

DRAKE Next Generation Anti-Drone Protection

Overview

DRAKE is a TRL 9, proven and fielded intelligent Software Defined Radio (SDR) Electronic Countermeasure (ECM) system that is spectrally aware, always on, omnidirectional, and independently protects by detecting, identifying, alerting, tracking, and defeating small drones. DRAKE can operate alone or coordinate with other C2 platforms, such as FAAD C2, delivering a layered protection for the warfighter. DRAKE's open architecture design and utilization of well-defined common standards enable rapid upgrades at the speed of relevancy to mitigate emerging threats on the modern battlefield.

The DRAKE systems are available in three different form factors: mounted, dismounted, and fixed site. The DRAKE ECM family of systems share common hardware and software, and provides long term afloat and ashore Counter-UAS protection to U.S. and coalition partners. Unlike other C-UAS systems that



eliminate enemy drones through kinetic attacks, the DRAKE system provides a bubble of protection around its defense perimeter by terminating the command link between the drone and its operator, rendering it useless.

DRAKE is currently employed by the U.S. Navy, U.S. Air Force, and partner countries Australia and New Zealand. In addition to providing reliable Counter-UAS protection, the system can also defeat Radio Controlled IEDs (RCIEDs) and has been providing U.S. and coalition partners with life-saving protection from RCIEDs under the variant known as Joint Counter Radio-Controlled Improvised Explosive Device (RCIED) Electronic Warfare (JCREW) since 2017.

Proven / Tested

- Program of Record: Naval Sea Systems Command, PEO USC Expeditionary Missions Program Office (PMS-408)
- Technology Readiness Level (TRL-9)
- Full Operational Capability (FOC)
- Full Rate Production with active FMS
 cases

Provides Radio Frequency Shields and Counters Against UAS Threats That Are Proliferating Across the Modern Battlefield.





DRAKE provides UAS detection (red targets) and performs non-kinetic effects to neutralize drone swarm.

Key System Design Features

- Independent detection and selective jamming, or can operate in coordination with other C2 platforms, creating layered C-UAS and Counter-RCIED protection for the warfighter
- Open architecture System of Systems design enabling rapid evolution for urgent multifunction RF requirements
- Common software and hardware across variants providing cost savings on logistics and upgrades
- Flexible timing protocol and clean RF signals establish a protective barrier without interruption to Blue Force communications
- Able to utilize active, reactive, and protocolbased jamming techniques
- Record events for in-depth intelligence analysis
- Ability to switch between C-UAS and C-IED
 missions without changing software
- Robust information assurance and security
- Rugged design (MIL-STD-810) hardware, fully capable of operation in challenging environments & extreme conditions
- Intuitive User Interface (UI) with minimal operator training required
- Options for ruggedized display or tablet
- Modular Open Systems Approach (MOSA) no proprietary interfaces
- Hot-swappable common 2590 style batteries
- Built-in Test (BIT) for fault isolation with "Go / No-Go" indicator



Situational Awareness

- Ruggedized tablet features:
 - Displays features of detected drones
 Map displaying threat locations detected by DRAKE systems
- Networking capabilities
 - Display threat locations from all connected units
 - Control multiple units from one central location
- Built-in maintenance features
- Mission playback capability

Integration Capability

- Ability to coordinate with Command and Control Systems
- Compatible with Northrop Grumman Forward Area Air Defense Command and Control (FAAD C2)

For more information, please contact:

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