


THE ALTERNATIVE SYSTEM FOR MEDIUM-SIZED AIRPORTS

The ERIS system for ground surveillance and control can be tailored for integration into many different ATC environments

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 Czech-based company ERA launched ERIS, the ATM and ATC system for ground surveillance and control at medium-sized and regional airports, at the World ATM Congress 2019 in Madrid during March.

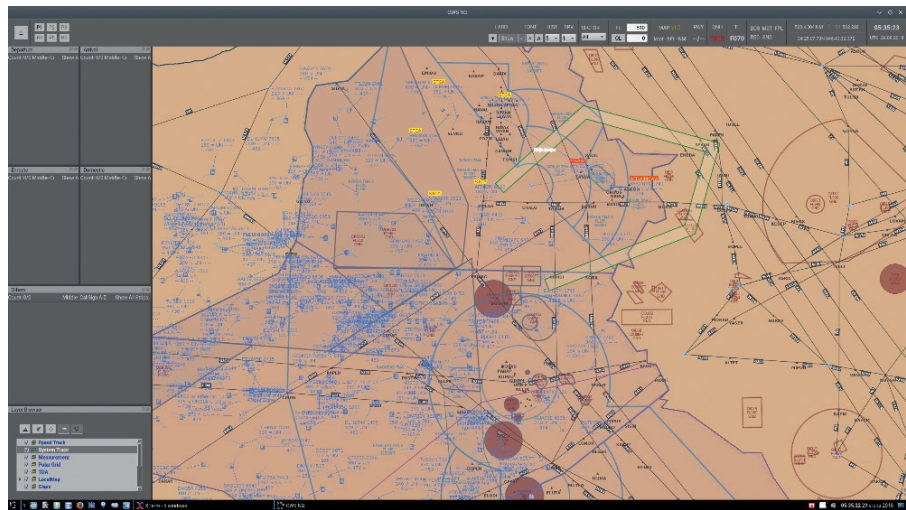
ERIS is a product family of ATM systems designed for air traffic control and flight planning of civil and military operations. When used in conjunction with ERA's Neo multi-sensor surveillance system, it represents a complete solution for ATC controllers.

ERIS's modular architecture and scalability enables individual and optimal site-specific tailoring and easy integration into various ATC environments. The use cases for ERIS ranges from a solution on ACC or APP level to a Common Ground Surveillance System (CGSS) suitable for both medium-sized and regional airports.

ERIS has been developed to comply with ICAO and Eurocontrol standards. The system is designed for 24/7 continuous operation with its configuration depending on the given use case. It features include multi-sensor data fusion, flight data processing, safety nets, integrated situational data presentation, complex supervision and monitoring functionality, and recording and analysis tools.

Product portfolio

The recently introduced ERIS system, can provide different functions depending on the type of ATC operations it is intended for. These include: ERIS ATM – an air traffic management system for Approach Control Service (APP) or Area Control Service (ACC); ERIS A – an alternative common ground surveillance system and ATC/ATM solution for TWR; ERIS C2 – an Air Command and Control System for military operations; ERIS DSD – a Distributed Surveillance Data System and ERIS SAR – a Search and Rescue System.



ERIS ATM

ERIS Air Traffic Management is an information system designed for radar and procedural air traffic control on all types of ATC centers. The modular system enables the tracking and evaluation of the movement of air objects and can fulfil special functions depending on the location and its particular implementation. High system reliability and availability is ensured by backing up major servers using dual LAN and SUSE Linux Enterprise High Availability Extension technology.

The system is able to: manage, plan and coordinate air traffic; plan and coordinate the use of airspace in pre-tactical and tactical phases; create and manage flight plans; support the provision of aeronautical information services. ERIS ATM can provide SAFETY Nets calculations and presentations and can be used to prepare and train air traffic controllers

ERIS A

ERIS Alternative Common Ground Surveillance is an information system designed for airport surveillance and surface

movement control with capability of detecting objects (airplanes, vehicles, or persons) moving in defined areas of an airport.

The system ensures the creation of data and voice recordings and archives them for at least 30 days. Records can be used to rebuild the air situation as well as for data analysis and statistics. It enables not only the monitoring of the current status of all system components, but can also analyze their history, evaluating the criticality of defects and the reliability of the system as a whole.

Its features include: Airport traffic control at the airport's operating and apron areas, the presentation of surveillance output data and related flight information; the provision of airport safety support services and the video presentation of surveillance information

ERIS C2

ERIS Command and Control is an information system designed to support command and control of air forces at operational and tactical levels, enabling

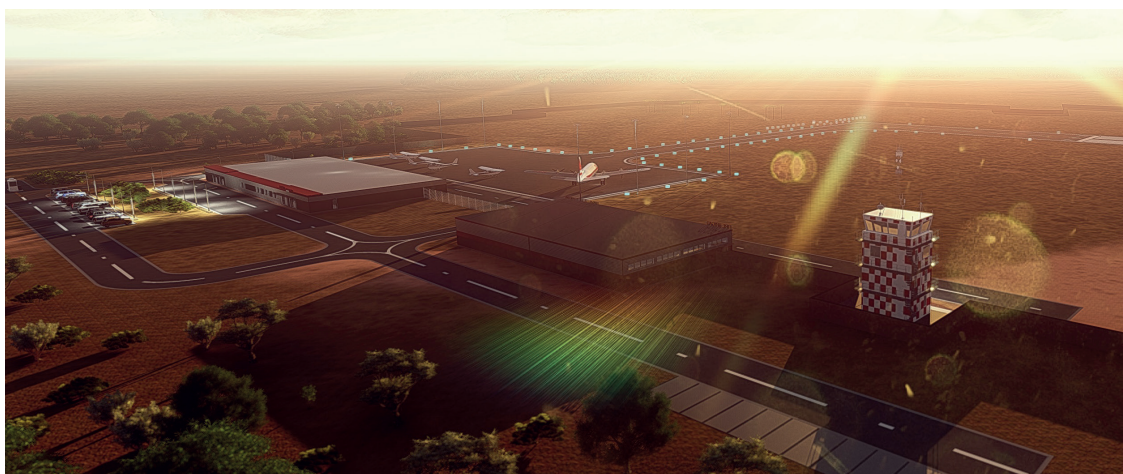


planning and implementation of air and Ground Based Air Defence (GBAD) operations. ERIS Command and Control's features include: Configuration and management of the ERIS C2 entities including surveillance data sources; collection, assessment and data fusion from dedicated surveillance sources; development, distribution and presentation of recognized

air pictures; determination of airspace structure according with the user requirements; definition of tasks for the air force and GBAD force; assignment of tasks for the air force and GBAD force; readiness management of the air force and GBAD force; management of air battle preparation and execution; analysis and assessment of the air force and GBAD force activities.

ERIS DSD

ERIS Distributed Surveillance Data can receive, filter, proces, fuse and control data on a country-scale, where the system is implemented to single communicated nodes. Data is recorded automatically and can be monitored. The records can then be used retrospectively to analyze or compare data with the reference trajectory. ❖



Opposite page: ERIS ATM can coordinate air traffic and plan the use of airspace in pre-tactical phases

Above & left: The ERIS System's modular architecture means it can be tailored to different regional and medium-sized airports while remaining cost effective (Image: Transcon)