Table of Contents

03 | Mission, Vision & Preface
04 | FY21-23 PM EW&C Contracting Opportunities
05 | PM Priorities
06 | PM EW&C Portfolio
07 | Map of Industry Partners
08 | Modular Open Systems Approaches
09 | Equipping the Force for Multi-Domain Operations

Middle Tier Acquisition

10 | Terrestrial Layer System (TLS)

ACAT II

11 | Counter RCIED Electronic Warfare (CREW) / Duke
12 | Prophet Enhanced

ACAT III

13 | Electronic Warfare Planning and Management Tool (EWPMT)
14 | Multifunction Electronic Warfare – Air Large (MFEW-AL)

ACAT IV

15 | Tactical Cyber Equipment

QRCs

16 | Baldr Dismounted Counter IED System
16 | Bat-12 UAS/Wolfman Payload
17 | Class IV Aerial EW Pod
17 | Ground Auto-Targeting Observation/Reactive (GATOR)
18 | Modi Dismounted EW System
18 | Radio Interference Mitigation (RIM)
19 | Tactical Electronic Warfare System Light (TEWL)
19 | Tactical Electronic Warfare System (TEWS)
20 | THOR III Dismounted Counter IED System
20 | Universal Test Set
21 | VROD Modular Adaptive Transmit (VMAX)
21 | Wolfhound

Technology & Resources

22 | Needs for Industry Focus
23 | Resources
PM EW&C Mission
Acquire integrated Intelligence, Electronic and Cyber Warfare capabilities that provide Spectrum and Cyberspace Superiority to enable freedom of maneuver on the Battlefield.

PM EW&C Vision
An Army equipped with relevant tools and weapon systems to conduct Electronic and Cyber Warfare.

Preface
This annual publication details Project Manager, Electronic Warfare and Cyber (PM EW&C) major weapon systems and equipment programs. It highlights PM EW&C strategic priorities (FY2021-2034) and potential future contracting opportunities for mission areas that focus on Electronic Warfare and Cyber capabilities. With a diverse portfolio, PM EW&C spans across 5 product management offices (Product Manager Information Warfare, Product Manager Electronic Warfare Integration, Product Lead Terrestrial Spectrum Warfare, Product Lead Electronic Attack, Product Lead Tactical Space Superiority) responsible for the development, acquisition, production, fielding, and sustainment of Programs of Record and Quick Reaction Capabilities. Our acquisition workforce, comprised of more than 275 military and civilian professionals, have the unique and solemn responsibility of providing integrated intelligence, electronic warfare, and offensive cyber capabilities to dominate the electromagnetic spectrum and cyberspace for Multi-Domain Operations.

With program descriptions, status, projected activities, as well as benefits to the Soldier, this handbook is designed to give you a better understanding of our efforts to provide soldiers with the advanced, world-class capabilities they need to win our nation’s wars and come home safely.

We hope that you find this a valuable and informative resource.
## FY21-23 PM EW&C Contracting Opportunities

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Contract Type / Vehicle</th>
<th>Description</th>
<th>Estimated Value</th>
<th>Est. Solicitation Release</th>
<th>Contracting Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>SETA Support</td>
<td>CPFF/FFP RS3 Task Order</td>
<td>SETA Support for PM EW&amp;C</td>
<td>$175-$225M</td>
<td>3QFY21</td>
<td>ACC-APG</td>
</tr>
<tr>
<td>Terrestrial Layer System (TLS) Software</td>
<td>Type TBD RS3 Task Order</td>
<td>Maintenance and Sustainment of Government owned software (Photon)</td>
<td>$20-$30M</td>
<td>1QFY21</td>
<td>ACC-APG</td>
</tr>
<tr>
<td>TLS Sustainment &amp; Systems Integration</td>
<td>CP/FFP IDIQ</td>
<td>TLS Sustainment Services and systems integration</td>
<td>$550M-$1.1B</td>
<td>3QFY22</td>
<td>ACC-APG</td>
</tr>
<tr>
<td>EWPMT Inc. 1 Product Improvement</td>
<td>CPIF or FPI Set Aside or RS3</td>
<td>Maintain EWPMT Inc. 1 SW relevancy</td>
<td>$10M-$20M</td>
<td>3QFY22</td>
<td>ACC-APG</td>
</tr>
<tr>
<td>EWPMT Inc. 1 Training Support</td>
<td>CPIF or FPI Set Aside or RS3</td>
<td>NET/NEF to units IAW Material Fielding Plan</td>
<td>$10M-15M</td>
<td>3QFY22</td>
<td>ACC-APG</td>
</tr>
<tr>
<td>EWPMT Inc. 2 Electromagnetic Battle Management</td>
<td>TBD</td>
<td>Postured to leverage EWPMT Inc. 1 - fully owned Government software</td>
<td>TBD</td>
<td>TBD</td>
<td>ACC-APG</td>
</tr>
</tbody>
</table>

The forecast data is for planning purposes, does not represent a pre-solicitation synopsis, does not constitute an invitation for bid or request for proposal, and is not a commitment by the government to purchase the desired products and services. Opportunities for Information Warfare and Tactical Space Superiority are out of scope for this handbook.
PM Priorities

TO SUPPORT A 2028 MULTI-DOMAIN OPERATIONS CAPABLE FORCE, DESIGNED TO COUNTER NEAR-PEER ADVERSARIES.

1. BUILD NEW PROGRAMS, NEAR TO MID-TERM (FY20-28)
   - Terrestrial Layer System*
   - Joint Common Access Platform
   - Cyber Warfare Battalion*

2. EXECUTE CURRENT PROGRAMS, NEAR TO MID-TERM (FY20-28)
   - Electronic Warfare Planning and Management Tool (EWPMT) – Capability Drop 4
   - Multifunction Electronic Warfare – Air (Large) – Flight demo and Phase 2*
   - Prophet Modernization (ESP)
   - Tactical Space Superiority

3. DELIVER CAPABILITY NOW, NEAR TERM (FY20-22)
   - USAREUR & CEMA Operational Needs Statement (ONS) Fielding
   - MODI and CREW to Pace Threat, Reconstitute Single Manager Role
   - Provide capabilities aligned to EW force structure growth and pacing the near peer threat

4. SET CONDITIONS FOR THE FUTURE, MID TO FAR-TERM (FY23-34)
   - Cross-portfolio integration with the convergence of Electronic Warfare, Cyber, and Signals Intelligence
   - Terrestrial Layer System – echelons above brigade
   - EWPMT Increment 2 (EMBM)
   - Maturation and Implementation of EW&C CMOSS & Photon
   - MFEW Rotary Wing and MFEW Air Small

*First EW&C CMOSS Implementations
# PM EW&C Portfolio

## Spectrum & Cyberspace Superiority

**ATTACK • PROTECT • SUPPORT**

<table>
<thead>
<tr>
<th>Terrestrial Spectrum Warfare (TSW)</th>
<th>Electronic Attack (EA)</th>
<th>EW Integration (EWI)</th>
<th>Information Warfare (IW)</th>
<th>Tactical Space Superiority (TSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Prophet Enhanced</td>
<td>• Mounted CREW - Duke</td>
<td>• EW Planning &amp; Management Tool (EWPMT)</td>
<td>• Offensive Cyber Infrastructure</td>
<td>• Space</td>
</tr>
<tr>
<td>• Terrestrial Layer System</td>
<td>• Dismounted CREW</td>
<td>• RF Interference Mitigation (RIM)</td>
<td>• Weapon System / Tools</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Fixed Site CREW</td>
<td></td>
<td>• Defense Cyber Operations – Response Actions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Fixed Site EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Multi-Function EW – Air</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Operational Capabilities

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

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

- **Electromagnetic Battle Management**
- **Spectrum Management Operations**
- **Spectrum Compatibility**

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

- **Classified Capabilities**
Modular Open Systems Approaches

WHY?
At the core, CSISR/EW systems use many of the same technologies, but they are not always compatible between systems (e.g., amplifiers, filters, processors).

HOW?
CMOSS is being included in and managed under the SOSA initiative with Army, Air Force, and Navy industry participation.

• Reduces integration costs and risks
• Mitigates obsolescence
• Facilitates interoperability and reuse
• Accelerates fielding and deliveries

For more information visit: https://www.opengroup.org/sosa

Modular Open Systems Approaches for our Weapon Systems - Tri-Service
“We determined the continued implementation of these standards, and further Development of Modular Open Systems Approach (MOSA) standards in areas where we lack them is vital to our success.”

- Secretaries of the Army, Navy, & Air Force

Utilization of Electronic Warfare & Cyber CSISR/EW Modular Open Suite of Standards (EW&C CMOSS) - PM EW&C
“I approve and direct the use of the EW&C CMOSS for use and integration of all future Project Manager EW&C Systems where applicable.”

- COL Kevin E. Finch, Project Manager, EW&C
Equipping the Force for Multi-Domain Operations

Aerial Layer
- MFEW Air Large
- CL IV Aerial Pod
- Small Payload and Rotary Demonstration
- Future Requirements

MFEW Production & Fielding
- MFEW Air Small
- MFEW Air Rotary Wing

Foundational Layer
- Army POR
- EWPMT CD1
- EWPMT CD2
- EWPMT CD3
- EWPMT CD4
- INC 2 EMBM

Terrestrial Layer
- Prophet Enhanced
- VROD/VMAX
- MEWL & TEWL
- TEWS
- Terrestrial Layer System
  Integrated SIGINT/EW/Cyber

Future Capabilities
- Advanced Air Layer
  - Air Launched Effects
  - CEMA MUM-T
  - Payloads for Adaptive Coverage
  - UAV Formations
  - Persistent Elevated Sensors
  - AI and ML Enabled

- Advanced Battle Management
  - Multi-INT/OPS Cross Cueing (COE/JADC2)
  - MDO Effects Modeling and Visualization
  - Electronic Protect
  - Deception Planning
  - AI and ML Enabled

- Advanced Ground Layer
  - CEMA MUM-T
  - Low SWaP CEMA Payloads for UGVs
  - and Artillery/Air Delivered Sensors
  - CEMA Deception
  - Counter UAS
  - Ground Vehicle Survivability Equipment
  - AI and ML Enabled

- Cyberspace Operations
- Electronic Warfare Operations
- Spectrum Management Operations

Enable Freedom of Maneuver

Converged CEMA for MDO
(Controlled Risk)

RISK

Adversary EW Overmatch
(Uncontrolled Risk)
MISSION
Terrestrial Layer System is the Army’s next generation tactical vehicle based system that delivers an integrated suite of Signals Intelligence (SIGINT), Electronic Warfare (EW), and Cyberspace Operations overmatch capabilities to enable the Joint All Domain Operational (JADO) Capable Force. When fielded, TLS will be assigned to the Multi-functional Platoon and the EW Platoon organic to the Military Intelligence (MI) Company (MICO) in the Brigade Combat Team (BCT). TLS will provide the warfighter at multiple echelons critical situational awareness of the enemy through detection, identification, location, exploitation, and disruption of enemy signals of interest.

DESCRIPTION
The convergence of SIGINT, EW, and Cyber is represented in the Army’s Terrestrial Layer System. Improved versions of tactical SIGINT, new EW and Cyber capabilities, Modular Open Systems Architecture, and a Micro Services Computing Environment combine to create the Army’s next generation state of the art ground based Cyber Electromagnetic Activity System.

PROGRAM STATUS
• MDD achieved in June 2019
• Milestone A achieved in 2QFY20

PROJECTED ACTIVITIES
• 3QFY20 OTA Prototype, Integration, and Assessments begin
• First Unit Equipped (FUE) planned for FY22

OEM/Contractor: Digital Receiver Technology, Inc through Consortium Management Group, Inc (CMG)
Contract Number: W15QKN-17-9-5555; OTA: C5-19-2005 1A

OEM/Contractor: Lockheed Martin through CMG Contract Number: W15QKN-17-9-5555; OTA: C5-19-2005 1B

Rendering courtesy of Digital Receiver Technology, Inc., a subsidiary of The Boeing Company
Counter RCIED Electronic Warfare (CREW) / Duke

MISSION
Provide Counter Remote-Controlled Improvised Explosive Devices (R-CIED) 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 to include GATOR V3 and Sabre Fury. 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 STATUS
- FY10: CREW-2 Duke designated as ACAT II Program of Record
- FY11: Approved Acquisition Objective (AAO) of 39,114/APO of 32,608; ~16,263 fielded
- FY12: Sustainment transitioned to CECOM LRC and SEC
- FY13: HQDA G3/5/7 approved Directed Requirement for DTI Assets for D&T
- FY15: Basis of Issue Plan (BOIP) approved
- FY15: CREW-2 CPD Update validated by HQDA G-3
- FY16: CECOM Commanding General (CG) approved Full Materiel Release (FMR)
- FY18: Duke RDT&E Task Order 0002 awarded

PROJECTED ACTIVITIES
- FY20: Duke RDT&E Contract terminated for Government convenience
- FY20: Duke Family of Systems Sustainment Contract

OEM: SRC, Inc. | Contractor (Sustainment): CSRA, Inc. GS00Q140ADU312; Task Order: GSQ0016AJ0035
Prophet Enhanced

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.

PROGRAM STATUS
• FY17-19: De-field Prophet Enhanced AN/MLQ-44A (POR-A) Systems
• FY17-20: Modify AN/MLQ-44A to AN/MLQ-44B (POR-A to POR-B) Systems

PROJECTED ACTIVITIES
• FY20: Hardware Transition to Sustainment
• FY21: Software Transition to Sustainment

OEM/Contractor: General Dynamics Mission Systems; Contract: W56KGY-17-D-0006
Electronic Warfare Planning and Management Tool (EWPMT)

MISSION
EWPMT is the Commander’s tool to control, manage, and dominate the Electromagnetic Spectrum (EMS). EWPMT will provide the ability to conduct remote control & management of Electronic Warfare (EW) assets to execute offensive and defensive Electronic Attack, EW targeting and enable maneuver by synchronizing EW and Spectrum Management Operations (SMO) across Intelligence, Operations, and Signals to successfully execute Multi-Domain Operations (MDO).

DESCRIPTION
Each successive Capability Drop (CD) builds out additional capability on top of the existing EWPMT software baseline.
CD1: Foundational (EW Planning, EW Targeting)
CD2: Foundational (Spectrum Management, Enhanced M&S)
   QRC: EWPMT Raven Claw (Urgent Operational Need)
CD3: Disconnected, Intermittent and Latent (DIL), Direct connect control of EW Assets, Converged Raven Claw capabilities
CD4: EW Effectiveness, Enhanced Targeting, Remote Control and Management (RCM) of assets, Battle Damage Assessment (BDA), and Command Post Computing Environment (CPCE) Convergence.

PROGRAM STATUS
- FY19: EWPMT CD4 Task Order Award

PROJECTED ACTIVITIES
- FY20: EWPMT Increment 1 Integration/convergence with CPCE
- FY21: EWPMT Increment 1 IOT&E
- FY21: EWPMT Increment 1 Full Deployment Decision
- EWPMT Increment 2 Requirements Development and Joint Electromagnetic Battle Management (EMBM)

OEM/Contractor: Raytheon; Contract: W15P7T-14-D-C006
Multifunction 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 STATUS
• FY18: Joint Requirements Oversight Council (JROC) CDD Approved
• FY18: MFEW-AL tailored Milestone B approved
• FY18: Other T2Q FY22 - Complete Gray Eagle Integration
• OTA awarded for prototype system development

PROJECTED ACTIVITIES
FY21: Milestone C
FY22: Operational Test (OT) on Gray Eagle
FY22: Full Rate Production (FRP)
FY22: First Unit Equip (FUE)

OEM/Contractor: Lockheed Martin Rotary and Mission Systems (LM RMS) through CMG
Contract: W15QKN-17-D-5555; OTA: C5-18-1001C
Tactical Cyber Equipment

MISSION
Tactical Cyber Equipment (TCE) is a portfolio of systems that will enable the 915th Cyber Warfare Battalion (CWB) to deploy effects that deny, degrade, disrupt, destroy or manipulate threats in support of tactical Cyber-Electromagnetic Activities (CEMA) operations. TCE will bolster the adoption of Modular Open Systems Approaches (MOSA) through development and conversion of capabilities to comply with the Electronic Warfare & Cyber C4ISR/EW Modular Open Suite of Standards (EW&C CMOSS).

DESCRIPTION
TCE provides configurable spectrum survey and CEMA effects at the tactical edge through swappable capability cards integrated with EW&C CMOSS compliant platforms such as the TCE CMOSS Chassis (TCE-CC), MFEW-AL, and TLS. Select TCE systems will support agile, downrange capability development to keep pace with evolving threat technologies and tactics, techniques, and procedures (TTPs) as well as encompass a range of mission-specific platforms such as the Integrated Command and Control Radio System (ICCRS).

PROGRAM STATUS
• FY18: ICCRS Contract Award
• FY20: TCE-CC Increment 1 Request for Proposal Published

PROJECTED ACTIVITIES
• FY20: TCE-CC Increment 1 Task Award
• FY20: ICCRS Capability Release 1 (CR1) Development Test
• FY21: ICCRS CR1 Operational Test
• FY21: ICCRS CR1 IOC
• FY21: TCE-CC Development & Operational Tests
• FY22: TCE-CC IOC
• FY23: TCE-CC Increment 2 Task Award
Baldr Dismounted Counter IED System

MISSION / DESCRIPTION
Baldr provides dismounted individual level protection against Remote-Controlled Improvised Explosive Devices (R-CIEDs). As a Quick Reaction Capability (QRC) Counter Remote-Controlled Improvised Explosive Device (R-CIED) Electronic Warfare (CREW) system, Baldr provided individual soldier protection from RCIEDs while augmenting the Thor III force protection system and providing additional defense against radio-controlled initiation of explosive devices.

OEM: Sierra Nevada Corporation
Contractor (Sustainment): CSRA, Inc. GS00Q14OADU312; Task Order: GSQ0016AJ0035

OEM/Contractor: Northrop Grumman; Contract: FA8726-14-D-0002 (Air Force Contract)

Bat-12 UAS/Wolfman Payload

MISSION / DESCRIPTION

OEM/Contractor: Northrop Grumman; Contract: FA8726-14-D-0002 (Air Force Contract)
**Class IV Aerial EW Pod**

**MISSION / DESCRIPTION**

Equipped onto a Gray Eagle UAS and leverages re-purposed existing Program of Record (POR) aerial SIGINT assets to inform TTPs and CONOPS for airborne EW operations. Reduces risk and supports DOTMLPF-P development for MFEW Air Large PoR. Capabilities include Electronic Warfare Support (ES) and Special Purpose Electronic Attack (SPEA).

OEM/Contractor: BAE Inc; Contract: W56KGY-16-D-0013; Task Order: W56KGY19F0073

---

**Ground Auto-Targeting Observation/Reactive (GATOR)**

**MISSION / DESCRIPTION**

GATOR is a Quick Reaction Capability (QRC) that provides fixed site organic Electronic Support (ES) / Electronic Attack (EA) to jam specific enemy transmissions. It provides increased organic Electronic Warfare (EW) capabilities at the tactical level, designed to be interoperable with Counter Remote-Controlled Improvised Explosive Device (R-CIED) Electronic Warfare (CREW) and the C4ISR infrastructure.

OEM: SRC, Inc.
Contractor (Sustainment): CSRA, Inc. GS00Q140ADU312; Task Order: GSQ0016AJ0035

---

Modi Dismounted EW System

MISSION / DESCRIPTION
Modi is a dismounted portable programmable man-pack Quick Reaction Capability (QRC) that provides full spectrum coverage to maneuver Warfighters with increased protection against Remote-Controlled Improvised Explosive Devices (R-CIEDs). It is designed to counter an array of diverse threats by providing state-of-the-art offensive and defensive countermeasure capabilities.

OEM/Contractor: Sierra Nevada Corporation; Contract: H92222-17-D-0023; Task Order: H9240218F0027 (Procured through SOCOM)

Radio Interference Mitigation (RIM)

MISSION / DESCRIPTION
RIM maintains communications capabilities in the presence of friendly and adversary Electronic Warfare (EW) systems. RIM Interference Cancellation solutions provide advantages over legacy filter-based solutions for congested and contested electromagnetic environment. Interference Cancellation (IC) Light provides a dedicated voice channel for SINCGARS during friendly and enemy jamming/interference. Interference Cancellation (IC) Heavy provides a dedicated voice channel for UHF/SATCOM during friendly and enemy jamming/interference.

OEM/Contractor: Peraton, Inc.; Contract: W911NF-15-D-0008; Task Order: 0006
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).

OEM/Contractor: General Dynamics Mission Systems; Contract: W56KGY-17-D-0006
Task order: 0003; W56KGY19F0013; and W56KGY20F0018

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.

OEM/Contractor: General Dynamics Mission Systems; Contract: W56KGY-17-D-0006
Task order: 0003; W56KGY19F0013; and W56KGY20F0018
THOR III Dismounted CIED System

MISSION / DESCRIPTION
Thor III is a dismounted three (3) man pack replacement to the Navy procured Guardian dismounted Counter Remote-Controlled Improvised Explosive Device (R-CIED) Electronic Warfare (CREW) system. The system provides dismounted squad level protection to counter against R-CIEDs.

OEM: Sierra Nevada Corporation
Contractor (Sustainment): CSRA, Inc. GS00Q140ADU312; Task Order: GSQ0016AJ0035

Universal Test Set

MISSION / DESCRIPTION
The UTS provides Counter Remote-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, Thor III, Modi, and Baldr).

OEM/Contractor: Textron Systems Corporation; Contract: W56KGY-16-D-0017; Task Order: W56KGY19F0059
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.

OEM: U.S. Army Intelligence and Information Warfare Directorate (I2WD)

Wolfhound

MISSION / DESCRIPTION

Wolfhound, procured in response to 4 Joint Operational Need Statements (JUONS), is a man-portable Electronic Warfare Support (ES) capability supporting kinetic operations in the Central Command (CENTCOM) Area of Responsibility (AOR) and is fielded as a force protection capability and is intended for operation by other than Army Intelligence personnel.

OEM: Praemittias Group Incorporated
Contractor (Sustainment): CSRA, Inc. GS00Q140ADU312; Task Order: GSQ0016AJ0035
Needs for Industry Focus

• Efficient CEMA Techniques and tools for integrated EW, SIGINT, and Cyber
• Miniaturized High Gain Broadband Directional Antennas supporting both receive/transmit
• Miniaturized High Efficiency Broadband Power Amplifiers
• Low SWaP Direction Finding (DF) Antennas operating across the full band of interest
• Fast Tuning Sense, Detect, DF, and Engage Algorithms supporting Modern Waveforms
• RF Interference Mitigation/Interference Cancellation
• Miniaturized Tuners/Radios/Processors that support Digitization and Processing at Sensor
• Machine Learning Technologies supporting improved CEMA responsiveness and flexibility
• C5ISR/EW Modular Open Suite of Standards (CMOSS) compatible capabilities
• Ruggedized GPU HW and algorithms to pace threat and support Micro-Service architecture
• Cross Domain Solution (CDS) capabilities
• EW Modelling, Simulation, and Visualization supporting Mission Planning and Effectiveness
• Deep Sensing in Contested and Denied Environments
• Transmitter Protection / Obfuscation
• Distributed, Cooperative, and Coherent Operations
• Military Deception
Resources

- Assistant Secretary of the Army (Acquisition, Logistics & Technology)  https://www.asaalt.army.mil/
- PEO IEW&S  https://peoiews.army.mil/
- U.S. Army Acquisition Support Center  https://asc.army.mil/web/
- CCDC C5ISR Center  https://c5isr.ccdc.army.mil/
- beta.SAM.gov (formerly FEDBIZOPS)  https://beta.sam.gov/
- C5 Consortium Management Group  https://cmgcorp.org/c5/
- SOSA Consortium  https://www.opengroup.org/sosa
- Army Capability Manager EW  https://cybercoe.army.mil/CDID/ACMEW/
- Army Capability Manager Cyber  https://cybercoe.army.mil/CDID/ACMC/
For a copy of PM EW&C CMOSS standards or any questions on this handbook, please contact PM EW&C Operations at:
usarmy.apg.peo-iews.mbx.pmewc-hq-ops@mail.mil

To request a copy of the EWPMT SDK, please contact PdM EWI at:
usarmy.apg.peo-iews.mbx.ewpmt-sdk-req@mail.mil

For additional questions, please contact:
COL Kevin Finch, Project Manager, Electronic Warfare & Cyber  |  410.278.6210
William Utroska, Deputy Project Manager, Electronic Warfare & Cyber  |  410.278.6210