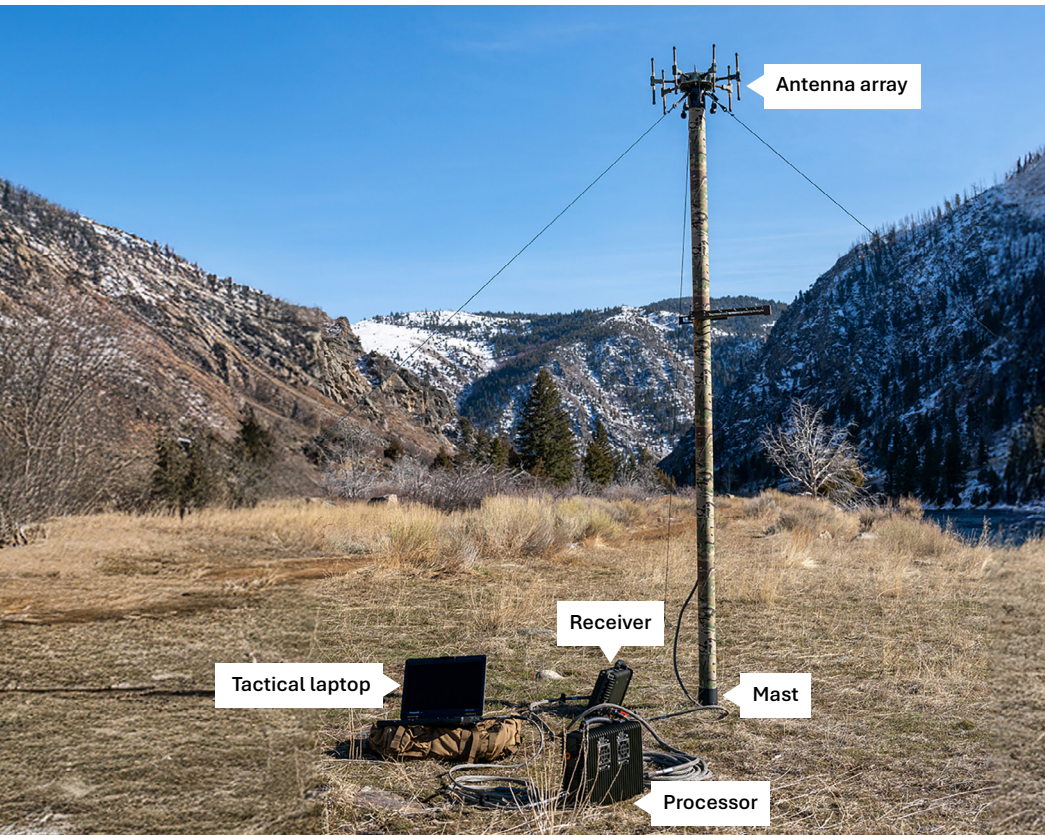


# SPaRK

## *Silent passive radar kit*



For more information about CACI's technology suite, please contact:  
**SparkCUAS@caci.com**  
(406) 333-5010

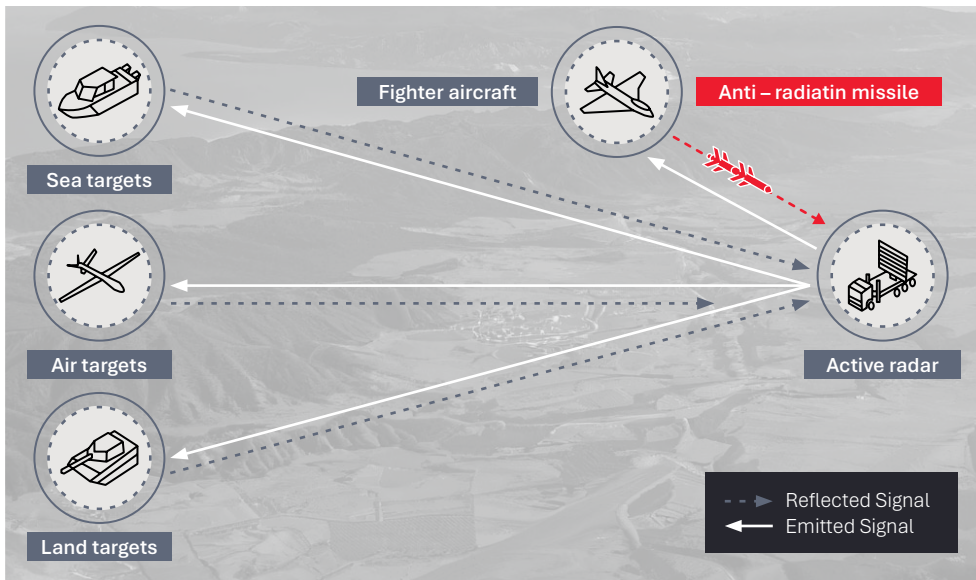
For more information, visit:  
**caci.com/cuxs**

### **Covert detection and tracking of crewed and uncrewed aerial systems**

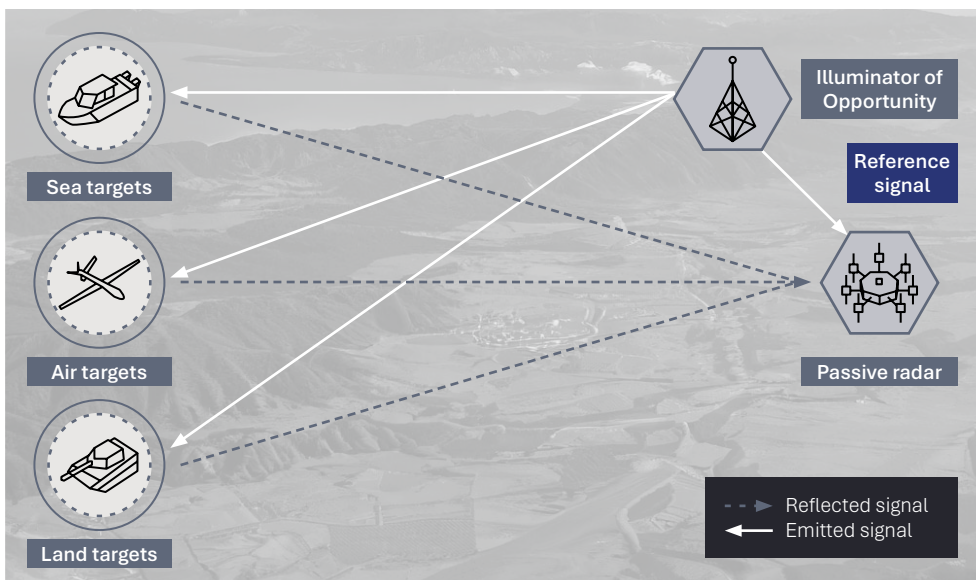
CACI's SPaRK is a lightweight, covert capability for detection and tracking of crewed and uncrewed aerial targets, such as Group 1-5 uncrewed aerial systems (UAS). A completely passive technology, SPaRK delivers increased situational awareness and actionable intelligence when deployed in emission-constrained environments. Developed for expeditionary missions, SPaRK can be easily deployed by two-person teams in a matter of minutes and requires just a single operator.

Today's adversaries continue evolving to thwart passive RF detection capabilities, increasingly relying on low-profile dark drones and aerial stealth capabilities. Conventional active radars can detect many of these threats, but these radars produce electromagnetic emissions that tip off adversaries to the system's location. SPaRK avoids this by processing reflected signals from third-party sources, such as commercial TV broadcast signals, to detect and locate targets. By using signals already present in the electromagnetic environment, SPaRK delivers superior intelligence, surveillance, and reconnaissance capabilities without broadcasting the system or the operator's location, helping ensure friendly forces remain undetected.

**CACI**



**Image 1** Overview of conventional radar operation



**Image 2** Overview of passive radar operation

**Features**

- Passive system operation with no radio frequency emissions.
- Portable, man-packable kit.
- Configured for single operator.
- Diagnostic mode for built-in testing and troubleshooting.
- Mission planning mode for performance prediction.

**Benefits**

- With no RF emission profile, SPaRK is ideal for covert operations.
- No electromagnetic radiation hazard concerns.
- Can detect and track dark UAS with little or no RF profile.
- Detects Group 1-5 UAS.
- No licensing or approvals required.
- No interference with local infrastructure.
- Inherently resistant to jamming and spoofing.