

## **WRAITH SHIELD™**

# **DEFENSIVE JAMMER**

### **Transform every L3Harris Falcon® IV Radio into a protective sensor**

Modern battlefields face threats from attritable (expendable, low-cost) drones and aggressive electronic attacks. The Wraith Shield™ software transforms L3Harris radios into a protective network, delivering resilient voice and data while defending ground forces from commercial unmanned aerial systems (UAS) threats.

The Wraith Shield™ defensive jamming software is a converged communications solution that upgrades Wraith-enabled L3Harris radios, turning them into distributed radio frequency (RF) sensors and effectors. Through a software-only enhancement, radios already carried by operators can simultaneously provide resilient, anti-jam communications while sensing, identifying and disrupting drone control links operating in their environment.

#### **EVERY RADIO A PROTECTIVE NODE**

The Wraith Shield technology builds on the proven Wraith™ fast-frequency-hopping waveform and extends resilient communications into a new operational role — turning every radio network into a distributed protection layer. While operators continue passing voice, GPS and data, Wraith Shield-enabled radios monitor for signals of interest associated with UAS C2 (unmanned aerial system command and control) links and, when activated, disrupt those links to counter the threat.

#### **LAYERED PROTECTION AT THE TACTICAL EDGE**

Designed for the tactical edge, the Wraith Shield solution provides a distributed layer of protection that prioritizes operator survivability. By transforming each radio into an AI-enabled protection node, the system extends safeguarding capabilities to every operator.

The Wraith Shield solution expands coverage, shortens detection timelines and disrupts hostile drone threats before they reach effective range. This proactive, layered approach helps safeguard dismounted and mounted forces at the front line, reducing risk to personnel while allowing higher-end counter-UAS and air defense systems to stay focused on more complex threats.

#### **UPGRADE CAPABILITY, NOT EQUIPMENT**

The Wraith Shield upgrade is delivered as a software update. It becomes operational immediately across 150k+ fielded Falcon® IV radios worldwide. No need to carry new hardware, antennas or batteries. Deployed radios become sensors at the front line — expanding situational awareness, feeding sensed data to visualization and AI tools and integrating seamlessly with broader counter-UAS, air defense and mission command systems.

#### **ONE RADIO. MULTIPLE ROLES. IMMEDIATE ADVANTAGE.**

The result: resilient communications, distributed sensing and rapid protection — delivered through a single radio platform and ready for today's contested environments.



#### **KEY BENEFITS**

- > Delivers anti-jam voice and data while detecting and countering UAS threats
- > Turns deployed radios into distributed RF sensors providing UAS protection at the tactical edge
- > Disrupts drone links to strengthen layered counter-UAS and air defense systems
- > Requires no added hardware or SWaP; delivered as a software upgrade to existing radios
- > Integrates and scales across the battlespace feeding sensor data to C-UAS systems like Drone Guardian® and VAMPIRE™

## FROM RESILIENT COMMUNICATIONS TO INTEGRATED PROTECTION

The Wraith Shield solution builds on the proven Wraith waveform by adding distributed sensing and protection capabilities at the radio level.

### Wraith

- > Fast frequency hopping MANET
- > Voice and data through jamming, GPS denial and severe RF environments
- > Supports high data throughput applications including streaming video, ISR and C2 applications
- > Proven resilience for today's contested environments via partnerships and demonstrations at multiple lab and field exercises
- > Available on the AN/PRC-163, AN/PRC-167, AN/PRC-158C, RF-9820S, RF-9820S-ER and AN/PRC-171

### Wraith Shield

- > Sense-and-protect capabilities for distributed c-UAS protection
- > AI integrated radio-as-a-sensor-and-effector solution
- > Scalable to thousands of distributed sensors with c-UAS protection capabilities
- > Supported on the RF-9820S-ER providing long-range threat sensing on a UAV platform
- > Will be available on the AN/PRC-163, AN/PRC-167, AN/PRC-158C, RF-9820S, RF-9820S-ER and AN/PRC-171

## AI-ENABLED SPECTRUM AWARENESS AT THE TACTICAL EDGE

The Wraith Shield solution integrates advanced AI-driven signal intelligence from DataShapes AI to deliver realtime visibility into the electromagnetic environment at the tactical edge. With the DataShapes AI GlobalEdge™ platform, Wraith Shield-enabled radios detect, classify and visualize RF (radio frequency) signals of interest — including commercial drone links and other threat emitters — providing operators with enhanced situational awareness and faster decision making.

By combining resilient communications, distributed sensing and protection and AI-powered analytics, the Wraith Shield system transforms tactical radios into a scalable network for sensing, identifying and countering emerging RF threats.

## REDEFINING THE ROLE OF THE TACTICAL RADIO

Built on proven resilient communications and designed to evolve through software, the Wraith Shield platform enables distributed sensing and protection where it matters most — at the edge. The result is a scalable, integrated capability that strengthens layered defense architectures and keeps warfighters connected and protected in increasingly complex battlespaces.

### Wraith Shield™

© 2026 L3Harris Technologies, Inc. | 05/2026 | L32850

**NON-EXPORT CONTROLLED:** THIS DOCUMENT CONSISTS OF INFORMATION THAT IS NOT DEFINED AS CONTROLLED TECHNICAL DATA UNDER ITAR PART 120.33 OR TECHNOLOGY UNDER EAR PART 772.

L3Harris is the Trusted Disruptor in defense tech. With customers' mission-critical needs always in mind, our employees deliver end-to-end technology solutions connecting the space, air, land, sea and cyber domains in the interest of national security. Visit [L3Harris.com](https://www.l3harris.com) for more information.



1025 W. NASA Boulevard  
Melbourne, FL 32919

[L3Harris.com](https://www.l3harris.com)