

# ARSS

## Advanced Radar Surveillance System



transmitting peak power of only 5W. The ARSS can be set up quickly in the field. It can be vehicle-mounted for portability, fixed-based for facility surveillance, or utilized in a multiple unit configuration that can be linked to deliver broader surveillance coverage.

### Ground Radar, Man-Portable

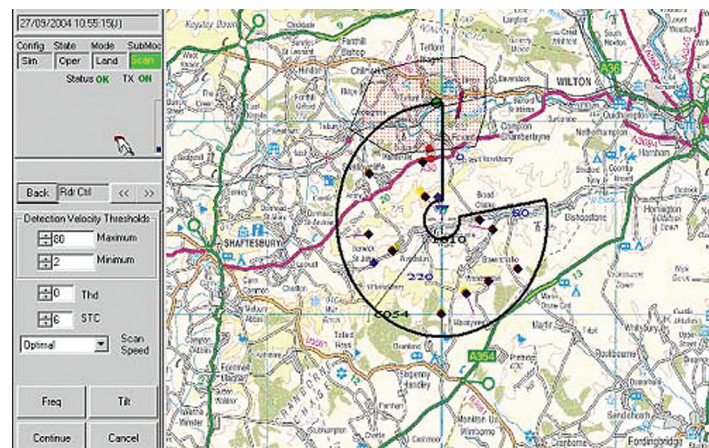
The man-portable version of the ARSS consists of three main parts: Transmitter/Receiver Antenna unit (TRA), Drive Pedestal, and Remote Control-Display Unit (RCDU). The lightweight Windows-based RCDU contains the system control panel and radar display that provides the operator the ability to operate the system in varied work conditions. The screen readouts and control panel are distinct and readable under various lighting conditions.

### Ground Radar, Surveillance Utility Vehicle (GR-SUV)

The Telephonics ARSS ground surveillance radar can be integrated with virtually any mobile surveillance vehicle. The ARSS radar allows target detection and classification during day, night, and limited visibility conditions. An associated electro-optical system optimizes radar detection and classification of targets. The distinct advantages of Telephonics' mobile surveillance system are:

- Exceptional detection/classification capability

### Flexible, Integrated, Real-Time Surveillance



### Mission: Intelligence

Telephonics brings on-line, real-time field reconnaissance to a new level of access and preparedness with the ARSS – Advanced Radar Surveillance System. The ARSS ensures that critical mission intelligence is gathered in even the most intense environments – quickly, easily and reliably. This lightweight, low-power, coherent, ground-based radar system is rugged,

reliable and mission customizable. The ARSS is ideal for establishing portable, fixed, or highly mobile surveillance operations in the most demanding security, military and paramilitary applications.

### Versatile and Capable

Incorporating pulse compression technology, the ARSS is an ultra-versatile Low Probability of Intercept (LPI) radar system with a

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- Full life cycle maintenance support
- Extensive FLIR and workstation interface experience
- Surveillance systems with predicted systems reliability of over 2,000 hours
- Modular design makes it easy to add additional modes, features and software upgrades
- Antenna and receiver, transmitter design incorporates 100% solid-state proven technology.



ARSS Deployed by Norwegian Army for Border Surveillance

## Ground Radar, Command and Control (C<sup>2</sup>)

In various surveillance environments, there is a need for the integration and centralized management of mission-critical information. The effective integration and centralization of such information provides commanders with enhanced and real-time situational awareness. Telephonics' ARSS enhances the effectiveness of forward reconnaissance patrols by providing the local patrols with "extended eyes and ears." Each forward position surveillance radar, with a surveillance range of up to 30 kilometers, can be located to provide over-lapping coverage.

## Features:

- Extensive Built-In-Test (BIT)
- Enhanced display, PPI and B Scope, Digital Map, Clutter Map, Graphics-on-Color Display
- Flexible interfaces to extend functionality
- System Detection Ranges:
  - Pedestrian: 7-10 Km
  - Group: 10-12 Km
  - Light Vehicle: 15 Km
  - Heavy Vehicle: 30 Km
  - Hovering Helicopter: 15 Km
- Automatic "Search and Detect" in a defined sector
- Automatic tracking and Track-While-Scan (TWS) on 60 targets
- Search and Detect in any defined sector up to 358 degrees and up to 30 km
- Artillery detection of shell explosion and fire corrections (option)
- Alarm and no-interest zones
- Rugged MS® Windows-based processor
- Standard Ethernet communication channel
- XML Remote Interface
- Continuous 24 hours per day of operation
- Fully environmentally qualified
- Range accuracy: ±25 meters
- Range resolution: 50 meters
- Fixed scan speeds of 1.3, 2.6 and 3.8 RPM
- Pulse compression transmitted peak-power of 5W
- X-Band radar for excellent all weather performance
- Optional 24V power source available
- Audio and video output signals
- Target identification via audio doppler zones
- Capability of integrating multiple map formats
- Ability to continuously record radar operation

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