



ERA ATM SOLUTIONS

Surveillance – Multilateration and ADS-B
Air Traffic Management



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



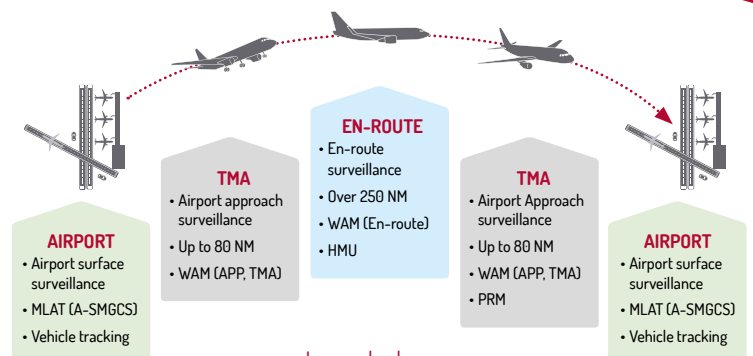
SURVEILLANCE SENSORS – MULTILATERATION AND ADS-B

NEO – Multisensor Surveillance System

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 scheme:

- 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

**MATURE 4TH
GENERATION SYSTEM**



NEO – COMPOSITE MULTILATERATION AND ADS-B SYSTEM

The latest generation of multisensor surveillance systems

The system provides accurate real-time location and identification of all objects equipped with a Mode A/C/S transponder. The generic ERA architecture can be readily configured to optimize performance for specific applications: Surface Multilateration, WAM, PRM, HMU as well as ADS-B based surveillance. NEO is capable of performing all or selected functions simultaneously and seamlessly.

NEO SOLUTIONS



Wide Area Multilateration



Surface Multilateration



Precision Runway Monitoring



Height Monitoring Unit



Automatic Dependent Surveillance - Broadcast

FEATURES:

- Type of targets: Mode A/C, Mode S, Mode S ES
- Operating temperature -40°C to +60°C
- ASTERIX DATA format

BENEFITS:

- ✓ High reliability and safety
- ✓ Expandable modular system
- ✓ International standards compliant

MAKE YOUR SURFACE SAFER

THE MOST FREQUENTLY
USED VEHICLE TRACKING
UNIT WORLDWIDE



Picture: Fraport 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

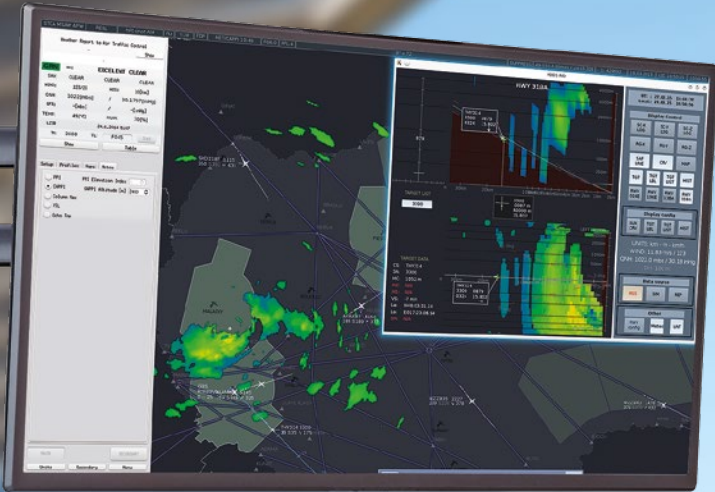
FEATURES:

- Carrier Frequency 1090 MHz
- Output message format Mode S reply DF18
- Operating temperature -40°C to $+70^{\circ}\text{C}$
- 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

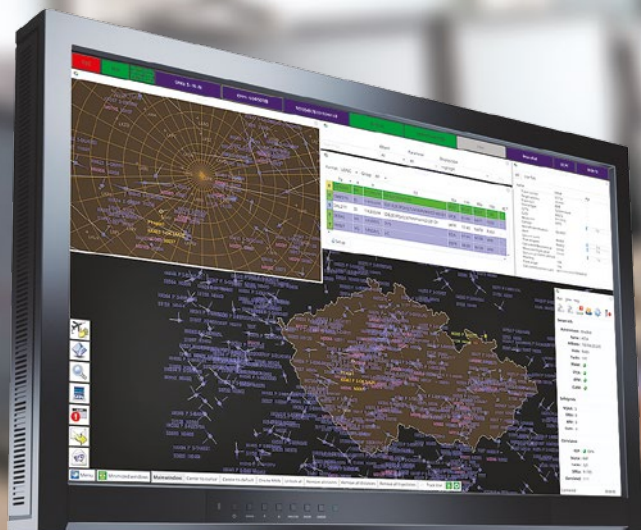
Modular, multi-source, multi-channel and nonstop record&replay system with Technical and Investigation Client for filing, long-term storage and replay of audio, video and data recordings.

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.

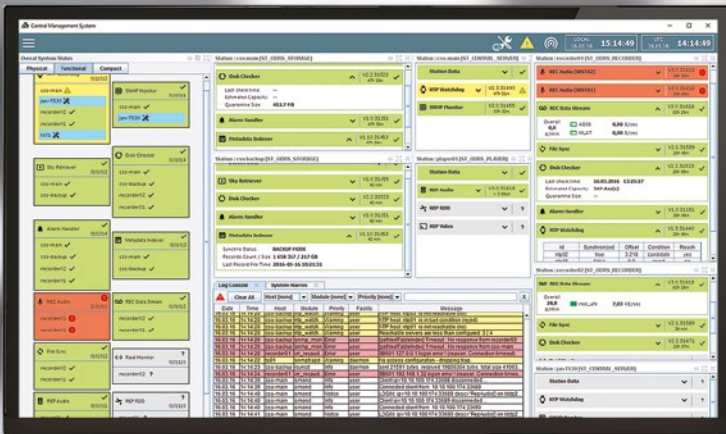
FEATURES:

- 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





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
100
INSTALLATIONS

IN OVER
60
COUNTRIES

ON
5
CONTINENTS

Basic info on ERA:

ERA a.s. (a member of Omnipol Group) is a pioneer and leading supplier of next-generation surveillance and flight tracking solutions for the air traffic management, military, security and airport operations markets.

As one of the developers of the respected technologies of multilateration and ADS-B and thanks to the company's traditional products, ERA has more than 100 installations at a series of aerodromes, air traffic control centres and military organisations in over 60 countries on all continents except Antarctica: in Europe, the Middle East, Africa, the Americas and Asia.

For more than half a century, ERA has built a proud heritage delivering multilateration based solutions such as wide area multilateration and surface surveillance to ATC controllers. Apart from systems for the civil sector, ERA has developed the unique passive radiolocation system VERA-NG – an essential part of any modern defence surveillance network and advanced border protection.

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