

Mission-Critical Radar for Federal Law Enforcement

PREVENT. PROTECT. PURSUE.



THE OPERATIONAL ENVIRONMENT

Small unmanned aircraft systems (sUAS) are increasingly used by criminal and hostile actors to operate undetected in low-altitude airspace. These systems maneuver through complex urban environments, bypass traditional surveillance, and create a critical visibility gap for law enforcement.

Law enforcement teams need persistent, reliable awareness to act within limited reaction windows.

Echodyne's low-SWaP, MESA® radar systems deliver a decisive advantage, using advanced electronically scanned array technology to provide high-fidelity detection, tracking, and classification of sUAS.



MISSION APPLICATIONS

Criminal & Illicit Drone Activity

High-resolution radar surveillance enables early detection and classification of low-altitude unmanned aircraft systems (UAS) to reduce adversarial freedom of maneuver and crime.

Counterterrorism (CT) Operations

Persistent, accurate radar surveillance enables early detection and classification of low-altitude unmanned aircraft systems (UAS) to accelerate response to emerging attack vectors.

Counterintelligence (CI) Operations

High-fidelity, rapid classification, and precise targeting of low-altitude and hovering surveillance protects sensitive facilities, personnel, and preserves investigative integrity.

Critical Infrastructure & Sensitive Operations

Continuous, all-weather airspace monitoring of swarm, hovering and low-signature threats delivers actionable intelligence to safeguard high-value assets and maintain operational security.

Special Events and Public Safety Operations

Multi-target classification cuts through clutter, reduces operator burden, and strengthens operational decision-making enabling coordinated response and public safety at scale.



MESA RADAR ADVANTAGES

Software-Defined

Adaptive, software-defined radar optimizes against clutter and interference by leveraging dynamic beamforming and waveform management. On radar software supports rapid mission tailoring, seamless integration, and continuous capability upgrades without hardware changes.

Accuracy

High-integrity radar data delivers precise target localization and tracking, reducing false positives, improving sensor cueing, and enabling rapid, informed action.

Classification

AI/ML-driven classification distinguishes threats in real time, compressing detection-to-action timelines and focuses resources on true targets, not clutter.

Mobility

Low-SWaP design enables deployment across fixed, portable, on-the-hault, and on-the-move operations, extending persistent awareness from distributed assets to dynamic, expeditionary environments.

Cognitive

MESA radars operate with built-in intelligence. They learn from the environment, autonomously adjust sensing strategies, and coordinate across systems to maintain continuous tracking and seamless awareness.

Trusted by defense and national security organizations worldwide.