The SkyChaser™ radar is a 3-D multi-mission radar (MMR) system that detects and tracks low, slow and small (LSS) targets while on-the-move (OTM). The system is modular and software defined, leveraging a compact, rugged and flexible active electronically scanned array (AESA) that delivers fully steerable beams in azimuth and elevation. The system can also be modularly stacked and expanded to create more powerful arrays, with increased accuracy, opening up the radar’s capability to be used in multiple environments for diverse missions.

The SkyChaser system provides configurable coverage volume in elevation, range and detection accuracy. Utilizing steerable radar beams, the system allows for detection and tracking of close-in, pop-up targets as well as long range targets, all while the system is moving.

**RUGGED AND RELIABLE**

Designed to meet strict U.S. military standards, including MIL-STD-461, MIL-STD-464, and MILSTD-810, the system offers a robust built-in-test (BIT) capability. Its modular design allows for simple field replacement of a failed panel.

**FLEXIBLE**

The SkyChaser OTM radar can be installed in a variety of configurations — on a vehicle, trailer, tower, rooftop, or as a standalone tripod mounted system. It can be remotely operated by an optional power generator. Additionally, the light-weight SkyChaser system can be set up quickly. The modular design of the radar also makes it easy to combine multiple panels into one larger array to meet mission-specific needs.
APPLICATIONS
- Air surveillance
- Counterfire target acquisition
- Short range air defense
- UAS sense and avoid

SINGLE PANEL SPECIFICATIONS
- Operating frequency: S-band
- Azimuth coverage: 90° steerable
- Elevation coverage: 90° steerable
- System weight: < 50 lb
- System size: < 1 cubic ft per panel
- Temperature range: -40°C to 65°C
- Power requirements: < 500 W, 110/240 VAC, 50-400 Hz using optional power supply

BENEFITS
- Reduces costs by performing the tasks of multiple radars through one multi-mission system
- Configurable for a variety of applications due to modular antenna panel design
- Detects LSS targets, typically undetectable by other radars, by utilizing excellent Doppler resolution from digital beamforming and enhancement algorithms
- Provides optimized all-weather and environment search and track capabilities

FEATURES
- Operates while on-the-move
- Performs multiple missions simultaneously
- Detects and tracks close-in, low, slow and small targets
- Provides 3-D target position
- Customizable coverage volume with electronically steerable beams in azimuth and elevation
- Compatible with a variety of interfaces
  - MAFIA/MAS
  - TCUT
  - ASTERIX
  - AFASTS FAA D C2
  - Multi-source correlator tracker
- Seamlessly integrates with Silent Archer™ technologies for counter-UAS missions
- Designed to reduce phase noise and minimize clutter

BELOW: SkyChaser as a standalone system or mounted on a vehicle