Naval Information Warfare Center Atlantic

Expeditionary Warfare Department Overview
Equipping the Force

Kevin Charlow, SSTM
NIWC Atlantic
ExW Department Head
2 April 2019
Agenda

▼ ExW Department Overview

▼ Division Overviews

- Expeditionary Intelligence Solutions (EIS)  
  Toby Straight

- Expeditionary Enterprise Systems & Services (E2S2)  
  Erik Gardner

- Land Systems Integration (LSI)  
  Pete Ward

- Marine Air Ground Task Force (MAGTF)  
  Command, Control & Communications (C3) Solution  
  John Christensen
Expeditionary Warfare (ExW) Department

ExW Department
FY18: 529 FTEs
74 Programs / Projects
  ▪ Deliver Information Warfare capabilities to the Marine Corps and Special Operations Command
  ▪ Provide full spectrum C4ISR systems and services to Marines and Special Forces
  ▪ Engineer end-to-end C4ISR systems in tactical vehicles
  ▪ Develop and sustain Enterprise IT system capabilities and solutions

▼ Expeditionary Warfare Divisions
Rapidly delivering C4ISR, Cyber and IT systems and engineering services to meet the Information Warfare needs of the Marine Corps and Special Operations Command.
  ▪ Expeditionary Enterprise Systems and Services Division
  ▪ Expeditionary Intelligence Solutions Division
  ▪ Marine Air Ground Task Force (MAGTF) Command, Control and Communication Solutions Division
  ▪ Land Systems Integration Division

Major Sponsors
- MARCORSYSCOM
- MARFORCYBER
- SOCOM
- HQMC
- PEO Land Systems

Amphibious Assault Vehicle (AAV)
Supporting AAV program office by assessing technology on combatant crafts for potential transition to future AAVs. SOCOM combatant craft navigation development efforts could benefit USMC

Expeditionary Intelligence Solutions (EIS) Division
Toby Straight

IPTs
Terrestrial Collections and Identity Operations
DCGS-MC IPT
Expeditionary Intelligence Technology Improvement, Innovation, & Quick Reaction Capability (ExTIIRQRC)
Expeditionary ISR Sustainment
Expeditionary SIGINT/EW Special Ops ISR Solutions

Expeditionary Enterprise Systems & Services Division (E2S2)
Erik Gardner

IPTs
Enterprise Network Infrastructure
Enterprise Engineering and Integration Services
Enterprise Service IT Management
Enterprise Systems and Services (ES2)
Special Operations Communications Systems
Enterprise Automation Analytics

Land Systems Integration Division
Pete Ward

IPTs
Vehicular Technology Transition
Heavy, Medium, Light Vehicles
CIED Support
LAV and Tanks
MRAP and MMPV Program Support

Marine Air Ground Task Force (MAGTF) Command, Control and Communications (C3) Solutions Division
John Christensen

IPTs
USMC Command Post (UCP)
Command and Control Situational Awareness (C2SA)
MAGTF C2 Services and Applications
USMC Communications Systems (UCS)

Mr. Toby Straight, Division Head
Expeditionary Intelligence Solutions (EIS)
Mr. Toby Straight, Division Head
Expeditionary Intelligence Solutions (EIS)
Expeditionary Intelligence Solutions (EIS) Division Overview

What We Do
- Provides full spectrum expeditionary intelligence capabilities, technologies and solutions to the warfighter

Major Systems / Solutions
- DCGS-MC (All-Source, GEOINT SIGINT)
- Communications Emitter Sensing Attacking System (CESAS)
- Identity Operations (ID Ops)
- Terrestrial Collections
- Joint Threat Warning System (JTWS)
- Combatant Craft
- C4ISR Intel Sustainment

Primary Partners:
MARCORSYSCOM and SOF ATL
- Portfolio Manager Command Element Systems (PfM CES)
- PEOs SRSE, S&T Maritime (SOF ATL)
- HQMC Intel

IPTs
- Terrestrial Collections and Identity Operations (TCIO)
- Distributed Common Ground/Surface System-Marine Corps (DCGS-MC)
- Expeditionary Intelligence Technology Improvement, Innovation, & Quick Reaction Capability (ExITIIQRC)
- Expeditionary ISR Sustainment
- Expeditionary SIGINT/EW Special Ops ISR Solutions

On future battlefields, victory will go to those who can sense, understand, and act at a tempo that out-paces their opponents. Enterprise creates that tempo.
EIS Division
Mission, Vision and
Goals

Our Mission
The Expeditionary Intelligence Solutions (EIS) Division will research, develop, integrate, and field common, platform agnostic solutions providing information as a weapon to address battlespace awareness capability gaps across intelligence disciplines to support accurate, timely, and actionable decisions.

Our TGAs
Cyber Warfare | Data Science/Analytics
Embedded Systems | Assured Communications

Our Vision
We will provide agnostic Intelligence Surveillance Reconnaissance (ISR) engineering solutions to both the US Marine Corps and Special Operations Command (SOCOM) enterprise by developing common capabilities designed to operate in an expeditionary environment while leveraging Joint Tactical and National ISR capabilities providing full lifecycle support for sensor development, systems of systems deployment and integration, machine learning, artificial intelligence, and advanced analytics.

OBJECTIVES

1. Shorten the kill chain at the tactical edge by leveraging and successfully integrating commercially- and governmental-developed technologies that both produce and consume actionable intelligence.

2. Use a systems of systems approach to demonstrate interoperability across the enterprise.

3. Explore data strategies and information sharing architectures that help commanders and other decision makers quickly and intuitively understand complex situations.

4. Engage the Fleet to improve our products and services and increase their capability.

Mission: Provide the intelligence, surveillance, and reconnaissance community with solutions that bridge capability gaps and offer acquisitions programs technology transition options.

Vision: “How can we provide immediate responsiveness to the warfighter’s emergent requirements by quickly delivering meaningful solutions?”

Capabilities
• Delivering Accelerated “Just-in-Time” Solutions
• Identifying and Bridging Capability Gaps
• Champion Technology Transitions into Acquisition Programs
• Iterative Development Cycles in Collaboration with SMEs and End Users
• Research & Remain at Forefront of New Technologies
• Extreme Programming
• DevOps Combining S/W Development & Information Technology
• Dynamic Team Including Former Intel Specialists, Scientists, S/W Developers, & Other Talented Individuals

Execute rapid prototyping and relevant technology insertion.

Drive innovation of governance, technology, and processes to address unique intelligence needs.

Enable integration of solutions using technology transition best practices.

Way Forward

- Kick Off Meeting 14 January 2019
- Draft Schedule Developed 15 February 2019
- Research existing mission threads and test plans due 1 March 2019
- Began executing draft schedule 4 March 2019

The team will meet at least once a month as a group to share findings, lessons learned, and update the schedule.
Looking for industry and academia partners that can be SOLUTION providers

- Avoid industry exchanges that tend to focus solely on contract vehicles and available funding
- We want to see that industry can show us they understand the areas of need our EIS Division Priorities and Objectives
- Industry should present technical capabilities that match our present and future challenges
Mr. Erik Gardner, Division Head
Expeditionary Enterprise Systems & Services (E2S2)
Expeditionary Enterprise Systems and Services (E2S2) Division Overview

What We Do

- Provide the design, acquisition, and sustainment of Naval and SOCOM information systems to include Enterprise telecommunications infrastructure, streamlined and consolidated enterprise services, IT solutions for personnel logistics and enhanced cybersecurity.

Major Systems / Solutions

- BMA Cloud Transitions
- Marine Corps Enterprise Infrastructure Modernization
- Marine Corps Enterprise IT Systems (MCEITS)
- IT Strategic Sourcing (ITSS)
- Emergency Response Systems (ERS)
- SOFTACS Deployable Network and SCAMPI
- Marine Corps Mobility & Wireless Solutions

Connecting Information to the Lethality Kill Chain

Primary Partners:

- PEO EIS
- MARCORSYSCOM
  - PFM -17 Supporting Establishment Systems (SES)
- SOF ATL
- PEO C4 (SOF)
- Headquarters Marine Corps (HQMC)
  - DC Programs & Resources DC Installations & Logistics
  - DC Information
    - War Room
- MARFORCYBER
  - Cyberspace Operations Group (MCCOG)

IPTs

- Enterprise Network Infrastructure
- Enterprise Engineering and Integration Services
- Enterprise Service IT Mgmt
- Enterprise Systems and Services
- Special Operations Communications Systems
- Enterprise Automation Analytics
E2S2 Division Organization

ERIK GARDNER
Division Head

Enterprise Network Infrastructure
- Enterprise Infrastructure Modernization
- Joint Information Environment
- Application Development Test Service (ADTS)

Enterprise Service IT Management
- Service Transition
- Governance & Process Management
- Catalog & Managed Services (Cloud MSO)

Enterprise Systems and Services
- Networked Communications Infrastructure & Services
- System Applications & Services
- Marine Corps Wireless & Mobility Solutions

Enterprise Engineering & Integration Services
- Enterprise IT Service Eng
- Requirements & Process Eng
- Enterprise Architectures
- Rapid Technology Integration & Prototyping

Special Ops Comms Systems
- Enterprise Network Sustainment
- Enterprise Kitting and Installations
- Information Operations/ MISO
FY19 Thrust Areas

- Marine Corps Enterprise Network (MCEN) Modernization
- Cloud Migration and Automation
- Service and Application DEVOPS
- Catalogue and Managed Services
- Cyber Monitoring and Defense
- Rapid Prototyping
- Small Business-Academia Partnering
- IWRP Prototyping
- Data Center Consolidation & Application Migration
- Model Based System Engineering
- Information Operations / Military Information Support Operations (MISO)
- Wireless Networking & Enterprise Mobility

What are we doing?
FY20-23 Thrust Areas

Where are we headed?

- Cloud Services & Data Analytics Process/Service Automation
- Enabling the Marine Information Group (MIG) Delivering IW to Fight & Win Anytime Anywhere
- Developing the NIWC Lab of the Future
- Enterprise level Infrastructure Design, Architecture Services and Digital Communications
- Enterprise Mobility and Assured Communications
- Autonomous Self-forming Networks (SWARM)
- DEVSECOPS – continuing our journey…

Key Technology Growth Areas:
Cyber Warfare, Cloud Computing/Big Data, Assured Communications, Data Science/Analytics, Autonomy.
# Division Contract Strategy

## Contract Strategy for Expeditionary Information Technology Support

<table>
<thead>
<tr>
<th>Functional Area (Task Book Tasks)</th>
<th>Fiscal Year 2018</th>
<th>Fiscal Year 2019</th>
<th>Fiscal Year 2020</th>
<th>Fiscal Year 2021</th>
<th>Fiscal Year 2022</th>
<th>Fiscal Year 2023</th>
<th>Fiscal Year 2024</th>
<th>LEGEND:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information Technology Support</strong></td>
<td>IT Support</td>
<td>IT Support</td>
<td>IT Support</td>
<td>IT Support</td>
<td>IT Support</td>
<td>IT Support</td>
<td>IT Support</td>
<td></td>
</tr>
<tr>
<td><strong>Information Warfare Research Project (IWRP) OTA Project</strong></td>
<td>Cloud Support</td>
<td>Cloud Support</td>
<td>Cloud Support</td>
<td>Cloud Support</td>
<td>Cloud Support</td>
<td>Cloud Support</td>
<td>Cloud Support</td>
<td></td>
</tr>
<tr>
<td><strong>Data Center Support</strong></td>
<td>Data Center Support</td>
<td>Data Center Support</td>
<td>Data Center Support</td>
<td>Data Center Support</td>
<td>Data Center Support</td>
<td>Data Center Support</td>
<td>Data Center Support</td>
<td></td>
</tr>
<tr>
<td><strong>Logistics IT Support</strong></td>
<td>Logistics IT Support</td>
<td>Logistics IT Support</td>
<td>Logistics IT Support</td>
<td>Logistics IT Support</td>
<td>Logistics IT Support</td>
<td>Logistics IT Support</td>
<td>Logistics IT Support</td>
<td></td>
</tr>
<tr>
<td><strong>IT Engineering Support</strong></td>
<td>IT Engineering Support</td>
<td>IT Engineering Support</td>
<td>IT Engineering Support</td>
<td>IT Engineering Support</td>
<td>IT Engineering Support</td>
<td>IT Engineering Support</td>
<td>IT Engineering Support</td>
<td></td>
</tr>
<tr>
<td><strong>IT Material Procurements</strong></td>
<td>IT Material Procurements</td>
<td>IT Material Procurements</td>
<td>IT Material Procurements</td>
<td>IT Material Procurements</td>
<td>IT Material Procurements</td>
<td>IT Material Procurements</td>
<td>IT Material Procurements</td>
<td></td>
</tr>
<tr>
<td><strong>Information Warfare Research Project (IWRP) OTA Project</strong></td>
<td>IWRP OTA</td>
<td>IWRP OTA</td>
<td>IWRP OTA</td>
<td>IWRP OTA</td>
<td>IWRP OTA</td>
<td>IWRP OTA</td>
<td>IWRP OTA</td>
<td></td>
</tr>
<tr>
<td><strong>Microsoft Support</strong></td>
<td>Microsoft Support</td>
<td>Microsoft Support</td>
<td>Microsoft Support</td>
<td>Microsoft Support</td>
<td>Microsoft Support</td>
<td>Microsoft Support</td>
<td>Microsoft Support</td>
<td></td>
</tr>
<tr>
<td><strong>Design &amp; Integration Support</strong></td>
<td>Design &amp; Integration Support</td>
<td>Design &amp; Integration Support</td>
<td>Design &amp; Integration Support</td>
<td>Design &amp; Integration Support</td>
<td>Design &amp; Integration Support</td>
<td>Design &amp; Integration Support</td>
<td>Design &amp; Integration Support</td>
<td></td>
</tr>
<tr>
<td><strong>Cloud Services</strong></td>
<td>Cloud Services</td>
<td>Cloud Services</td>
<td>Cloud Services</td>
<td>Cloud Services</td>
<td>Cloud Services</td>
<td>Cloud Services</td>
<td>Cloud Services</td>
<td></td>
</tr>
<tr>
<td><strong>Cloud Transition &amp; Modernization</strong></td>
<td>Cloud Transition &amp; Modernization</td>
<td>Cloud Transition &amp; Modernization</td>
<td>Cloud Transition &amp; Modernization</td>
<td>Cloud Transition &amp; Modernization</td>
<td>Cloud Transition &amp; Modernization</td>
<td>Cloud Transition &amp; Modernization</td>
<td>Cloud Transition &amp; Modernization</td>
<td></td>
</tr>
<tr>
<td><strong>Cyber Support</strong></td>
<td>Cyber Support</td>
<td>Cyber Support</td>
<td>Cyber Support</td>
<td>Cyber Support</td>
<td>Cyber Support</td>
<td>Cyber Support</td>
<td>Cyber Support</td>
<td></td>
</tr>
<tr>
<td><strong>Communications Systems Support</strong></td>
<td>Communications Systems Support</td>
<td>Communications Systems Support</td>
<td>Communications Systems Support</td>
<td>Communications Systems Support</td>
<td>Communications Systems Support</td>
<td>Communications Systems Support</td>
<td>Communications Systems Support</td>
<td></td>
</tr>
</tbody>
</table>

### Value:

- **$500M over Five-Years**

### Statement A:

Approved for Public Release. Distribution is unlimited (29 March 2019).
A prototype project is used to evaluate the technical or manufacturing feasibility or military utility of a particular technology, process, concept, end item, effect or other discrete feature. The quantity should generally be limited to that needed to prove technical or manufacturing feasibility or evaluate military utility.
Enterprise Cloud Contracting Strategy
Accelerate Better Buying Power and Diversification

Commercial Services
- CYBER Security – CSP owns accreditation for core services
- Catalogue Services (IaaS, PaaS, SaaS)
- Compute, Storage, Data Lake
- DevSecOps Environments and Tool Kits (Pre-Prod Environments)
- Logs & Alerts (Management Automation)

Engineering Services
- DevSecOps Application Development
- DevSecOps Application/Service Transition
- New Service Development & Orchestrations
- Service Security and Cyber DT & Accreditation

- Phases 1 & 2 develop competency technical and contractual understanding of provisioning Internet of Things (IoT) and doing business in Cloud ecosystem
- Phase 1 & 2 are shorter period of performance based TO/DO
- Each Phase informs next phase
- Phase 3 matures buying/provisioning of Core Services via established SLAs developed in Phase 2
- Phase 3 must include process to “on-ramp & off-ramp” Core Services - Core Services not meeting usage thresholds will off-ramp and new Core Services developed on BOA will “on-ramp” under BPA at some scheduled interval

User Provisioning of Core Enterprise Engineering Development & Cloud Services – ‘Family Plan and Rollover’ for Core Service Units
E2S2 intends to host 2 annual Industry All-Hands events

The purpose of these events is:

- Provide near-term 12-month detail and long-term 3-year forecast.
- Identify Industry collaboration and partnerships opportunities.
- Foster open collaboration and promote innovation through prototyping initiatives.
- To create a forum where Industry excellence can be recognized.
Small Business – Opportunity!

▼ Service Design
- Cyber Security Engineering (USMC Certified Validators)
- Model-Based Systems Engineering (Mature Processes)
- Network System Architecture Simplification
- Network Design and Cyber Engineering
- Test Automation Support
- Business Process Engineering
- 2D Design Drafting

▼ Service Operations
- Managed Services and Accounting
- Storefront Operations
- Automation Services
- Integrated Adaptive Cyber Defense (IACD)
- Network Sensors & Report Automation
- Mobility Services

▼ Programmatic
- IMS and Critical Path Analysis
- Financial, Program & Business Analytics (ERP and PR Management)
- Task Planning and Execution Management
- Program Management Support

▼ Logistics
- System Life Cycle Management
- Audit and Surveillance Processes
- Marine Corp Logistics Process SMEs
- Facilities Planning, and Management Support
Mr. Pete Ward, Division Head
Land Systems Integration (LSI)
Mr. Pete Ward, Division Head
Land Systems Integration (LSI)
MEMO: 7 JAN 2019

SUBJECT: Modular Open Systems Approaches for Weapon Systems is a Warfighting Imperative

SIGNED: Secretary of Navy, Army and Air Force

Modernization of vehicle systems must stay ahead of near peer competitors
Land Systems Integration Division Overview

What We Do

- Provide design, engineering and full scale integration of C4ISR capabilities into tactical military vehicle platforms. Improve efficiency and effectiveness of integrating mission equipment on vehicle platforms for specific mission activities. Provide post-fielding sustainment support.

Primary Partners:

- PEO Land Systems
  - PM Advanced Amphibious Assault (AAA)
  - PM Light Tactical Vehicle (LTV)
  - PM Medium Heavy Tactical Vehicles (MHTV)
- MARCORSYSCOM
  - PfM CES - PM C2S - NOTM
  - PM Light Armored Vehicle (LAV)
  - PfM GCES – PM Fires
- USN - Naval Expeditionary Program Office
- USA
  - PM Light Tactical Vehicle
  - PM Medium Mine Protected Vehicles
- USAF - AFCENT / MRAP PO / JLTV PO

IPTs

- Vehicular Technology Transition
- Heavy, Medium, Light Vehicles
- CIED Support
- LAV and Tanks
- MRAP and MMPV Program Support

Major Systems / Solutions

- C4ISR system integration (USMC, USA, USAF, USN)
  - MRAP, JLTV, AAV, ACV, MTVR, LVSR, LAV
- Network on the Move (NOTM)
- Digital Integration Facility (DIF)

Transforming Combat Vehicles into Mobile C4ISR Platforms
Land Systems Innovation Cell
Focus (3 thrust area’s)

Mobile Integration Teams

Alliances with Vehicle / Automotive Experts

Technology Development and Insertion

Integrated Product Team (IPT) Organization

- **Vehicular Technology Transition (VTT) IPT**
  - Systems Engineering, Software Integration, and Acquisition Mgmt. — Unrestricted - CY 2023
  - Systems Engineering, Software Integration, and Acquisition Mgmt. — Small Business-CY2023
  - Networking on the Move Fielding Support — Unrestricted - CY2021

- **LAV Program Support IPT**
  - LAV C2 SW Support — Small Business CY2022

- **CIED Support IPT**
  - CIED — Small Business CY2021

- **Heavy, Medium and Light Support (HML) IPT**
  - MRAP and Other Tactical Vehicle C4ISR Support — CY2021

- **MRAP & MMPV Program Support IPT**
  - LSI Tactile Vehicle Fielding Services — CY2024

**Future Focus / Opportunity — OTAs / IWRP**

Transforming C5ISR Integration for Improved Maneuverability Through an Electromagnetically Challenged Environment

Technologies to enhance Land System Maneuver

Science & Technology Initiatives

- GPS III (M-Code) Assured PNT in a GPS Denied Environment
- LAV Driver Vision Augmented Reality for Enhanced SA
- LAV DC Power Management
- Network on the Move Mobile C3 Capabilities
- Autonomous Logistics Vehicles
- Signature Management Reduced Probability of Detection
- Tactical Deployable MUOS MUOS Availability in a SATCOM Denied Environment
- UAS with Object Recognition Enhanced SA & Targeting

ExW Department

Technologies to enhance Land System Modernization

HSI / System Usability (Reduce Learning Curve)

Physical Interfaces – On-Demand Manufacturing (Not just AM also Subtractive)

Secure file storage

Re-use current systems and Other Program Technology (OPT)
Augmented Reality using current FLIR Camera

Seamless operations as Platform of Systems (Open)
Bottom Line: We’re looking for Technologies and Techniques to enhance Land System Modernization and Maneuver
Mr. John Christensen, Division Head
Marine Air Ground Task Force (MAGTF) Command, Control and Communications (C3) Solutions Division
MAGTF C3 Solutions Division Overview

What We Do

- Develop, integrate and equip Marines with mobile C3 facilities, devices and services that provide fused situational awareness, facilitate information sharing and enhances the decision support process.

Major Systems / Solutions

- Combat Operations Centers (COC)
- Combat Data Network (CDN)
- Joint Battle Command Platform FoS
- Tactical Communications Systems
- Tactical Service Oriented Architecture (TSOA)
- Global Command Control System (GCCS) Tactical Combat Operations (TCO)
- Marine Corps Common Handheld (MCH)
- Joint Tactical Common Operational Picture Workstation (JTCW)

Provide and Sustain Tactical Command Control and Communications capabilities to the MAGTF.

Primary Partners:
- MARDORSYSCOM
  - Portfolio Manager Command Element Systems (PfM CES)

IPTs
- USMC Command Post (UCP)
- Command and Control Situational Awareness (C2SA)
- MAGTF C2 Services and Applications
- USMC Communications Systems (UCS)
Advancing technologies to build new capabilities relevant to Warfighter needs and operations

- **Tactical Service Oriented Architecture (TSOA):** Enable the transition of C2 capabilities from systems and applications to platform agnostic services. Provide Marines the ability to discover, subscribe, shape, filter, modify and visualize data (Net-centric Operations) that aids their assessment of a situation, enabling timely and informed decisions. NIWC Atlantic is the lead software integrator of the TSOA environment, mobile apps and services.

- **NextGen COC:** Ongoing convergence of COC and CDN systems architectures. Strong UCP IPT engagement with the Program Office to participate in the design and realistic schedule supporting a common software build for both CDN and COC.

- **Tactical Comms Systems:** Non RF Transport, Free Space Optics (FSO), LiFi Technology etc.
High Frequency Radio (HFR) II
- Replacing the AN/PRC-150, AN/VRC-104, AN/MRC-148, AN/TRC-209
- Man-pack scheduled for future fielding
- AN/VRC-104, AN/VRC-148 and AN/TRC-209

Multi-Channel Man-Pack (MCMP)
- Replacing the AN/PRC-117F Man-pack and Vehicle systems
- Future fielding scheduled

Multi-Channel Hand-Held (MCHH)
- Replace AN/PRC-152 Hand-Held and Vehicle systems
- Future fielding scheduled

Mobile User Objective System (MUOS)
- Upgrading all AN/PRC-117G, AN/VRC-114(V)1, AN/VRC-114(V)2 and AN/MRC-145B Systems
- Fielding
- Firmware, Diplexers and antenna kits
C2SA Engineering & Logistics Support FY19 – 21

▼ JBC-P
- System fielding of anticipated USMC Vehicle Platforms
- Development of Modification Instructions, Technical Instructions and Technical Manuals
- Create and manage technical drawings
- Create and maintain Interface Control Documents (ICD)
- Provide Physical Configuration Audit (PCA) support for all core components of JBC-P FoS
- Provide support to Form Fit and Val/Var Events
- Develop ECPs as required

▼ JBC-P Navy
- MTVR, MRAP Cougars and HMMWV’s to undergo BFT system fielding
- Engineering support to upgrade the Mark Patrol Boat platform to the MFoCS
- FST Support: sustainment trips planned for NECC locations to provide system health assessments and software patch update support
- Training seminars scheduled

▼ MCH Program of Record (PoR) and ECR Increment II
- MARCORSYSCOM awarded the MCH CsFC compliant hardware/software solution
- Conduct the DT HW Test event, DT HW Test Cases and Test Reports
- Support DT Integration
- Self Assessment Planning, IV&V Support, RMF Support

Future Opportunities & Influencers

I MEF CG, LtGen Joseph Osterman directed his staff to examine alternative Combat Operations Center (COC) configurations for distributed C2. He provided the following four areas as guidance:

- Focus on Distributed Operations / C2
- COC needs to be wireless; C2 must be resilient and redundant
- Reduce electronic and thermal signatures
- Transportability, i.e. move the office into the field

NextGen OPFAC (GCE, LCE, ACE, CE) Requirements Working Groups

Opportunities resulting from IWRP White Papers

Exercise Lessons Learned

- Advanced Naval Technology Exercise (ANTX) 2019
- Island Marauder…
Summary

▼ Expeditionary Warfare Department

- Government partner delivering Information Warfare solutions to Marines and Special Forces
- Close partnering with SYSCOM PMs to achieve affordable technical requirements for the operating forces
- Supporting operations from the flag pole to the fighting hole
Equipping the Force