



ERA ATM SOLUTIONS

Surveillance – Multilateration and ADS-B
Air Traffic Management

**FULLY CERTIFIED
AND PROVEN BY DOZENS
OF INSTALLATIONS**



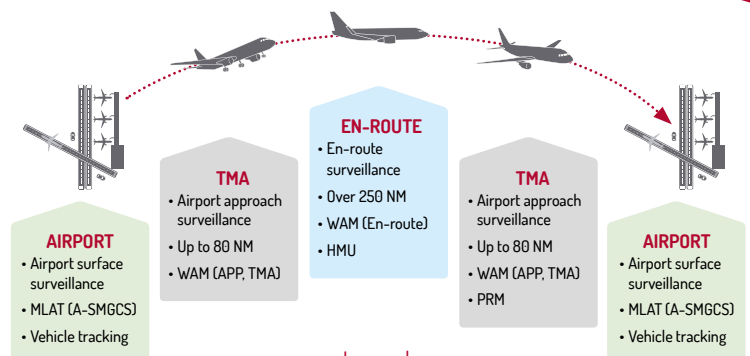
SURVEILLANCE SENSORS – MULTILATERATION AND ADS-B

MSS-5 – Multilateration Surveillance System

The latest version of verified and proven surveillance system with excellent performance tailored for Air Traffic Management/Air Traffic Control combining multilateration and ADS-B capability.

SQUID – Vehicle Tracking

The most widespread self-contained transmitting vehicle unit for improving airport safety by broadcasting the position of ground vehicles (ADS-B squitter using GNSS).



Legend:

- TMA – Terminal Maneuvering Area • A-SMGCS – Advanced Surface Movement Guidance and Control System
- WAM – Wide Area Multilateration • HMU – Height Monitoring Unit • PRM – Precision Runway Monitoring
- MLAT – Surface Multilateration • APP – Approach

THE POWER OF SURVEILLANCE

**MSS-5
INVITES THE FUTURE!**

MSS-5 – MULTILATERATION SURVEILLANCE SYSTEM

The 5th generation of composite multilateration and ADS-B system

MSS-5 is the 5th generation of the Multilateration Surveillance System (MSS) tailored for Air Traffic Management combining proven multilateration and ADS-B technologies. The system provides accurate real-time localization, tracking and identification of all objects equipped with transponder: at the airport surface, in TMA and en-route. The system withstands all weather conditions and is suitable for any terrain profiles.

FEATURES:

- 2020+ standards readiness
- Dual Station Data output: ASTERIX format and raw Mlat
- Expandable modular solution for flexible deployment, mast up or down
- All weather conditions - any climatic or terrain challenges
- Worldwide GNSS Synchronization (GPS, GLONASS, GALILEO, BEIDOU)

MSS-5 SOLUTIONS



Wide Area Multilateration



Surface Multilateration



Precision Runway Monitoring



Height Monitoring Unit



Automatic Dependent Surveillance - Broadcast

MAKE YOUR SURFACE SAFER

THE MOST FREQUENTLY
USED VEHICLE TRACKING
UNIT WORLDWIDE

Picture: Traport AG

SQUID – VEHICLE TRACKING UNIT

Squitter beacon broadcasting the position of ground vehicles

The ERA-designed SQUID, self-contained vehicle tracking unit, improves airport safety by continuously broadcasting the exact position of ground vehicles such as tugs, de-icing equipment, follow me cars, etc. Especially during low visibility conditions SQUID provides reliable information to tower controllers to help minimize the risk of runway incursions.

SQUID SOLUTIONS



Surface Multilateration



Vehicle Tracking System

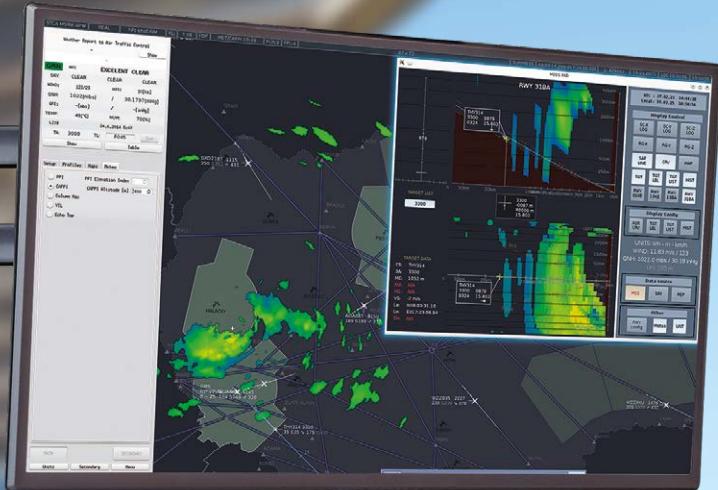
FEATURES:

- Carrier Frequency 1090 MHz
- Output message format Mode S reply DF18
- Operating temperature -40°C to +70°C
- Permanently or magnetically mounted

BENEFITS:

- ✓ Full A-SMGCS exploitation
- ✓ Safety enhancements under all weather conditions
- ✓ Improved situational awareness
- ✓ Seamless integration with ADS-B and multilateration surveillance systems

BEYOND THE SENSORS



MORE THAN SENSORS

ERIS – ERA Integrated System

ERIS is an ATM system designed for Air Traffic Control and flight planning of civil and military operations. ERIS is based on a modular design that has been developed in compliance with ATM standards.

3R – Record&Replay&Investigator

Modular, multi-source, multi-channel and nonstop record&replay system with Technical and Investigation Client for filing, long-term storage and replay of audio, video and data recordings.

Other products and services

Net Briefing System
Coverage Analysis Tools
Data Fusion and Data Displays

MasterCare – System Assurance Services
Consultancy/Training
Research & Development

MORE THAN SENSORS



ERIS – ERA INTEGRATED SYSTEM

Modular and scalable ATM System for Air Traffic Control

ERIS represents a product family of Air Traffic Management systems designed for Air Traffic Control and flight planning of civil and military operations. ERIS is based on a modern sophisticated and modular design that has been developed in compliance with ICAO and EUROCONTROL standards. Thanks to the modularity and scalability, ERIS is adaptable to any radar/sensor including ATC functionalities.

FEATURES:

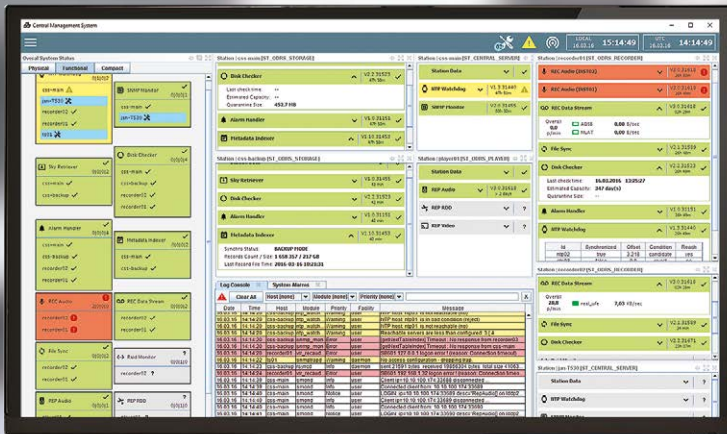
- Modern Multisensor Surveillance Tracker
- User-friendly HMI
- Linux-based software
- Full redundancy
- TMC (Technical Monitoring and Control)
- ATC (Air Traffic Control) Server incl. safety nets
- Sophisticated modular system design

BENEFITS:

- ✓ Simple analysis of complex air situation
- ✓ End to end solution from planning and execution up to analysis



Air Traffic Management



3R – RECORD & REPLAY & INVESTIGATOR SYSTEM

Non-stop record&replay system with Technical and Investigation Client

Record&Replay&InvestigatoR is an open and modular solution based on common HW and designed for filing, long-term storage and replay of audio, video & data recordings. Technical and Investigation Client (TIC) of 3R serves for analysis, monitoring and controlling of Recorders and Central Storage devices suitable for different users, e.g. ANSP's Safety Department.

FEATURES:

- Inputs (Analogue voice channels, Digital voice channels, Data streams, video channels)
- Full redundancy
- Linux-based software
- Central on-line storage
- Advanced user profile management and user activities log system

BENEFITS:

- ✓ Shorter time of investigation files sharing across the team
- ✓ Based on COTS HW components
- ✓ Easy export of given sequence
- ✓ Independent Data Display for surveillance data
- ✓ Selectable channels for on-line monitoring support



Non-stop Recording Data

WELCOME TO ERA WORLD



MORE THAN
130
INSTALLATIONS

IN
67
COUNTRIES

ON
5
CONTINENTS

Basic info on ERA:

ERA (a member of OMNIPOL group) is a leading company in multilateration, multistatic surveillance, and reconnaissance technology. Unrivalled experience in passive surveillance sensor development provides ERA with unique know-how to deliver comprehensive solutions for global markets. We develop, manufacture and implement mission-critical systems for military and civil purposes.

Over last 2 decades, ERA has reached number of more than 130 installations, deployed in 67 countries on 5 continents with 24/7 operations fulfilling demanding customer requirements.

ERA has developed unique passive surveillance system VERA-NG that defines new sensor category DPET (Deployable Passive ESM Tracker) tailored for air, maritime and land target surveillance and reconnaissance for defence and electronic warfare purposes.

In parallel, ERA made air traffic control history when deploying the first multilateration system and introducing gate-to-gate surveillance. We intend to continue introducing new technologies to adapt to today's and tomorrow's challenges.

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