SARA's threat warning systems division produces sensors that solve urgent and emerging mission needs, such as:

- Long range, low SWaP aircraft detection systems that enable safe integration of UAS into mission airspace and the National Airspace System.
- Detection of hostile small arms gunfire and shooter geolocation
- Sensors and seekers that can home in on radio frequency (RF) sources such as jammers.

#### **Contact Us**

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### **THREAT WARNING SYSTEMS**



**Detect & Avoid for UAS** 



**Hostile Fire Warning** 



**RF Homing Seekers** 

Learn about all of SARA's divisions at SARA.com







#### **Company History**

- Founded 1989
- US owned small business
- 150 employees
- Offices in Cypress, CA and Colorado Springs, CO
- Rooted in defense contracting and innovative research

### **Mission/Vision Statement**

SARA is dedicated to equipping our defenders and providers with breakout technology that works.

Our innovation and thought leadership results in solutions that are uniquely available through SARA. We accomplish this by leveraging cutting edge technology at a reasonable cost, through the skills of the best scientists, engineers and mission experts who maintain close relationships with our customers so that we may rapidly provide solutions to our customer's most pressing needs.



### **Detect & Avoid for UAS**

SARA has multiple DAA solutions available for integration into UAS platforms and networks: **PANAMA**: Acoustic air collision avoidance system for military UAS. SWaP suitable for groups 1, 2 & 3 UAS with detection ranges from 2-5 miles. Developed with SBIR funding and sponsored by PMA-263. TRL-6. System uses may be expandable to additional ISR missions such as camera cueing, shooter geolocation and vehicle/vessel detection.



**PANCAS**: Commercial DAA system that can be integrated into drones to keep them well-clear of manned aircraft. SARA has teamed with PrecisionHawk to provide PANCAS-equipped systems to customers seeking to operate beyond visual line of sight (BVLOS). <u>www.precisionhawk.com/bvlos</u>

**TASA**: SARA's ground-based DAA offering is an acoustic alternative to expensive radar systems. Scalable systems can be installed along flight corridors and can report manned-aircraft tracks to subscribing drones.

# **Hostile Fire Warning Systems**

SARA offers acoustic gunshot detection systems for the harshest environments; on aircraft, ground vehicles and fixed installations. We use proprietary flow noise reduction and vibration reduction technologies to operate where traditional acoustic systems never could.



**ShotFinder**: SARA has partnered with Northrop Grumman to produce ShotFinder, a single-sensor airborne system that can detect hostile fire from small arms and point back to the shooter.

www.northropgrumman.com/Capabilities/Shotfinder

## **RF Homing Seekers**

Should an enemy strive to complicate the battlefield by stray or competitive RF energy, SARA's HOJ subsystems can enable a host guided bomb or missile to engage it as the system or operator might prefer.



HOJ is compact and 1/10th the production cost of prior-generation systems. HOJ uses solid state components and a common munition interface which provides rapid, low-cost integration.