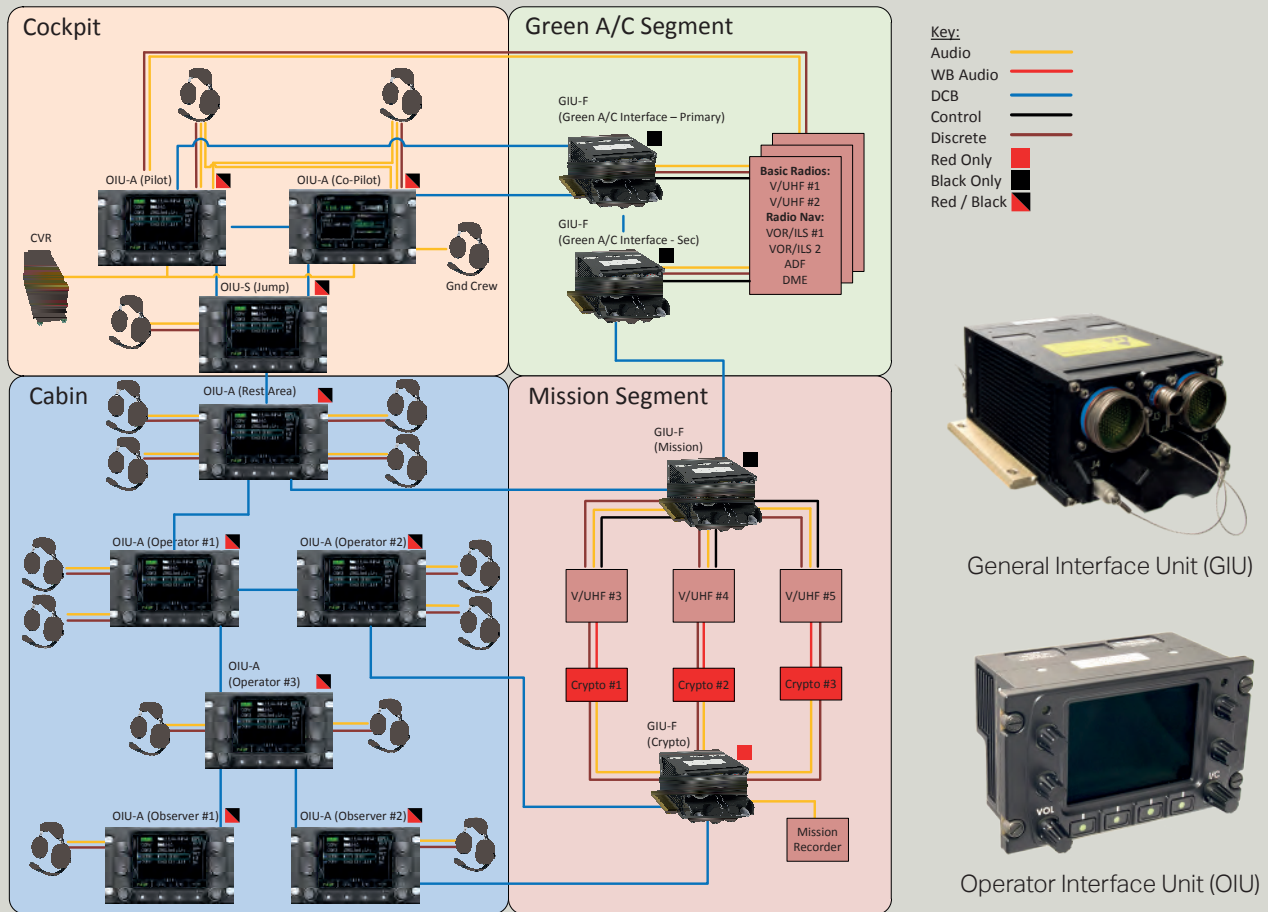


Figure 1: Example architecture

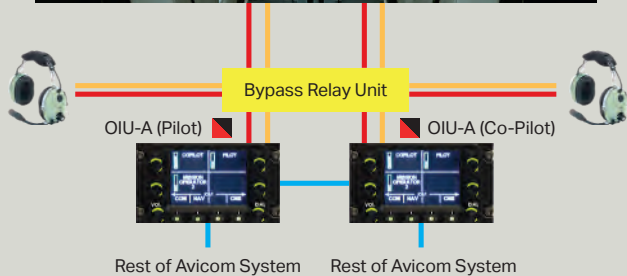


Figure 2: Optional integration with existing ICS

DEVELOPMENT STANDARDS

AviCom was developed in accordance with the following standards:

- Mil-Std-461E
- RTCA DO-160F
- RTCA DO-178B
- RTCA DO-254
- RTCA DO-214A

INTERFACE STANDARDS

AviCom has been designed with common interface standards, facilitating the integration with a wide variety of external equipment. The following interfaces are available:

- Analogue Audio Inputs / Outputs
- Mil-Std-1553B
- Arinc 429
- RS422/485
- USB
- Analogue inputs
- Discrete Inputs / Outputs



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