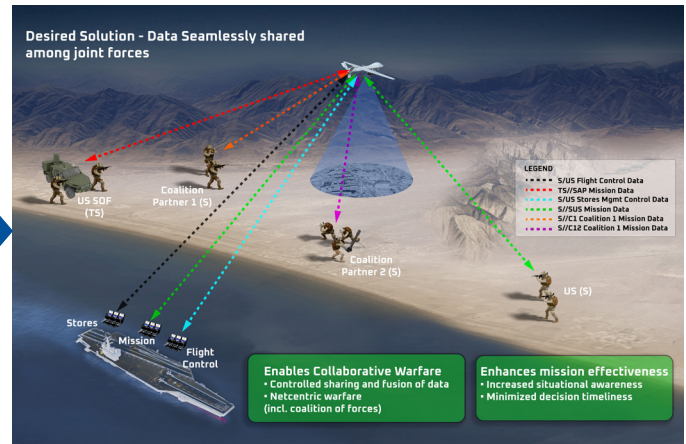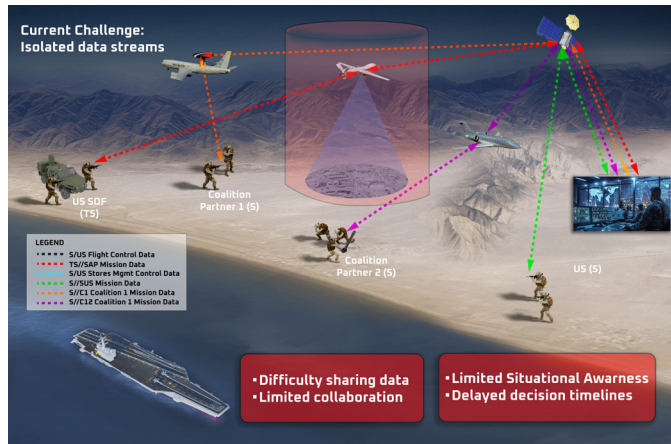DYNAMIC
EDGE KIT™

Dynamic Edge Kit

Enhancing Multilevel Security for Accelerated Decision-Making Capabilities

Benefits

Enhanced Interoperability: Secure data sharing improves joint operational effectiveness.

Improved Situational Awareness: Fuses multiple data sources for a real-time operational picture.

Reduced Cognitive Load: AI/ML automates tasks, enabling focus on mission-critical decisions.

Proven Reliability: High TRL and Navy certifications ensure immediate deployment readiness.

Future-Proof Solution: Open standards allow seamless integration with current and future systems.

Operational Efficiency: Reduces network load and accelerates decision-making.

Comprehensive Support: Backed by General Dynamics' commitment to ongoing software sustainment and field support, Dynamic Edge Kit ensures long-term reliability and performance.

Overview

The Dynamic Edge Kit is a cutting-edge multilevel security solution that meets the U.S. Navy's stringent requirements for secure and efficient data sharing to accelerate decision making for U.S. and coalition forces.

Developed with Navy-defined requirements in mind and grounded in open standards, the Dynamic Edge Kit seamlessly integrates high Technical Readiness Level (TRL) advanced hardware from Multifunction Processor (MP) family of products, as well as the Tactical Cross Domain Solution (TACDS) and sophisticated software applications Dynamic ASSIST and Dynamic Vision. This integration ensures robust Multilevel Security (MLS) processing and real-time data fusion from various sources such as AIS and Link-16, providing operators with a comprehensive, and actionable set of Intelligence, Surveillance, and Reconnaissance (ISR) data.

The Dynamic Edge Kit offers unparalleled benefits, including secure information sharing between U.S. and Coalition forces, reduced cognitive load on operators through AI/ML-enhanced automation, and proven reliability with multiple Navy certifications and accreditations. Its ready-for deployment status and seamless integration with existing naval systems make it a future-proof solution for maritime ISR operations.

The Dynamic Edge Kit represents a pivotal advancement in naval ISR operations, providing a robust MLS solution that aligns with the strategic objectives of the U.S. Navy. With its high TRL, compliance with Navy defined requirements, adherence to open standards, and support for critical Military Standards and interfaces, the Dynamic Edge Kit is poised to revolutionize maritime data sharing and processing.

DYNAMIC EDGE KIT™

Features:

- **Secure Multilevel Communications**
  - Facilitates secure information sharing across multiple security levels, enhancing interoperability and operational integrity for U.S. and Coalition forces.

- **Real-Time ISR Data Management**
  - Manages and fuses real-time ISR data for improved maritime domain awareness.

- **Track Data Correlation**
  - Correlates tracks from various sources to provide a unified operational picture and timely situational analysis.

- **Sensor Integration and Management**
  - Integrates and automates onboard sensors to optimize surveillance and reduce operator workload.

- **Operational Efficiency and Reduced Cognitive Load**
  - Uses AI/ML to automate routine tasks, allowing operators to focus on mission-critical decisions and increasing operational effectiveness.

- **Proven Reliability and Readiness**
  - High TRL and multiple Navy certifications including Raise the Bar (RTB) accreditation ensure immediate deployment readiness and seamless integration with existing naval systems

Dynamic Edge Kit Components

Dynamic Vision TRL 8
- Software for real-time ISR and off hull data fusion for a common operational picture

Multilevel Security TRL 8
- 3UVPX form factor hosting General Dynamics Secure Network Access Products (SNAP) for MLS processing and secure communication
- Authority to Operate (ATO) received on multiple platforms
- National Cross Domain Strategy and Management Office Raise the Bar (NCDSMO RTB) Ver 2.0 influenced by SNAP

TACDS TRL 9
- Ensures secure data transfer across different security domains
- Raise the Bar (RTB) accredited solution with roadmap defined to maintain accreditation

Dynamic ASSIST TRL 7
- Sensor control for automated optical investigation of track data

GENERAL DYNAMICS
Mission Systems

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