

Merlin



For more information about CACI's C-UxS technology suite, please contact cuxs@caci.com or visit caci.com/CUXS

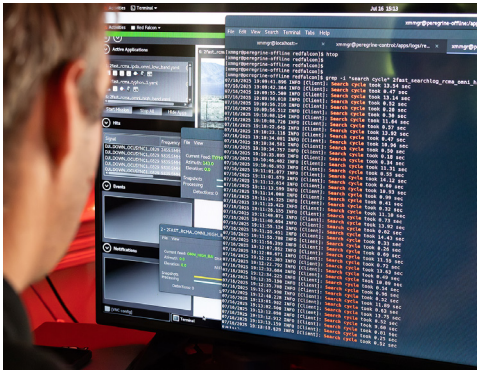
Long-range counter unmanned aircraft system (C-UAS) detect and defeat system

Drones are a dynamic and pervasive threat to U.S. and allied forces, creating significant challenges for agencies responsible for public safety. Merlin rises to this challenge with industry-leading long-range detection and lightning-fast, automated, non-kinetic countermeasures. Merlin keeps people safe and infrastructure protected against the threats of today and tomorrow.

Full spectrum automated detect and defeat

- Enable 24/7 automated sensing.
- Achieve precise, non-kinetic defeat with low/no-collateral impact.
- Detect UAS at longest range available, yielding more decision-making time.
- Detect and defeat Group 1-5 UAS, including new cellular drones.

CACI



Artificial intelligence paired with actual intelligence: Merlin uses the world’s most comprehensive threat data to find the adversary first

Adversarial unmanned systems hide in the noise — Merlin uncovers them fast. Merlin is backed by the world’s most comprehensive collection of threat data with over 1,000 unique global unmanned systems. Merlin integrates RF, radar, and EO/IR sensors to automatically detect and defeat Group 1–5 UAS from 75+ km away. The result is a layered drone defense that enables more decision-making time.

Interoperable	Merlin is interoperable with existing U.S. government command and control (C2) and security systems, providing a layered C-UxS defense.
Autonomous	Merlin operates autonomously 24/7 at various classification levels from any location.
Agile	Merlin’s software-defined architecture enables rapid integration of new capabilities through over-the-air updates to stay ahead of constantly evolving threats.
Comprehensive	Merlin supports both passive and active unmanned threat detection.
Surgical	Merlin delivers precision defeats across the full spectrum.
Proven	Merlin’s advanced technologies have been successfully employed for decades.

Search/track/identify

- **RF/line of site C2 link**
Detect range: ~75+ km, 360° coverage; 200 MHz – 8 GHz with no band-breaks; COTS and non-COTS UAS (Group 1–5).
- **RF/cellular C2 link**
Detect range: ~15km; 4G and 5G capable; protocol tracking without user data analysis.
- **Active radar**
Detect and track range: ~25 km; Tip and cue to EO/IR system; provides target position for drone capture; dark drone detection.
- **EO/IR camera**
Detect range: ~5-7 km; integrated ATR for drone detection, tracking, and ID; dark drone detection.

Low/no-collateral defeat

- **RF/line of site C2 link defeat**
Effective range: ~75+ km (150–1,500W); AI – automated sense and shoot algorithms; broad range of RF defeat from broadband to smart jam to command inject (crash, graveyard, change waypoint, etc.).
- **RF/cellular defeat**
Effective range: ~15 km; intelligent, “in-protocol” defeats; temporary, semi-persistent, and cyber-enabling effects; minimizes impact to network/subscribers.
- **Drone capture**
Effective range: 3–6 km; capture and disposal of targets <55 lbs at high speeds; ~4 seconds from cueing to launch; autonomous engagements; reusable after reloading net entanglement system.