

ART

Areté Radar Tracker



ART is a radar processing framework that leverages ARETE's decades of low signal / high clutter processing to provide enhanced capabilities to today's emerging micro-radar platforms. Designed for mission scalability (CUAS/Border Security/ATR), ART can be tailored to specific radar and platform environments to optimize overall system performance.

Key Features

- Runs on low SWaP (Size, Weight and Power) processing platforms (NUC)
- · Real-time track-before-detect processing
- · Significantly increased Range-to-Detect
- Improved performance near Zero Doppler (Slow Movers and Zero Range-rate UAS)
- · Improved performance against Low RCS targets
- Continuous "sweeping" provides uniform persistent surveillance across the FOV

Key Applications

- · Drone Surveillance (Including Hovering Assets)
- · Cued Target Tracking
- · Multi-Sensor Tracking



Time from COMEX (sec)



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HOVER RUN

Standard Radar Processing



Areté ART Radar Processing



ART Track Isoom

Extended Range Inbound Drone

•••••	DJI Phantom IV GPS Track (truth)
•••••	ART Track
•••••	Baseline Micro-Radar Track

Extended Range "S" Turns



DJI Phantom IV GPS Track (truth)ART TrackBaseline Micro-Radar Track



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