Modular Detachment Kit
A **Booz Allen**® Solution

MDK Fires
Transformative C2 at the Edge

The Booz Allen Modular Detachment Kit (MDK) Fires solution is a portable, modular command and control (C2) system delivering real-time capabilities for faster, more informed decision making. It connects multidomain technologies through a unified architecture, normalizing C2 message formats to enable operations.

The platform supports enriched data rendering, and it's compact size enables deployment in vehicles that meet the size, weight, power, and cost (SWaP) requirements for C2—transforming distributed multidomain and coalition battle management.

FEATURES

Tactical Network Infrastructure

- **Multi-Mission Datalink, Radar, and Radio Fusion:** Enables flexible, scalable battle management and C2.

- **Seamless System Connection:** Links legacy and modern systems across local, regional, or enterprise levels.

- **Data Conflict Resolution:** Applies data mesh to resolve military-standard (MIL-STD) sensor-message conflicts via Modular Open Systems Approach (MOSA) and Sensor Open Systems Architecture (SOSA) standards.

- **Enhanced Network Resilience:** Uses multiple waveforms, including 5G, for redundancy.

Small Form Factor System

- **Compact Command Posts:** Reduces infrastructure without sacrificing capability, for more survivable operations.

- **Simplified Server Needs:** Minimizes server stacks in operations centers.

- **Mobile Flexibility:** Configurable for mounted/dismounted use, enabling rapid deployment.

- **Hardware Optimized for Military Platforms:** Powers platforms like the Joint Light Tactical Vehicle (JLTV) and supports the Command Post Integrated Infrastructure (CPI2) red/black kits.

- **SWAP-C2 Compliant:** Meets SWAP-C2 standards.

Proven Joint All-Domain Tactical Edge Node

- **Adaptable Battle Management:** Supports battle management for various military units at the tactical edge.

- **Resilient Joint C2 Layer:** Adds robust, layered connectivity across all domains.

- **On-Premises Data Backbone:** Enables edge-to-cloud data exchange across broad systems.

- **Unified Messaging:** Connects Joint Fires Network, Cooperative Engagement Capability (CEC) platforms, and the Tactical Operations Center (TOC) family of systems.

- **Simplified Sensor Connection:** Reduces complexity with scalable, connected networking via software-defined wide area networks (SDWAN).

- **Hardware/Software Flexibility:** Vendor-neutral, allowing broad connection across a variety of hardware and software platforms.
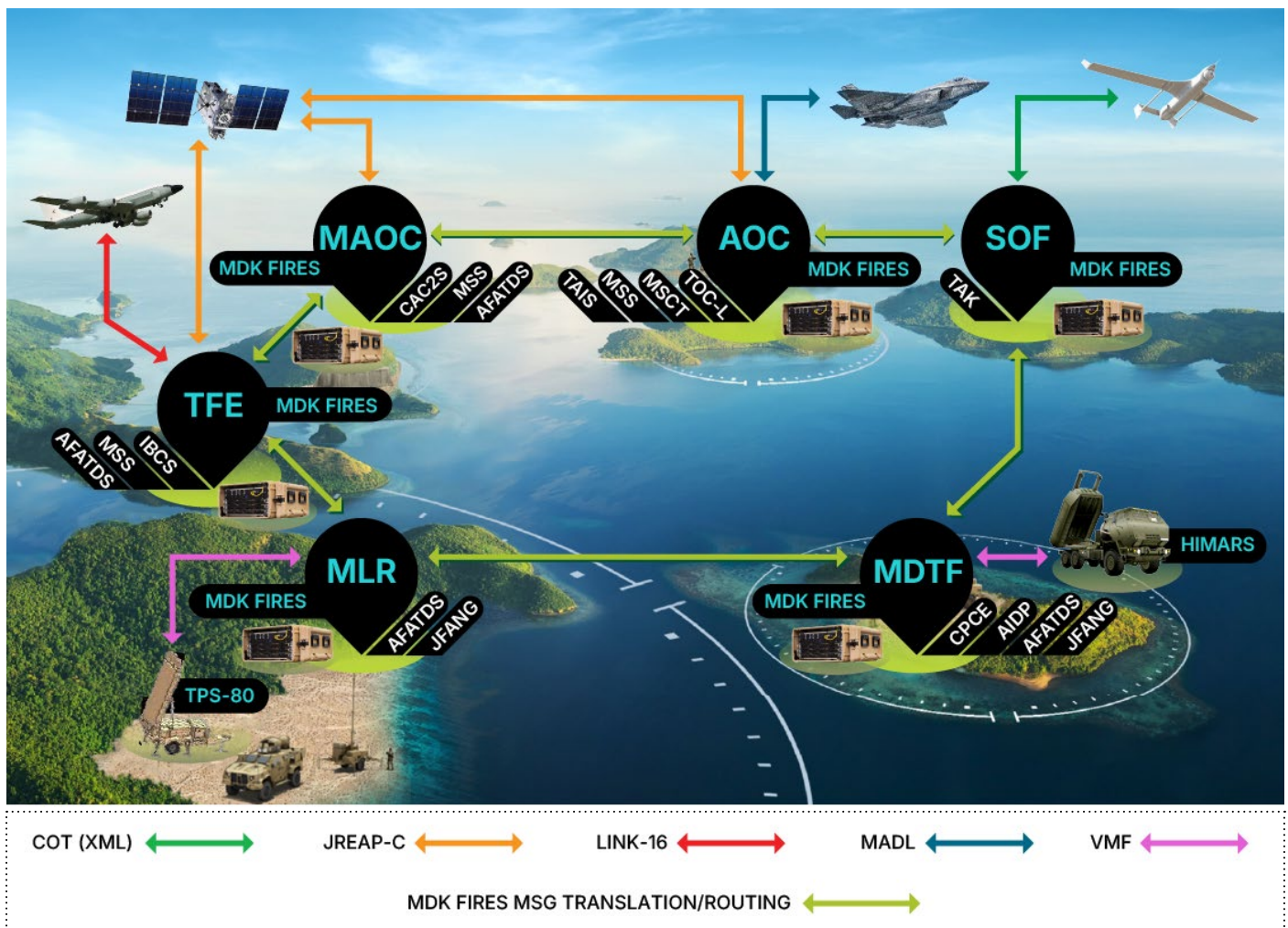
MDK FIRES IN ACTION

Project Convergence Capstone 4

- Addressed CJADC2 gaps including messaging issues, mission command scalability, and data fusion for offensive operations.
- Allowed data sharing across multiple echelons at speed and scale, working seamlessly with legacy systems to provide commanders with a unified view of the battlespace.

Archer–Arrow Scenario, Operational View

- Processed target data to identify and track a cruise missile using Joint Range Extension Applications Protocol (JREAP) messaging, translating and forwarding it to various military systems for interception and engagement—enhancing coordination for offensive fires.

About Booz Allen

Booz Allen is the advanced technology company delivering outcomes with speed for America's most critical defense, civil, and national security priorities. We build technology solutions using AI, cyber, and other cutting-edge technologies to advance and protect the nation and its citizens. By focusing on outcomes, we enable our people, clients, and their missions to succeed, accelerating the nation to realize our purpose: **Empower People to Change the World.®**

Contact Information

Dan Elliott
Elliott_Dan@bah.com

Patrick Hamilton
Hamilton_Patrick2@bah.com

For additional resources:
BoozAllen.com/MDK

Booz Allen®