PM Electronic Warfare & Cyber

APBI Break Out Session – FY24 Strategic Planning Guidance

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PM EW&C Mission

Acquire and field integrated electronic warfare, intelligence, and cyber capabilities to enable spectrum and cyberspace superiority.

PM EW&C Vision

An Army equipped with upgradable, integrated and networked EW, SIGINT, cyber and space capabilities to overmatch the threat in multi and joint all domain operations.

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PM EW&C Portfolio

Spectrum & Cyberspace Superiority
Upgradable • Integrated • Networked

TSW — Terrestrial Spectrum Warfare

- Prophet Enhanced
  - ESP, TDEWS, TEWS-I, TEWS, TEWL
- Terrestrial Layer System
  - Brigade Combat Team
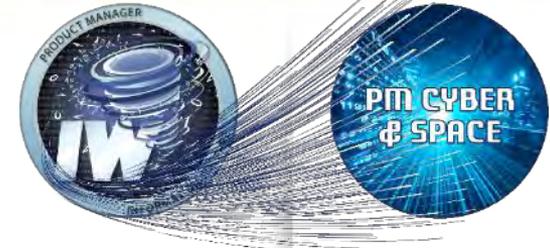 - Echelons Above Brigade

EA — Product Lead Electronic Attack

- Mounted CREW - Duke
- Dismounted CREW
- Fixed Site CREW & EA
- Multi-Function EW – AL
- **TLS BCT – Manpack - New**

EWI — Electronic Warfare Integration

- Electronic Warfare Planning & Management Tool (EWPMT)
- **Spectrum Situational Awareness (S2AS) - New**

TSS — Product Lead Tactical Space Superiority

- Space

IW — Product Manager

- Offensive Cyber Infrastructure
- Weapon System / Tools
- Defense Cyber Operations
  – Response Actions

PM CYBER & SPACE

New O6/GS15 PM to manage Army Offensive Cyber programs.

Operational Capabilities

- Ground SIGINT
- Actionable Intelligence
- Electronic Attack Offensive
- Situational Understanding
- Force Protection

- Electronic Attack Offensive / Defensive
- Electronic Support
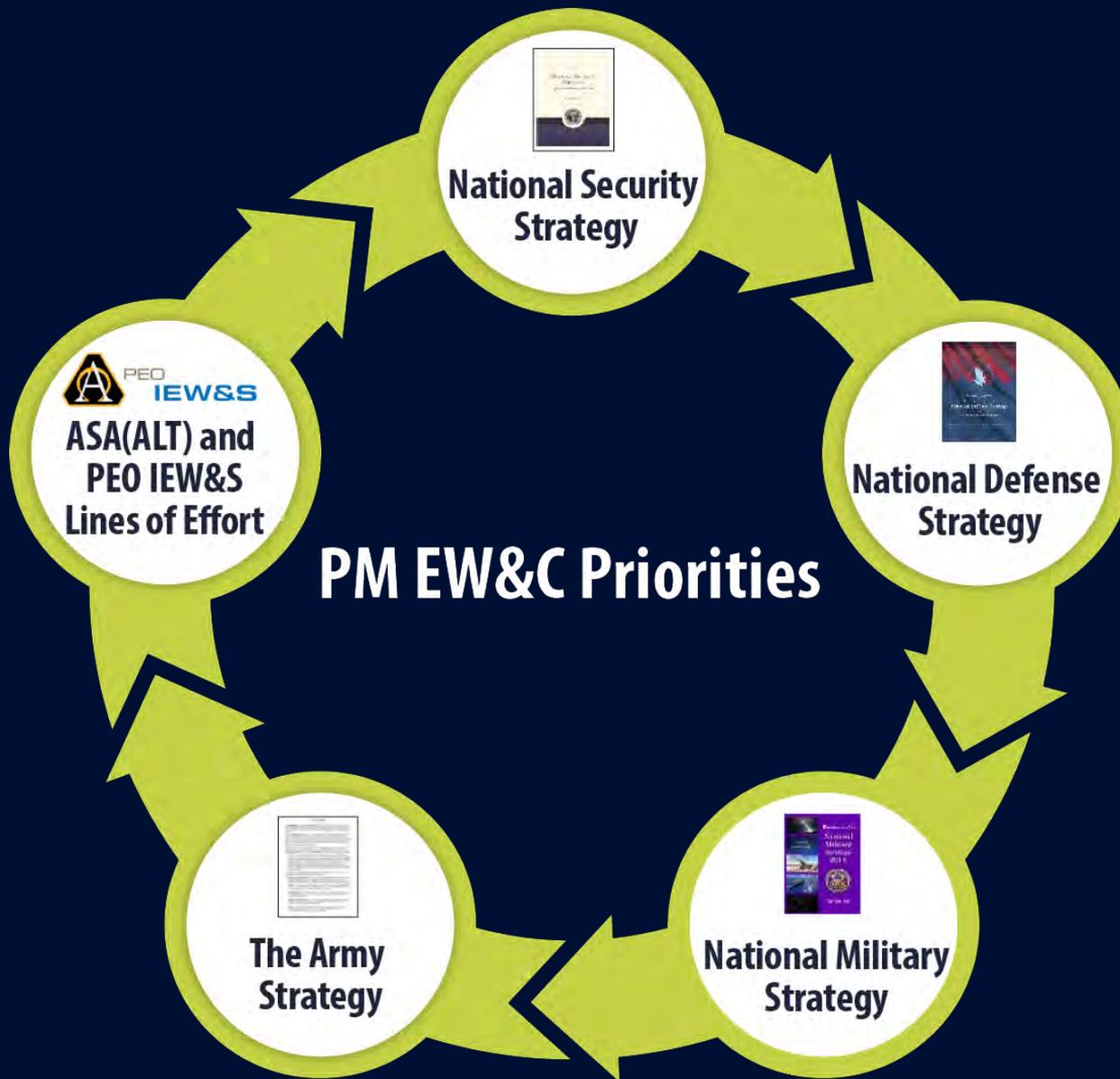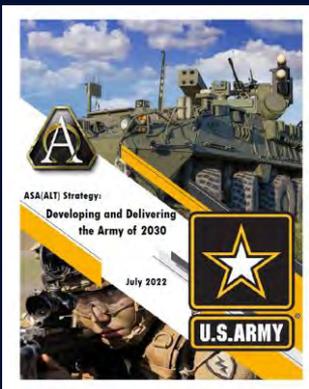- Situational Awareness
- Force Protection-RCIED

- Electromagnetic Battle Management
- Spectrum Management Operations
- Spectrum Compatibility

- Tactical Capabilities

- Offensive Cyberspace Operations
- Special User
- Low Quantity Fielding
- Development Operations
- Cyber Support to Corps & Below

Effective Summer Of 2023

Strategic Alignment

PM EW&C Priorities

- National Security Strategy
- National Defense Strategy
- National Military Strategy
- The Army Strategy
- ASA(ALT) and PEO IEW&S Lines of Effort

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Primary Army Capability Manager Alignment

ACM Electronic Warfare

- Electronic Attack
- Electronic Support
- EW Effects
- Spectrum Management

ACM Intelligence & Sensors

- Ground SIGINT
- Situational Understanding
- Actionable Intelligence
- Force Protection

ACM Space & High Altitude (SHA)

- Classified Capabilities
- NAVWAR SA / NAVWAR Attack

PM EW&C Requirements

Integrated EW / SIGINT / Cyber - 2030

BCT – Brigade Combat Team
EAB – Echelons Above Brigade
EW – Electromagnetic Warfare
EWPMT – Electronic Warfare Planning & Management Tool
FLOT – Forward Line of Troops
GLE – Ground Launched Effect
MEMSS – Modular Electromagnetic Spectrum System
MFEW – Multi-Function Electronic Warfare

MRL – Multiple Rocket Launcher
NESO – NAVWAR EW Systems Overhead
S2AS – Spectrum Situational Awareness System
SAM – Surface to Air Missile
TLS – Terrestrial Layer System
TA – Target Acquisition
TT – Target Tracking
UAV – Unmanned Aerial Vehicle

NESO

MFEW Air Large

EW Planning and Management Tool

EWPMT

ISR

TSIGS

S2AS

GLE Small

GLE Large

UAV

TLS BCT

INFANTRY

ARMOR

EW

SAM

SAM

SAM

TT RADAR

ARTILLERY

THREAT AREA

MRL

TA RADAR

TLS EAB

MEMSS

EW&C Open Systems Architecture Approach

Photon SW Framework

Photon is a GPU-accelerated computing digital signal processing (DSP) platform

On-demand data access to wideband I/Q samples
High-speed and parallel access enables concurrent DSP applications to process massive volumes (100s to 1000s of MHz) of data without duplication, through a zero-copy, shared-memory data plane.

Bridge between established and emerging platforms
Photon leverages the powerful performance of both legacy and GPU-based platforms to free up CPU resources for other platform capabilities and provide integrations with existing CPU-based DSP frameworks.

Enhanced capabilities through use of GPU technology
Including wideband channelization and detection, real-time multi-mega point DFT processing, and AI/ML-enabled survey and detection processing.

High-performance, parallel ingress to big data
Access multiple segregated services running concurrently on a single common platform.

Photon Benefits:

- Photon is an SW framework that enables delivery of digital signal information to both CPU and GPU-based signal processing capabilities
- Photon leverages the investments in GPU technology to scale real-time Digital Signal Processing (DSP)
- Photon enables rapid delivery integrating new techniques/SOIs of AI/ML capabilities to pace the threat
- Photon unifies multiple processing frameworks (e.g. XMIDAS, REDHAWK, SALVAGE)

Sensor Open Systems Architecture

CMOSS

C5ISR/EW Modular Open Suite of Standards

Multi-Function Electronic Warfare Air Large (MFEW-AL)
Provides Commanders with an organic airborne offensive Electronic Warfare (EW) capability. An airborne EW pod mounted onto Gray Eagle UAS.

Terrestrial Layer System (TLS-EAB) Echelons Above Brigade - Delivers an integrated suite of SIGINT, EW, and Cyberspace Operations capabilities to DIV, Corps, MDTF

Terrestrial Layer System (TLS-BCT) Brigade Combat Team - Delivers an integrated suite of SIGINT, EW, and Cyberspace Operations capabilities.

Tactical Cyber Equipment (TCE)
Manpack chassis providing Cyber-Electromagnetic Activities card for Expeditionary CEMA Teams to deploy effects at the tactical edge.
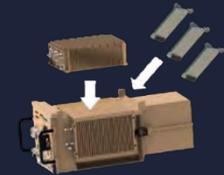
CMOSS Benefits:

- Operational flexibility of platform for the Battlefield Commander
- Ability to Pace the Threat, Increase Commonality/Reuse, and Mitigate Obsolescence
- Industry has used CMOSS to reduce risks associated with system design, development, integration, test, and maintain programmatic schedules

PM EW&C Priorities

To support a 2030 Multi-Domain Capable Force, designed to counter near-peer adversaries.

Deliver Capability Now - Near Term (FY23-25)
• Field TLS BCT
• Fully Deploy EWPMT & prepare for agile development
• Complete Soldier testing & deploy MFEW-AL

Build New Programs - Near to Mid-Term (FY24-28)
• Complete TLS EAB concept development and transition to prototype build
• Implement NAVWAR situational awareness
• Prepare new efforts to procure manpack / handheld spectrum, EW, SIGINT systems
• Establish program of record (POR) and tailored authorities for capability delivery for S2AS, MEMSS and TSIGS

Sustain and Maintain Readiness - Near to Mid-Term (FY23-28)
• Sustain fielded systems and QRCs until systems can be replaced with enduring capability
• Maintain relevancy of CREW to pace the threat and cover risk
• Expand community use of PHOTON via our DevSecOps pipeline

Set Conditions for the Future - Mid to Far-Term (FY25-35)
• Increase joint, interagency, and coalition interoperability
• Support the Network Capability Set process to deliver necessary network redundancy
• Mature modular open systems architecture approaches and expand the supporting ecosystem
• Support DoD goals for Foreign Military Sales
• Enable a Total Army 2030 MDO capable force

Spectrum Situational Awareness System (S2AS)

MISSION / DESCRIPTION
S2AS is a system that senses, detects and reports in near real time (1) a Command Post's EMS signature, (2) sources of electromagnetic interference from coalition, partner, and enemy spectrum use, and (3) ISR threats utilizing active emissions, and (4) enables Blue Force awareness inside the EMS.

Theater SIGINT System (TSIGS)

MISSION / DESCRIPTION
Provide tactical commanders at Echelons above CORPS with a forward deployable, remotely or locally controlled, signals intelligence (SIGINT) system for maintaining operational readiness and support for contingency operations. Material solution includes persistent (Pickett Line) and non-persistent (TSPRING) variants.

Modular Electromagnetic Spectrum System (MEMSS)

MISSION / DESCRIPTION
Modular Electromagnetic Spectrum System (MEMSS) supports Command Post Survivability by employing electromagnetic obfuscation to confuse and deceive adversary foreign intelligence collection and disrupt their targeting cycle. MEMSS is comprised of a multichannel transmitter, sensors, power amplifiers and generators on a military trailer.

Emerging Requirements FY24 - 29

Theater SIGINT System (TSIGS)

Tactical Aerial EW System (TAEWS) Ground Launched (GLE) / Air Launched (ALE) Effects

Family of Delivered EW (FDEW)

Navigation Warfare (NAVWAR) SA / NAVWAR Attack

Spectrum Situational Awareness (S2AS) / Spectrum Analyzer

CMOSS Mounted Form Factor (CMFF) EW Card/Payload

NAVWAR EW Systems Overhead (NESO)

Ultra Endurance Unmanned Aerial System (UEUAS)

Modular Electromagnetic Suite of Systems (MEMSS)

PM EWC — ELECTRONIC WARFARE & CYBER
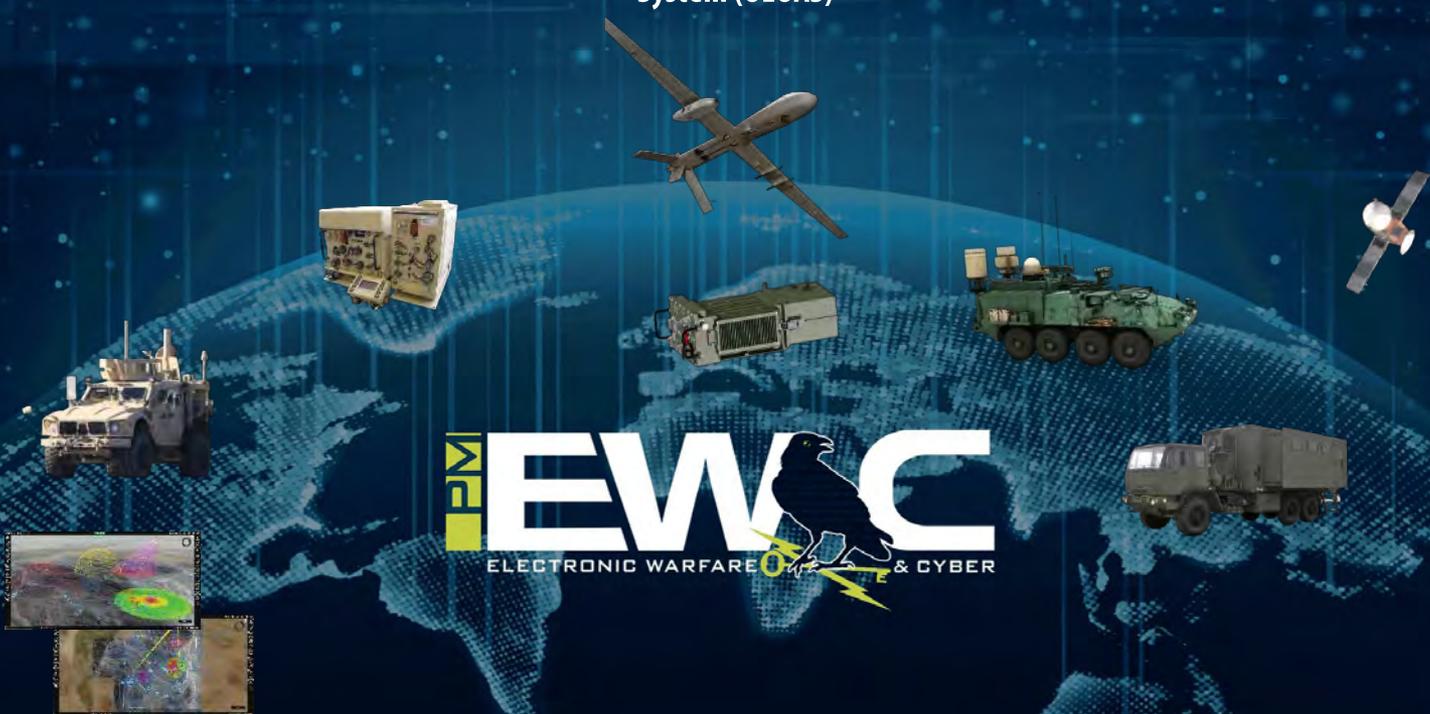
Needs for Industry Focus FY24 – FY29

- CEMA Techniques (Detect, ID, Exploit, Attack)
- Miniaturized High Gain Broadband Directional Antennas
- Miniaturized Broadband Power Amplifiers
- Low SWAP DF Antenna Arrays
- Fast Tuning Sensing, Detection, DF Algorithms
- RF Interference Mitigation and Cancelation
- Low SWAP Miniaturized Tuners, Radios, Processors
- Artificial Intelligence/Machine Learning Algorithms for SIGINT/EW/Cyber
- C5ISR/EW Modular Open Suite of Standards (CMOSS) Compatible Capabilities
- Ruggedized Low Power GPU HW and Algorithms for Micro Service Architectures
- SIGINT/EW Modeling Simulation and Visualization
- Deep Sensing and Affecting in Contested and Denied Environments
- Transmitter Protection/Obfuscation
- Obfuscation & Counter Obfuscation
- Distributed, Cooperative, Coherent Operation & Management for EA
- Automated System/RF Component Resource Management
- Efficient Data Compression and Management in Support of PACE
- Advances in User Interfaces/Experience
- NAVWAR Data from Traditional and Non-Traditional Sources
- Weapon-Target Pairing Tools/Models/Simulations
- Software and Hardware Networking Cross Domain Solutions (CDS)
- Tethered System Payloads
- Blue Force Emissions Awareness and Obfuscation

EMERGING CONCEPTS:
- Family of Delivered EW (UA/GLE/ALE/Rocket/Missile)
- Disposable EW Payloads
- High Powered DEA
- High Altitude Balloon Payloads
- Frequency Extensions

PM EWC ELECTRONIC WARFARE & CYBER

Collaborating with Industry Partners

Exchanging ideas, concepts, and emerging solutions with our industry partners are key enablers for achieving modernization/transformation priorities that support the Army of 2030.

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Soldier Centered Design

Warfighters remain our primary focus – from idea to inception and every step in between. That's what makes Soldier Touch Points integral to the success of our systems.

For Industry Engagements with PM EW&C

- Contact – EW&C OPS - usarmy.apg.peo-iews.mbx.pmewc-hq-ops@army.mil – POC Fran Orzech
- 30–45-minute engagement that focuses on how your company can support our technology/capability needs and what contract vehicles you support. Provide read ahead 48hrs prior.

For an Electronic Copy of the FY24 Strategic Planning Guidance

- Contact – EW&C OPS - usarmy.apg.peo-iews.mbx.pmewc-hq-ops@army.mil – POC Irene Booth

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Terrestrial Layer System – Brigade Combat Team (TLS BCT)

MISSION

TLS BCT is the Army's next generation tactical Signals Intelligence (SIGINT), Electronic Warfare (EW), and Cyberspace Operations overmatch system that delivers an integrated suite of capabilities to enable the Joint All-Domain Operational (JADO) Capable Force. Provides the warfighter critical situational awareness of the enemy through detection, identification, location, exploitation, and disruption of enemy networks.

DESCRIPTION

TLS BCT is the Army's next generation tactical system which provides Army maneuver forces integrated full spectrum Signals Intelligence (SIGINT), Electronic Warfare (EW), and Cyber-enabling non-kinetic offensive operation options to Brigade Combat Team (BCT) commanders. TLS BCT's information Superiority provides Indications and Warnings, Force Protection and Situational Awareness to influence the commander's decision cycle, improve targeting timeliness and accuracy, and provide the maneuver commander with electronic attack and offensive cyber warfare options to deny, degrade, disrupt, or otherwise manipulate the targeted force.

TLS BCT employs technologically advanced systems with a modular open-system approach for multiple configurations that can be efficiently sustained and effectively upgraded to provide capabilities against changing near-peer and emerging threats to address multi-domain capability gaps.

PROGRAM ACCOMPLISHMENTS

- FY20: Initiation of Middle-Tier Acquisition (MTA) Rapid Prototyping Program
- FY21: Up-select following Competitive Operational Assessment
- FY22: Stryker Variant Automotive Testing, Prototype Improvement (Phase 2)
- FY22: Stryker Manufacturing Proof of Concept (Phase 4) Initiates
- FY22: Manpack Variant Prototyping Begins

PROJECTED ACTIVITIES

- FY23: IBCT Integration & Assessment
- FY23: SBCT Operational Demonstration (DOTE)
- FY24: First Unit Issued (SBCT, IBCT)
- FY24: Transition SBCT & IBCT to Rapid Fielding
- FY24: ABCT Prototyping & Demonstration
- FY25: Transition to Rapid Fielding or MCA
- FY26: First Unit Issued AMPV

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Terrestrial Layer System – Echelons Above Brigade (TLS EAB)

MISSION

TLS EAB is planned as an extended-range, terrestrial sensing, collection, and EA system(s) providing integrated SIGINT, EW and Radio Frequency (RF) delivered Cyber capabilities for situational awareness / understanding, indications and warnings, command post protection operations, and support for the delivery of lethal and non-lethal effects in a holistic, synchronized manner for large-scale combat operations at Division, Corps, and the Multi-Domain Capable Force.

DESCRIPTION

TLS EAB modernizes the terrestrial layer and provides a capability to digitally interface with Brigade, Division, Corps, Army, unified action partners and mission command systems to sense, attack, deceive, and protect. When fielded, TLS EAB will be aligned with the IEW BN force structure and missions to support information superiority, targeting, and Long Range Precision Fires in Joint All-Domain Operations (JADO).

PROGRAM ACCOMPLISHMENTS

- FY22: Other Transaction Authority (OTA) Awards to two competing industry partners
- FY22 (Program Initiation): Middle Tier Acquisition (MTA) Acquisition Decision Memorandum (ADM)
- FY22: DevSecOps Demonstration and Soldier Touch Point #1 (both Vendors)
- FY23: Sensor Demonstration and Soldier Touch Point #2 (both Vendors)

PROJECTED ACTIVITIES

- FY23: Decision on early up-select to single vendor
- FY23: Phase 2 OTA contract award for Prototype Build & Demonstration
- FY24: Soldier Capability Demonstrations
- FY25: Phase 3 OTA contract award for Operational Assessment
- FY25: First Unit Issued
- FY26: Transition to Rapid Fielding or MCA

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Counter RCIED Electronic Warfare (CREW) / Duke

MISSION

Provide Counter-Radio Controlled Improvised Explosive Device (C-RCIED) Electronic Warfare (CREW) technology to protect ground forces operating in convoys, single vehicle operations, or fixed locations by blocking or jamming Radio Frequency (RF) signals intended to detonate Improvised Explosive Devices (IEDs).

DESCRIPTION

The Duke family of systems supports coalition operations in U.S. theatres of operations and other locations worldwide. CREW Duke enables spectrum dominance to protect vehicle convoys against the radio-controlled initiation of roadside bombs. CREW Duke is used in both mounted and fixed site configurations as well as for other non-CREW applications. The Duke V5 is the RESET version of the legacy Duke V3 Program of Record that has increased jamming effectiveness against certain threats and improves reliability and maintainability.

PROGRAM ACCOMPLISHMENTS
- FY10: CREW-2 Duke designated as ACAT II Program of Record
- FY12: Duke V3 Sustainment transitioned to CECOM LRC and SEC
- FY13: HQDA G3/5/7 approved Directed Requirement for DTI Assets for D&T
- FY15: CREW-2 CPD Update validated by HQDA G-3
- FY16: CECOM Commanding General (CG) approved Full Materiel Release (FMR)
- FY20: HQDA EXORD 117-20
- FY21: Duke Family of Systems 5-Year Sustainment Contract Awarded

PROJECTED ACTIVITIES
- FY23: Duke Family of Systems Task Order 3 Awarded
- FY24: Duke Family of Systems Task Order 4 Awarded

Electronic Warfare Planning and Management Tool (EWPMT)

MISSION

The Commander's tool to visualize, control, manage, and dominate the electromagnetic spectrum.

Mission Planning & Course of Action Development

- Developed with CEMA playbook
- Follows Army MDMP
- Automatic actions based on triggers
- Enables uniform predefined actions
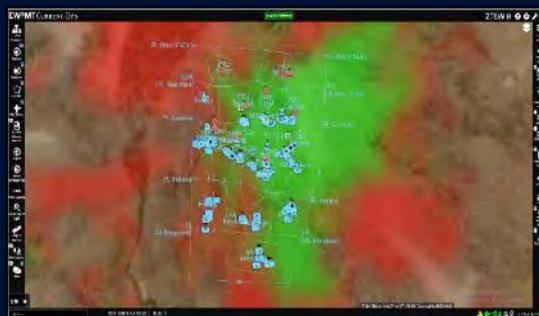
Interoperate with Mission Command Systems

- Populates the COP through DDS
- Nominates targets for Fires
- Distributes EW situation awareness
- Real time inputs

Spectrum Management & RF Interference Monitoring

- Provides spectrum de-confliction
- Develops spectrum management plan
- Identifies potential RF fratricide
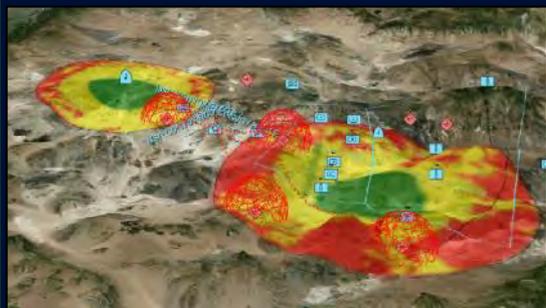
Modeling & Analysis for Sense and Attack

- Hi-fidelity EW modeling and simulation
- Ingests data from Army and Joint databases
- Models electromagnetic environment

Sensor Management, Correlation & Geolocation

- Cooperative tasking, coordination and ingest from Army and Joint sensors
- Enables operators to geo-locate emitters based off consolidated LOBS

Navigation Warfare

- Future capability as sensors fielded
- Identifies potential GPS interference, impacts and location of emitters
- Correlates multiple data inputs

Electronic Warfare Planning and Management Tool (EWPMT)

MISSION

The Commander's tool to visualize, control, manage, and dominate the electromagnetic spectrum (EMS). At end state, EWPMT will provide the ability to conduct remote control and management of EW assets (MFEW and TLS) to execute operations (Electromagnetic Support (ES) and Electromagnetic Attack (EA)), enhance targeting, and enable maneuver by synchronizing EW and spectrum management operations across intelligence, operations, and cyberspace in support of Multi-Domain Operations (MDO).

DESCRIPTION

EWPMT provides 18 major operations capabilities at varying levels of technical maturity. Future Operations (FUOPS) mode provide the ability to plan, model, and simulate EW effects. Current Operations (CUOPS) mode provide the means to receive geographical lines of bearing (LoB) and other sensor data to produce visualizations of the Electromagnetic Operating Environment (EMOE) enabling situational awareness. EWPMT enables cyber and electromagnetic activities (CEMA) and provides data for the overall Mission Command Operational Picture (COP). Future development includes a more refined ability to ingest TLS and MFEW sensor data, provide Positioning, Navigation and Timing (PNT). situational awareness, and the eventual means to command and control the sensors through EWPMT.

PROGRAM ACCOMPLISHMENTS

• FY21: Successfully completed IOT&E with DOTE oversight
• FY22: Capability Set 23 Technical Test
• Over 27 units equipped and currently supported via ONS

PROJECTED ACTIVITIES

• FY23: Full Deployment Decision (FDD)
• FY23: Delivery and roll-out of EWPMT Version 1 to ONS equipped units
• FY24: Begin full deployment to Army 2030
• FY24: Award new EWPMT Fielding, Training, Development, and Warfighter Support Contract
• FY24: New requirements and additional development & integration, to include NAVWAR
• FY24: Full Fielding
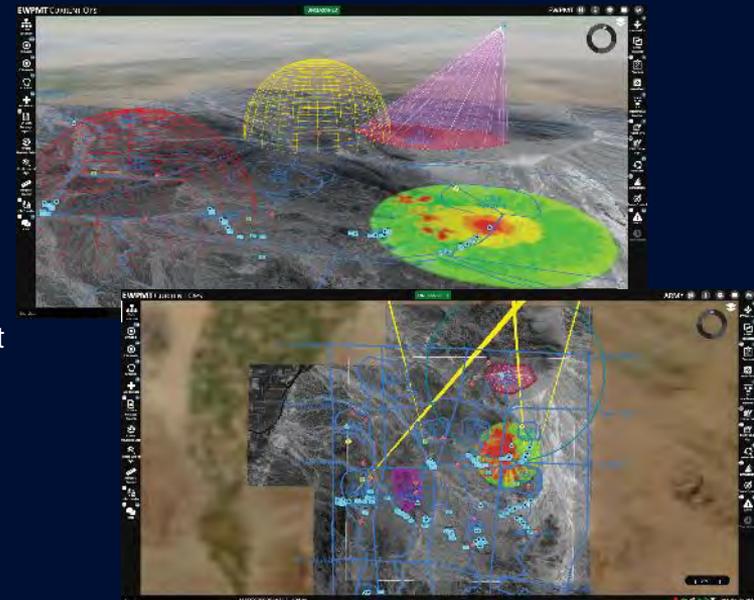
Prophet Enhanced Signals Processing (ESP)

MISSION

Prophet Enhanced (PE) is a dedicated, all-weather, 24/7 ground-based tactical Signals Intelligence (SIGINT) and Electronic Warfare Support (ES) sensor system, providing Force Protection, Situational Awareness, and Target Development to the U.S. Army. PE is organic to the Military Intelligence (MI) Company (MICO) in the Brigade Combat Team (BCT) and to the Expeditionary - MI Brigade (E-MIB) at Corps.

DESCRIPTION

The PE system detects, identifies, and locates enemy emitters through multiple configurations supporting Manpack, Vehicle-Mounted, and Dismounted / Fixed-site operations.

ESP Sensor upgrades provide:
• SIGINT/ES capability to Detect, ID and DF over an extended frequency range
• Near-peer threat processing
• GPU-based Photon digital signal processing for future SOI upgradability
• Multi-enclave network access

PROGRAM ACCOMPLISHMENTS
• FY17-21: Modify and Field AN/MLQ-44A to AN/MLQ-44B (POR-A to POR-B) Systems
• FY20-25: Modify and Field QTY 51 AN/MLQ-44B (POR-B) to Enhanced Signals Processing (ESP) variant, AN/MLQ-44E(V)1

PROJECTED ACTIVITIES
• FY22: Hardware Transition to Sustainment
• FY22: Sustainment Services Contract with CECOM
• FY22-25: ESP Fielding (17 BCT's) Three completed. Qty six fielding's scheduled in FY23, Qty seven in FY24 and Qty one in FY25

Multi-Function Electronic Warfare – Air Large (MFEW-AL)

MISSION
Multi-Function Electronic Warfare–Air Large (MFEW-AL) is a capability set that will provide Brigade Combat Team (BCT) Commanders with an organic airborne offensive Electronic Warfare (EW) capability.

DESCRIPTION
MFEW-AL is a single, self-contained, airborne electronic warfare pod which will be mounted onto Gray Eagle (GE) Unmanned Aircraft Systems (UAS). MFEW-AL is based on Software-Defined Radio (SDR) /Digital Radio Frequency Memory (DRFM) architecture, which will utilize both pre-programmed signal characteristic information and real-time battlefield information to complete the intended mission. MFEW-AL will be interoperable with EWPMT to support command and control; remote operations and dynamic tasking.

PROGRAM ACCOMPLISHMENTS
• FY18: Phase 1 OTA awarded for Prototype System Development
• FY20: Phase 2 OTA awarded for Engineering & Manufacturing Development
• FY21: Milestone C Approved
• FY21: Successful Operational Demonstrations in MDO Live 21, PNTAX 21, and PC-21

PROJECTED ACTIVITIES
• FY23: Developmental Flight Test w/ Soldier Touch Point
• FY24: Initial Deployment to an Operational Unit
• FY24: Additional Limited Production
• FY25: Operational Testing
• FY26: Full Production

Tactical Electronic Warfare System Light (TEWL)

MISSION / DESCRIPTION

TEWL is the corresponding TEWS capability for Light BCT formations. Each TEWL system consists of an integrated suite of radio frequency (RF) antennas and receivers, and processors on a Flyer 72 vehicle. TEWL conducts Electronic Warfare Support (ES) using the same or similar hardware and software, to include the machine learning signal recognition software as well as integration of Intelligence Community (IC) signal detectors in the Tactical Electronic Warfare System (TEWS).

Tactical Electronic Warfare System (TEWS)

MISSION / DESCRIPTION

TEWS is a Quick Reaction Capability (QRC) that provides an Electronic Warfare Support (ES) and Electronic Attack (EA) capability to Brigade Combat Teams (BCT). Each TEWS system consists of an integrated suite of radio frequency (RF) antennas and receivers, processors, and EA hardware. TEWS processing includes machine learning signal recognition software as well as integration of Intelligence Community (IC) signal detectors and EA techniques. .

Informing TLS BCT Rapid Prototyping

Quick Reaction Capabilities

Tactical Electronic Warfare System – Infantry (TEWS-I)

MISSION / DESCRIPTION

TEWS-I is the corresponding TEWS capability for Infantry BCT formations. Each TEWS-I system consists of an integrated suite of radio frequency (RF) antennas and receivers, and processors on an Infantry Squad Vehicle (ISV). TEWS-I conducts Electronic Warfare Support (ES) using the same or similar hardware and software, to include the machine learning signal recognition software as well as integration of Intelligence Community (IC) signal detectors in the Tactical Electronic Warfare System (TEWS).

Tactical Dismounted Electronic Warfare & SIGINT (TDEWS)

MISSION / DESCRIPTION

TDEWS is an Electronic Warfare (EW) and Signals Intelligence (SIGINT) ground based tactical sensor with radio. It is a dedicated, all weather, tactical EW system providing Protection and Situational Awareness to U.S. Army Brigade Combat Teams (BCTs). One TDEWS System consists of a Multi-Channel Receiver and Networked Communications Ground Radio.

Informing TLS BCT Rapid Prototyping

Modi Dismounted EW System (MODI)

MISSION / DESCRIPTION

Modi is a dismounted man-pack programmable Quick Reaction Capability (QRC) system that provides full spectrum coverage allowing the Warfighter the ability to maneuver with increased protection against Radio-Controlled Improvised Explosive Devices (R-CIEDs). Counters an array of diverse threats through state-of-the-art capabilities.

VROD Modular Adaptive Transmit (VMAX)

MISSION / DESCRIPTION

The VMAX system was created leveraging the capabilities of the Valcour system (also known as VROD, Versatile Radio Observation and Direction) developed for the Rapid Equipping Force (REF). VMAX is a highly sensitive, low-power, wideband, fast-scanning radio receiver with Direction Finding (DF) capabilities designed to detect radio frequencies in an Electronic Counter Measure (ECM) environment. VMAX provides Indications & Warnings (I&W), Situational Awareness (SA), and Lines of Bearing (LoB) information to Warfighters and is capable of widely configurable electronic attack.

Quick Reaction Capabilities

Informing TLS BCT Rapid Prototyping

Universal Test Set (UTS)

MISSION / DESCRIPTION

The UTS provides Counter Radio-Controlled Improvised Explosive Device (R-CIED) Electronic Warfare (CREW) personnel with a quick and effective field-level diagnostic capability. The UTS is a Component Major Item to each of the Army developed CREW systems (Duke and Modi).