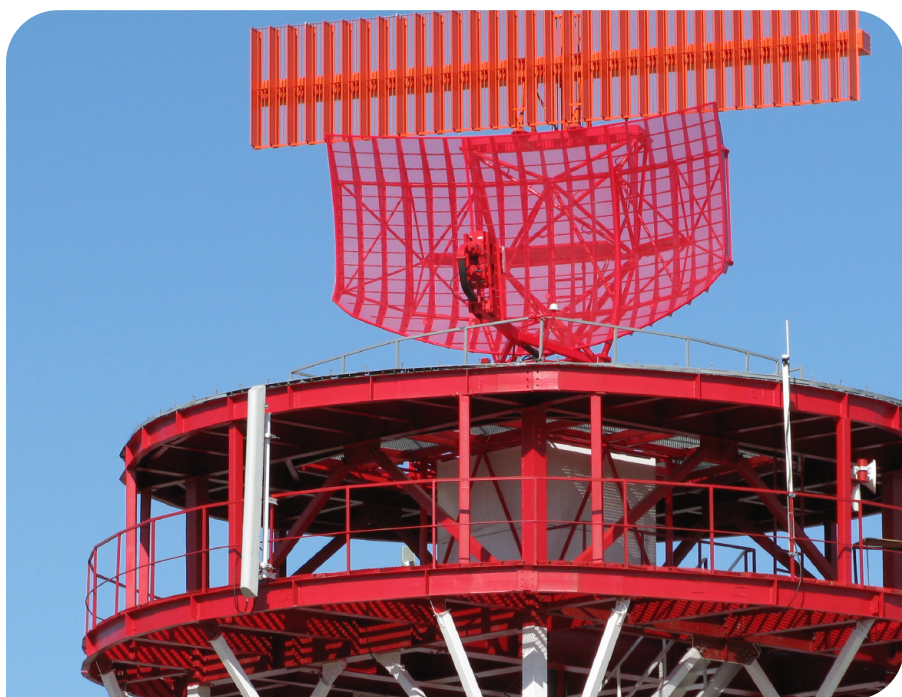


ATC

Surveillance Systems



nrpl.aero

NRPL – ATC Surveillance Systems

NRPL, based in Finland, is a manufacturer and supplier of Air Traffic Control equipment. The product line includes S-band PSR Morava 10, MSSR Mode-S M10S, ADS-B/MLAT solutions, transmitters, receivers, radar signal and data processing systems, software products, and services related to radar site design and construction.

Founded in 1992, NRPL has long history of successes and achievements. NRPL has deep knowledge and experience in building of comprehensive ATC systems and integrated solutions from sensors to ATC controller's working positions.

The distinguishing feature of NRPL philosophy is a customer oriented design and tailor-made products. We offer the most favorable and flexible conditions to our clients at development, delivery, installation, commissioning and maintenance of supplied systems.



Products and Solutions

- S-band Primary Surveillance Radar with 60/80/100/120 NM range options;
- Mode-S Monopulse Secondary Surveillance Radar with full support of elementary and enhanced surveillance;
- ADS-B/MLAT solutions;
- Transportable PSR and MSSR surveillance systems;
- Radar signal and data processing systems;
- Control and monitoring systems;
- ATC controller and maintenance working positions;
- Turn-key ATC solutions including radar site survey, consulting and building supervision;
- Expertise in sensor coverage modelling;
- Communication solutions.



Unified Comprehensive Surveillance

Developed by NRPL, Unified Comprehensive Surveillance is a concept consisting of seamlessly combining various sensors while having unified data processing, control and monitoring, and PPI. This approach allows for the end user

to reduce investments into the ATC surveillance network which typically consists of separate sensors with their own separate and often non-interoperable RDPS, CMS and PPI systems.

PSR Morava 10 is a field-proven S-band Primary Surveillance Radar with extended detection range reaching 120 NM. The radar is a combination of various hi-end design approaches and advanced manufacturing practices. Our customers perceive PSR Morava 10 as a state-of-the-art, reliable and high performance ATC sensor. Advanced field-proven proprietary signal processing algorithms guarantee low false alarm level, reliable detection, and wind farm clutter mitigation.

Mode-S MSSR M10S is a compact and flexible Mode-S Monopulse Secondary Surveillance Radar which is installed at numerous locations worldwide. M10S is a high performance turnkey solution with open architecture easily adaptable to customer requirements and needs of different sites such as communication and maintenance facilities.

ADS-B/MLAT is a compact indoor or outdoor system with a number of different antenna options available. It can be used either separately or as a part of the Unified Comprehensive Surveillance where traditional surveillance technologies are complemented with ADS-B/MLAT systems. ADS-B/MLAT integration into PSR or MSSR radar does not require separate data processing system or CMS, the approach which has been field-proven at numerous sites.

Transportable PSR/MSSR/ADS-B is an easily deployable air traffic control surveillance system that provides a terminal approach and en route surveillance. It is mainly used as an emergency gap filler or in case when communication and power supply infrastructures are temporarily not available.



Quality

NRPL holds an ISO 9001:2008 certificate issued by DNV for design, development, production, sales and after-sales of air traffic control radar systems. All NRPL subcontractors and suppliers have ISO certified quality management systems.



Experience

NRPL has wide experience in delivering turn-key surveillance solutions to our customers in United Kingdom, Lithuania, South Korea, Indonesia, Kazakhstan, Azerbaijan, Mozambique, Russia, Armenia, and Cuba. NRPL has numerous PSR, MSSR, ADS-B, and RDPS installations world-wide.

NRPL specializes in radar systems design, signal and data processing, RF devices, control and monitoring, customized software solutions, antenna systems, and hardware.

Design and Manufacturing Capabilities

NRPL as a specialist in sphere of ATC surveillance focuses on development of surveillance solutions for civil and military markets. The company is actively involved in research and development in areas of RF technology, signal and data processing, software including data storage engines, graphic user interfaces, networking and communications, and real-time data visualization. Distinguishing feature of NRPL design team is high efficiency - a combination of the design quality and speed of development.

NRPL supports very high level of product customization, which reflects our tailored approach to customer needs. According to the company policy, for every project NRPL assigns a group of highly qualified designers, which together with a project manager analyze requirements and help customers to find an optimal system design.

Manufacturing, final assembly, factory acceptance and customer training are performed at the factory located in Vantaa, Finland. The factory capacity allows to deliver more than 10 combined PSR and MSSR systems annually.

