Mounted Family of Computer Systems (MFoCS)

LEONARDO DRS

MOUNTED FAMILY OF COMPUTER SYSTEMS (MFoCS)

TODAY'S GENERATION OF WARFIGHTER DESERVES A NEXT-GENERATION MOUNTED COMPUTER.

MFoCS improves Situational Awareness (SA), Command and Control (C2), maneuverability, and logistics on a range of platforms and weapons systems across the joint services using next-generation computing and display hardware. These MFoCS systems include dismountable Tablet PCs, Processor Units, keyboards, removable solid-state storage, Display Units, cabling and installation kits designed for various platforms — all engineered rugged for continuous operation in a wide range of military and combat environments.

The system integrates Joint Battle Command-Platform (JBC-P), Warfighter Information Network-Tactical (WIN-T), and future Mounted Computing Environment (MCE) capabilities into a powerful, modular and flexible hardware architecture.

MFoCS CAN DO THAT:

- ☑ Tactical Sensors
- ☑ Tactical Networking
- ☑ Tactical Logistics
- ☑ Tactical Applications
- ☑ System of Systems

FEATURES & CAPABILITIES

INTEROPERABILITY

MFoCS enables Mounted Computing Environment (MCE) / Common Operating Environment (COE) for enhanced interoperability with other COE domain environments.

SOFTWARE FLEXIBILITY

MFoCS operates multiple Battle Management System applications such as JCR, JBC-P and FOS. MFoCS can simultaneously operate these applications and infrastructure services such as tactical routing, VICTORY shared services, video acquisition / streaming, and sensor integration.

MULTIPLE WORKSTATIONS

MFoCS can be configured with multiple work stations that are tailored to the mission and vehicle platform. Multiple workstations facilitate rapid decision-making via simultaneous viewing of Command and Control and Situational Awareness data.

VERSATILE

MFoCS can host both mission command and platform support applications. Services and applications such as Embedded Training, Virtual gaming, DVR, and Tactical Routing can be provided by one hardware suite.

HIGHLY SECURE

MFoCS incorporates a mature embedded cybersecurity architecture with a Secure BIOS, Security system updates, Hardware and Firmware integrity measurements, and exclusive Secure Boot and Self-Encrypting Drive technologies. These technologies help to protect the MFoCS system from the growing occurrence of embedded system attacks.

TACTICAL LOGISTICS

MFoCS can be integrated with Tactical Logistics Services that support multi-function use of Program of Record (PoR) MFoCS Hardware for vetronics data collection and on-platform prognostic data processing.

IMPROVED SWAP

MFoCS reduces Size, Weight, and Power (SWaP) demands by allowing multiple software applications to run on a common set of hardware, thereby eliminating the need for additional computers.

MFoCS COMPONENTS

RUGGED PORTABILITY: MFoCS TABLET

This ruggedized, dismountable Tablet features an Intel® Core™ i7 Dual Core process at 2.8GHz (Max Turbo) with up to 16 GB, DDR3 ECC RAM. It features a 10.4″ XGA bonded resistive touch screen display and 2 internal hard drive bays.

POWER AND THROUGHPUT: MFoCS PROCESSOR UNIT (PU)

The MFoCS PU features a powerful Intel® Core™ i7 Quad Core processor at 3.1 GHz (Max Turbo) with up to 16 GB, DDR3 ECC RAM. The ruggedized, highly compact form factor includes 2 internal hard drive bays.

MOUNTED FUNCTIONALITY: : MFoCS DOCKING STATION

The purpose of the MFoCS Dock is to provide a base for tethering the MFoCS Tablet to the vehicle. The Dock provides the Tablet with power and Input/Output fan-out for interfacing the vehicle via commercial standard LAN, USB, Serial, Audio, and RFID interfaces.

SITUATION VISUALIZED: MFoCS DISPLAY OPTIONS

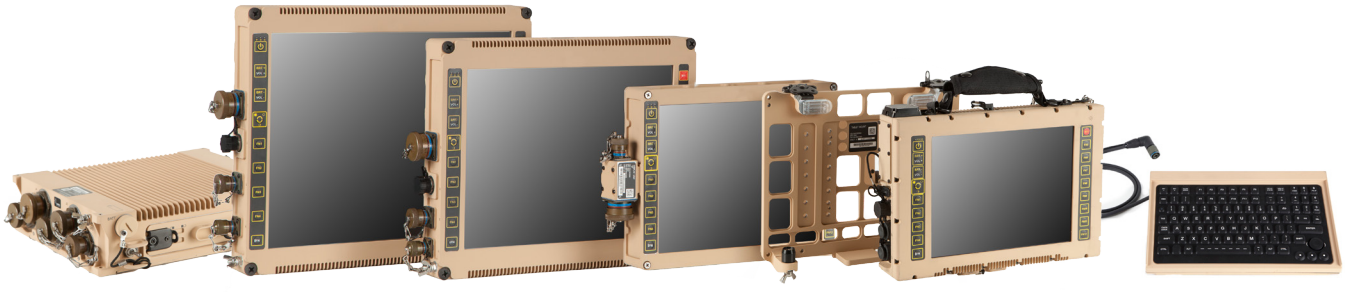
There are three Display Unit (DU) members of the MFoCS hardware family — 12.1″ XGA 1024x768, 15″ XGA 1024x768 and 17″ SXGA 1280x1024. The 12.1″ DU supports an LVDS interface, while the 15″ and 17″ DUs support both LVDS and Display Port inputs.

RUGGED INTERFACE: MFoCS KEYBOARD UNIT (KU)

The MFoCS Keyboard Unit (KU) is a full 85-key QWERTY keyboard that is environmentally sealed against dirt, dust and moisture. The Keyboard includes a sealed mouse pointing device and a USB port to support commercial add-on peripherals.

RUGGED AND SECURE STORAGE: THE MFoCS COMMON HARD DRIVE

The MFoCS computers operate from a common interchangeable 512GB solid state hard drive. The hard drive represents state of the art for rugged performance and security, incorporating the latest Opal 2.0 Self-Encryption technology for protecting data at rest.



MFoCS PU | *MFoCS 17″ Rugged Display* | *MFoCS 15″ Rugged Display* | *MFoCS 12.1″ Rugged Display* | *Docking Station* | *MFoCS 10.4″ Rugged Tablet PC* | *MFoCS Keyboard Unit (KU)*

BACKWARD COMPATIBLE

MFoCS is 100% compatible with over 200,000 previous FBCB2/JBC-P systems, providing flexibility when fielding new hardware and extending the usable life of systems in the Army's previous investments.

EXTREME ENVIRONMENTS

MFoCS has been verified to support continuous operation while exposed to MIL-STD combat environments. Commercial off the shelf hardware that is "designed to" military standards are not sufficient for mission critical applications.

FULLY CUSTOMIZABLE

MFoCS is comprised of interoperable and flexible family of hardware components. These components can be combined and configured to scale the computing architecture to meet specific platform needs.

LOGICAL EVOLUTION THAT BEGAN WITH FBCB2

The US Military has made substantial investments in mounted computing hardware and software, beginning with the Force XXI Battle Command Brigade and Below/Blue Force Tracking programs (FBCB2/BFT) in the mid 90s. DRS has fielded over 200,000 mounted computers since the launch of FBCB2.

Today's Mounted Family of Computer Systems (MFoCS) program has evolved to leverage over 15 years of mission command and battle management combat experience.

FBCB2

FBCB2 first fielded in the 90s providing real time position location to troops being transmitted via SINCGARS and EPLRS radios improving unit situation awareness exponentially.

JBC-P

JBC-P, introduced in 2012, offered several new features via the next generation computing and display system, called JV-5, operating a new version of mission command software, called Joint Capabilities Release (JCR).

THE NEXT-GEN MFoCS

Features JBC-P core functions and will be the common computing hardware for the Mounted Computing Environment. It's designed to facilitate rapid development of new capabilities, enhanced interoperability, security, and more.

FIELD-PROVEN

DRS Has a 15 Year Legacy of Fielded Mission Command and Battle Management Systems

- Force XXI Battle Command Brigade and Below (FBCB2)
- Joint Battle Command–Platform (JBC-P)
- Movement Tracking System (MTS)
- U.K. Bowman Program
- Driver's Vision Enhancer (DVE)

FBCB2

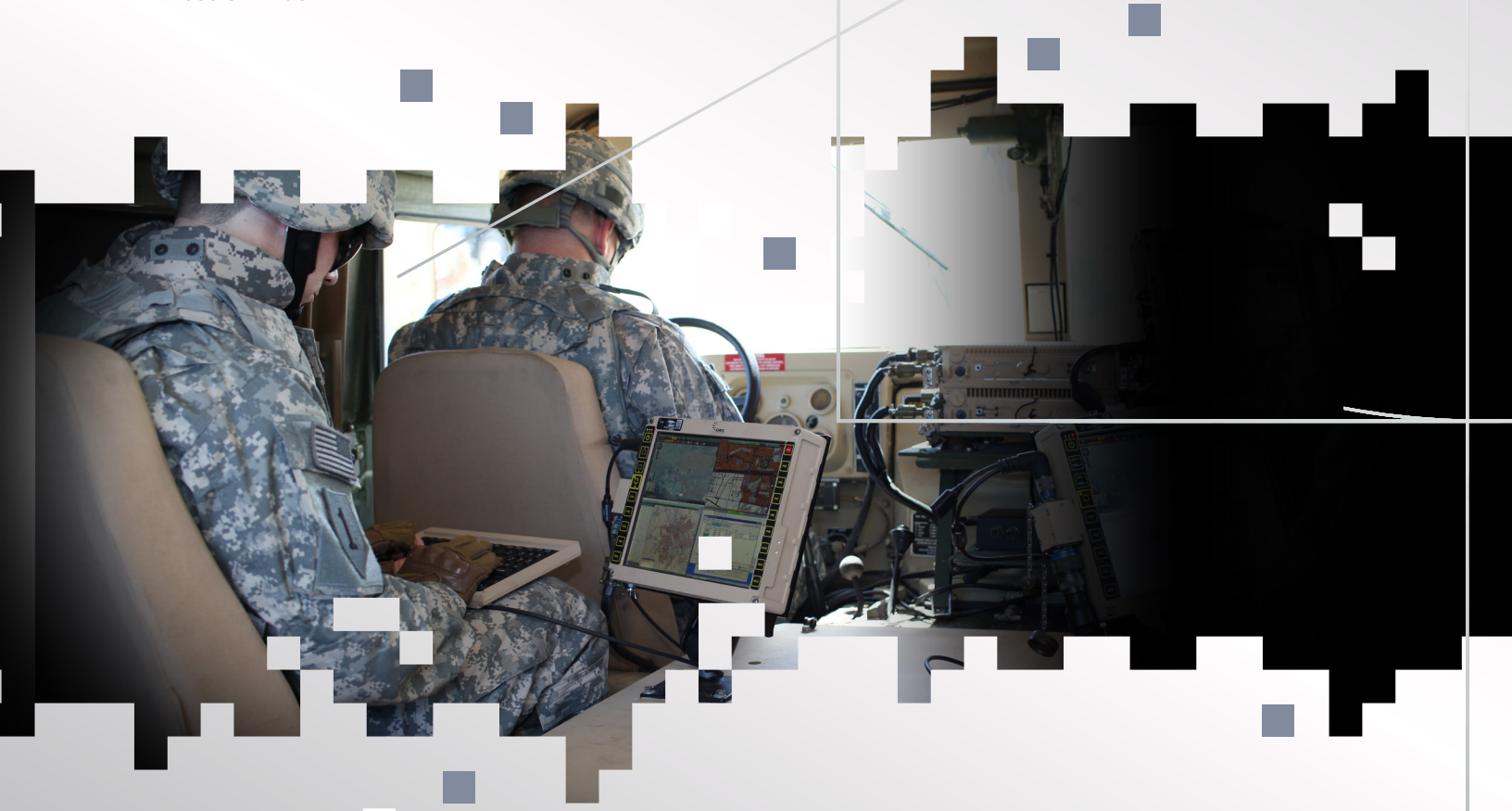
MTS

MOUNTED FAMILY OF COMPUTER SYSTEMS (MFoCS)

MFoCS improves Situational Awareness (SA), Command and Control (C2), maneuverability, and logistics on a range of platforms and weapons systems across the joint services using next-generation computing and display hardware.

LEONARDO DRS

leonardodrs.com/MFoCS
marketing@drs.com
DRS Land Electronics
+1 888 872 1100



MRD-2017-02-053_rev01