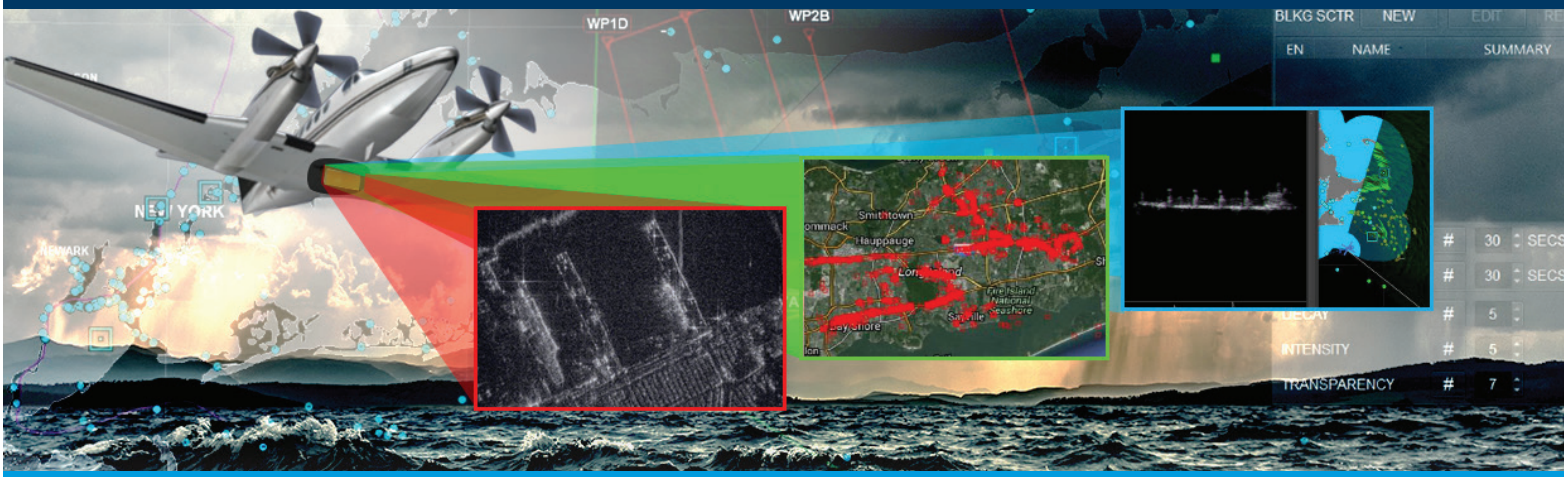


## Active Electronically Scanned Array (AESA) Radar



Telephonics' innovative, air cooled and modular designed MOSAIC<sup>®</sup> AESA radar provides operators and mission planners with a high performance, long range multi-mode and multi-domain capable system with low SWaP-C advantage. The system is optimized for maritime, littoral and overland surveillance missions and is designed for manned and unmanned rotary- and fixed-wing aircraft.

### Advantage

MOSAIC represents a unique application of leading edge technology to meet current and future surveillance, imaging and tracking requirements for a wide range of environments and missions.

- Simultaneous MIMO Dual Beam for true persistent sensing
  - Maritime: ISAR-while-Search
  - Overland: SAR + Wide Area GMTI
- 3D scanning
- Modular design for increased flexibility of aircraft integration including podded systems
- Air-cooled design significantly reduces Size, Weight, Power and Cost (SWaP-C)
- Unique High Intensity Radiated Fields (HIRF) design meets MIL-STD-464
- Graphical User Interface (GUI) with high-resolution moving map
- Adaptive radar resource manager

- Rules-based track management
- All digital interfaces to facilitate platform integration
- Software-defined open architecture: compatible with FACE, OMS, MOSA, SOSA and COARPs

### Multi-Mission, Multi-Domain

MOSAIC provides true multi-mission ISR functionality, while providing situational awareness across all domains.

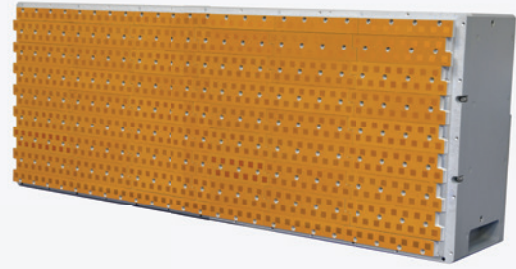
- Air-to-air
- Anti-Surface Warfare (ASuW)
- Anti-Submarine Warfare (ASW)
- Overland surveillance (ISR)
- Long-range maritime patrol
- Search and rescue
- Target classification for enhanced situational awareness
- Maritime interdiction operations

# MOSAIC Active Electronically Scanned Array Radar

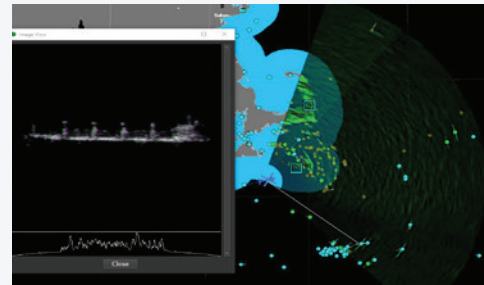
## MOSAIC Radar Modes

MOSAIC's suite of advanced modes include:

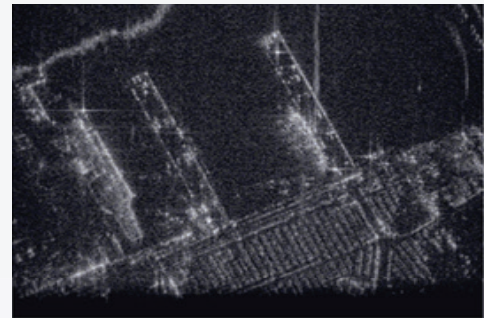
- Maritime (Blue Water and Littoral)
  - Inverse Synthetic Aperture Radar (ISAR) imaging with automatic target classification
  - ISAR-while-Scan for autonomous ASuW
  - Oil slick, iceberg and person-in-water detection
  - Small target detection & tracking and periscope detection
  - Long range search with reduced blind region
  - Multi-channel Maritime Moving Target Indicator (MMTI)
  - Beacon Detection (SART)
  - Littoral ground mapping and land-mass discrimination
  - Integrated Automatic Identification System (AIS)
- Overland
  - Synthetic Aperture Radar (SAR) imaging (Spotlight and Stripmap)
  - Coherent change detection
  - Multi-channel Ground Moving Target Indicator (GMTI)
  - Multi-channel Dismount Moving Target Indicator (DMTI)
  - SAR-while-GMTI
- Air
  - Air Moving Target Indicator (AMTI) with height information
  - Counter UAS
  - Sense and Avoid (SAA)
  - Weather mapping, including wind shear and turbulence detection
- Electronic Support and Electronic Protection
- Integrated Identification Friend or Foe (IFF)



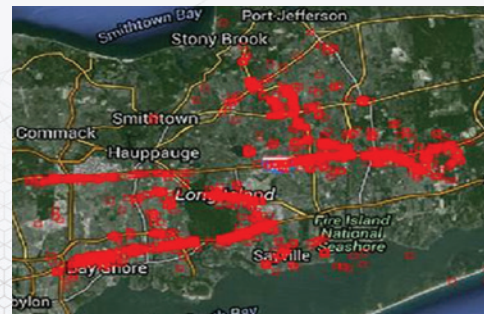
MOSAIC AESA Radar



ISAR While Search



Spotlight SAR



GMTI

For additional information, contact Telephonics at 631.755.7000 or visit [www.telephonics.com](http://www.telephonics.com).