

Naval Information
Warfare Center



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Naval Information Warfare Center Atlantic Shore C2ISR & Integration Department Introduction and Overview

16 July 2024

Mr. Bruce Carter, SSTM

Department Head Shore C2ISR and Integration

CDR Alexander Williams, USN, OIC, Europe/Africa

LCDR Tricia Nguyen, USN, OIC, Middle East

Mr. Donovan Lusk, Command and Operations Centers Div. Head

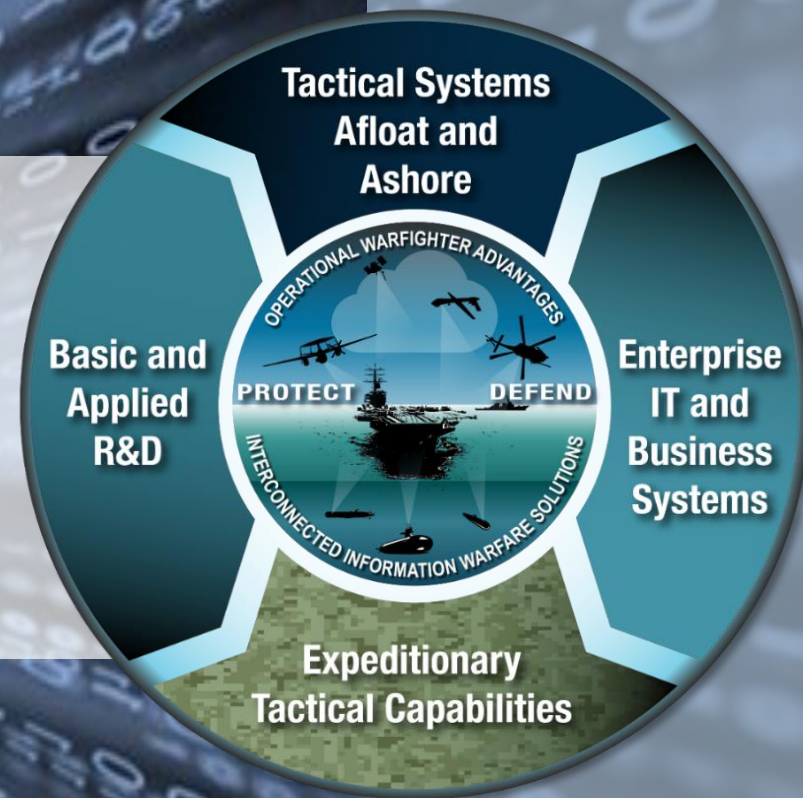
Mrs. Chris Litwin, Special RECON., Surveillance, & Exploitation Div Head

Mr. Robert Heaton, Air Traffic Control Engineering Div Chief Engineer

Mr. Greg Stevenson, Force Protection Solutions Div Ops Mgr

Mr. Myke Payne, Defense Health IT Div. Ops Mgr

Mr. Billy Rollins, Industrial Controls Systems & Applications Div. Head



Shore C2ISR & Integration Department Overview

Mission

Enable Naval and Joint Readiness by providing integrated Command, Control, and Intelligence products and services that allow for secured mission execution through sound engineering and implementation.

Vision: Delivering Engineered Shore C2ISR solutions that matter to the Warfighter and Nation.



Major Customers

- Commander, Navy Installations Command
- Marine Corps Installations Command
- Naval Air Systems Command
- Naval Facilities Engineering Command
- Defense Health Agency

Divisions

- Defense Health Information Technology
- Industrial Controls Systems and Applications
- Special Reconnaissance, Surveillance and Exploitation
- Force Protection Solutions
- Command and Operations Centers
- Air Traffic Control Engineering

Russia In The News

☰ CNN Politics SCOTUS Congress Facts First 2024 Elections

Russia-linked hacking group suspected of carrying out cyberattack on Texas water facility, cybersecurity firm says

By Sean Lyngaas, CNN
🕒 5 minute read · Published 6:07 AM EDT, Wed April 17, 2024

☰ CNN World Africa Americas Asia Australia China Europe India Middle East United Kingdom

From \$7 graffiti to arson and a bomb plot: How Russia's 'shadow war' on NATO members has evolved

By Nick Paton Walsh, Sarah Dean and Karolina Jeznach, CNN. Video by Clayton Nagel, CNN
🕒 7 minute read · Updated 5:34 AM EDT, Wed July 10, 2024

The Washington Post
Democracy Dies in Darkness

Russia recruits sympathizers online for sabotage in Europe, officials say

Europe has been grappling with an increase in Moscow-led sabotage attacks as Russia turns its focus to increasing the cost of Western support for Ukraine.

By Souad Mekhennet, Catherine Belton, Emily Rauhala and Shane Harris
July 10, 2024 at 9:11 a.m. EDT

The Washington Post
Democracy Dies in Darkness



Inside the Russian effort to build 6,000 attack drones with Iran's help

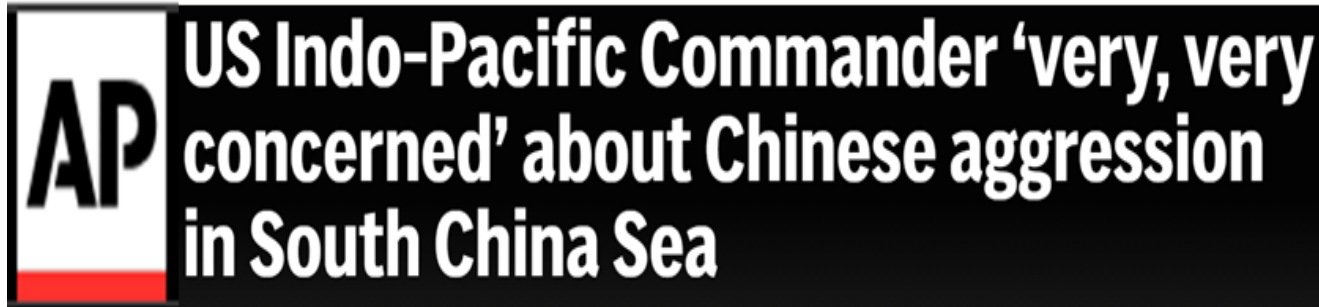
August 17, 2023

The Washington Post
Democracy Dies in Darkness



Arsonists burned down Marywilka 44 Shopping Center on May 12 in Warsaw. Polish police arrested nine men allegedly involved in a Russian criminal ring. (Video: Wawa Hot News 24 via Storyful)

China In The News



 **NBC NEWS**

Chinese hackers spent 5 years waiting in U.S. infrastructure, ready to attack, agencies say

Chinese hackers spent 5 years waiting in U.S. infrastructure, ready to attack, agencies say

The report is one of the first public indications that Chinese hackers have had years of access to U.S. infrastructure.

The Washington Post

TECH POLICY

China's cyber army is invading critical U.S. services

A utility in Hawaii, a West Coast port and a pipeline are among the victims in the past year, officials say

By [Ellen Nakashima](#) and [Joseph Menn](#)

December 11, 2023 at 6:00 a.m. EST

The image is a screenshot of the FBI News website. At the top, it says "FBI" and "News". Below that, there are links for "Stories", "News Blog", "Videos", "Podcasts", "Press Releases", "Speeches", "Testimony", "Photos", and "Apps". The date "April 18, 2024" is displayed. The main headline reads: "Chinese Government Poses 'Broad and Unrelenting' Threat to U.S. Critical Infrastructure, FBI Director Says". Below the headline is a sub-headline: "Partnerships, joint operations, and private sector vigilance can help us fight back". There is a photo of two men sitting in armchairs on a stage. Below the photo is a caption: "Director Wray, right, speaks with Vanderbilt University Chancellor Daniel Coenen during the Vanderbilt Summit on Modern Conflict and Emerging Threats in Nashville on April 18, 2024." The main text of the article begins: "FBI Director Christopher Wray on April 18 warned national security and intelligence experts, as well as students, that risks the government of China poses to U.S. national and economic security are 'upon us now'—and that U.S. critical infrastructure is a prime target." It continues: "The PRC [People's Republic of China] has made it clear that it considers every sector that makes our society run as fair game in its bid to dominate on the world stage, and that its plan is to land low blows against civilian infrastructure to try to induce panic and break America's will to resist," he said in remarks at the Vanderbilt Summit on Modern Conflict and Emerging Threats in Nashville." At the bottom, there is a highlighted yellow box containing the text: "But he suggested that partnerships with both the private sector and academia can be powerful tools in the quest to neutralize this threat."

Changing Business Landscape In Shore C2ISR and Integration Department – Update

▼ Work Shaping (an update)

- Defense Health Modernization System Support
- DLA Automated Fuel Handling
- IT Systems Support CNIC
- Reviewing all Projects Annually
- Trending towards R&D efforts and partnerships
- Naval is a priority and Navy is a component of any Combatant Command; therefore, Joint Interoperability is extremely important!

▼ Focus on Major Initiatives

- OCONUS Support / Naval Integration (Mission Engineering, Data Science, Autonomy)
- Shoreside Configuration Management
- Global Naval Electronic Security Solutions
- Electronic Warfare Capabilities
- Cyber Operations
- Enabling Warfighter Decision Superiority
- Employment of Artificial Intelligence wherever we can and as often as we can

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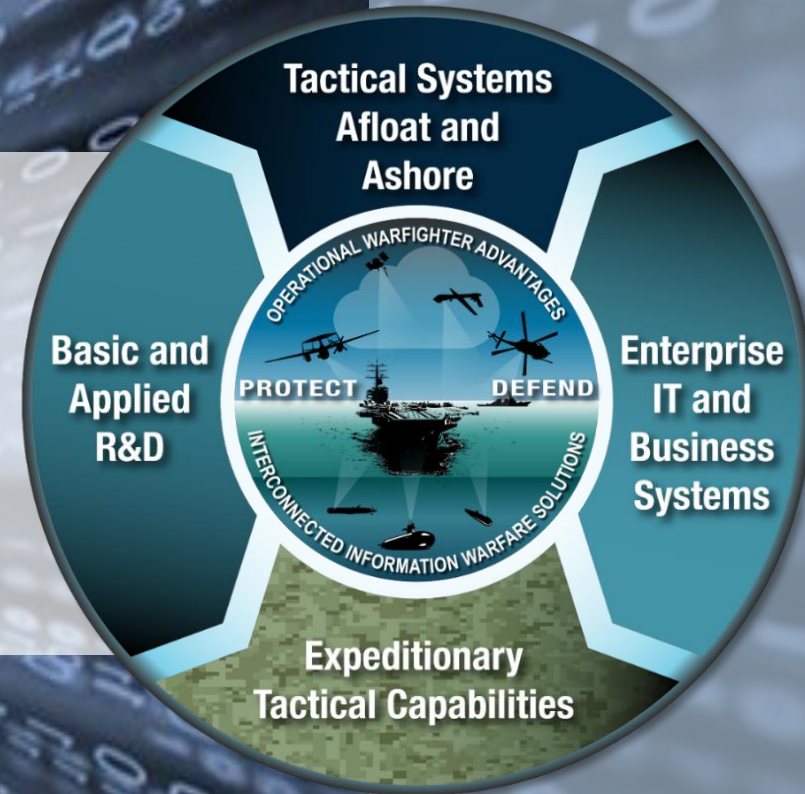
Naval Information Warfare Center Atlantic **Fifth & Sixth Fleet AOR** **Overview**

CDR Alexander Williams

NAVWAR Officer in Charge Europe & Africa

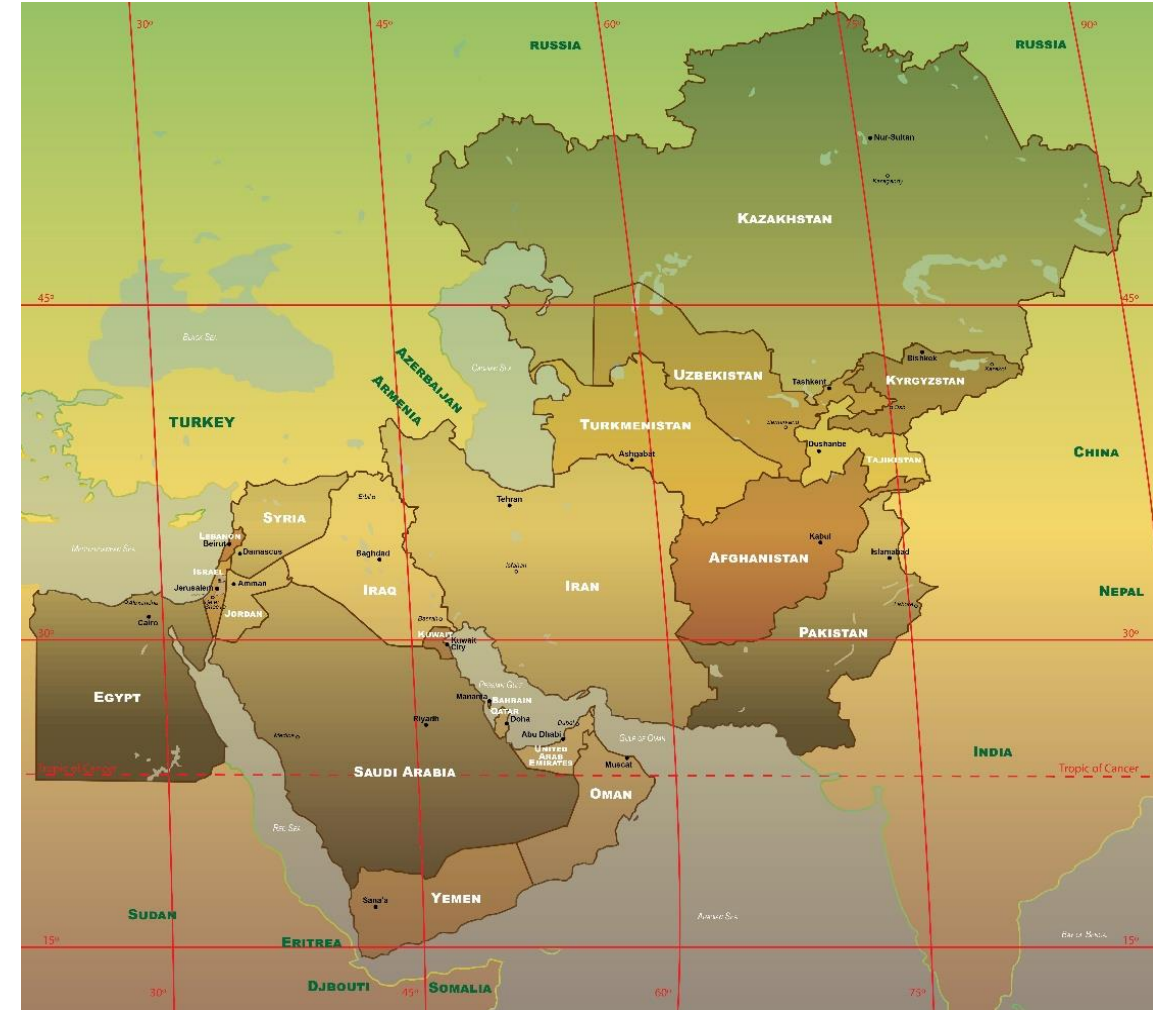
LCDR Trica Nguyen

NAVWAR Officer in Charge Middle East



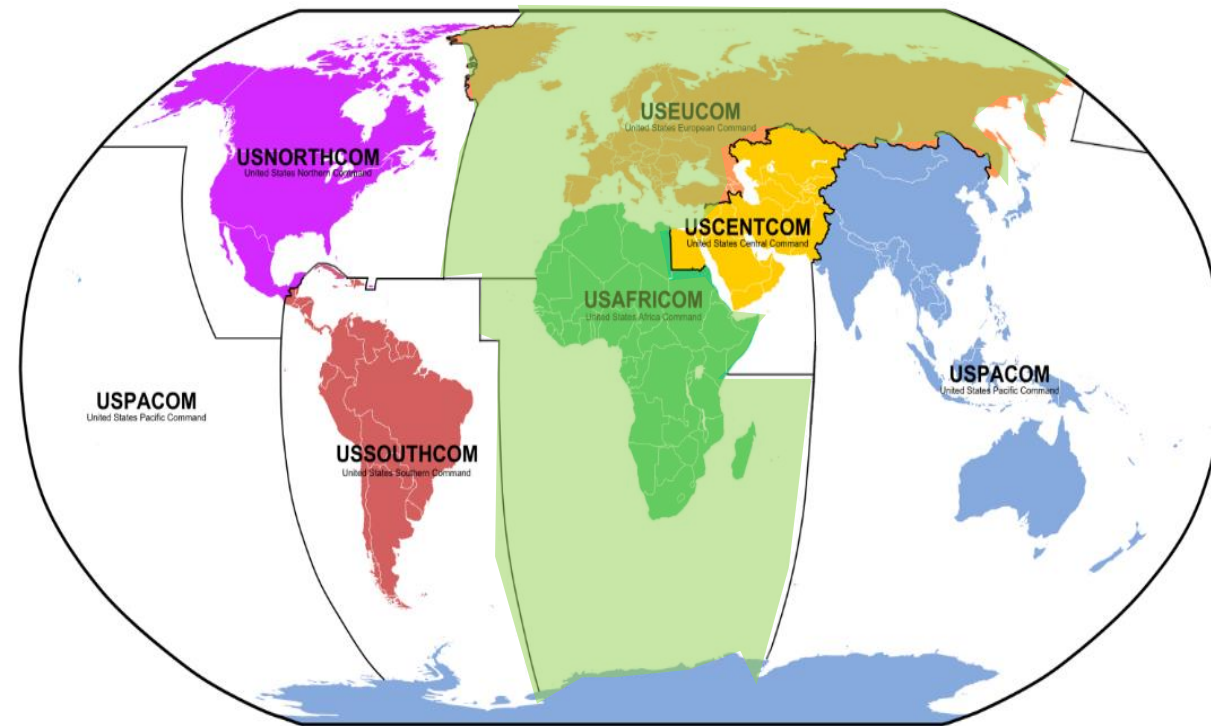
NAVCENT Fifth Fleet Overview

- ▼ Mission: Conduct maritime security operations, theater security cooperation efforts, and strengthen partner nation's maritime capabilities to promote security and stability in the C5F AOR.
 - Spans 21 nations from Africa, across the Middle East, to Central and South Asia.
- ▼ Lines of Effort:
 - Deter Iran
 - Counter Violent Extremist Organizations (C-VEOs)
- ▼ Functional Priorities
 - Regional Constructs
 - IAMD/C-UAS



NAVEUR/AF and Sixth Fleet Overview

- ▼ Mission: Conduct the full range of maritime operations and theater security cooperation in concert with Coalition, Joint, Interagency, and other partners to advance security and stability in the C6F AOR
 - AOR supports both USEUCOM and USAFRICOM
- ▼ Lines of Effort:
 - Deter Russian aggression against NATO
 - Counter VEO's
 - Partnership Building
- ▼ Functional Priorities:
 - Coalition Communications
 - Unmanned Systems
 - Data Science and Data Engineering



Operational Update

Unmanned Technology

BALTOPS 23: A testbed for new technology

June 15, 2023 — As in previous years, U.S. Sixth Fleet is partnering with the U.S. Naval research enterprise to bring the latest advancements in emerging unmanned technologies to conduct mine countermeasures (MCM) operations. To forward these efforts, Sailors and Marines are experimenting and integrating with Unmanned Underwater Vehicles (UUVs), Unmanned Aerial Vehicles (UAVs), and Unmanned Surface Vehicles (USVs). ... **MORE »**



Enhancing Partnerships

Exercise Sea Breeze 24, a Ukraine/US led multi-national Mine-Countermeasure exercise successfully completed in Scotland

July 8, 2024 — Exercise Sea Breeze took place off the west coast of Scotland for the second year where NATO and Ukrainian warships were supported by staff from 11 countries based in King George V docks in Glasgow. This two-week Mine Countermeasure exercise took place in the Firth of Clyde and Northern Minches, which was a culmination of two years of training for the Ukrainian staff and MCMV crews enabling them to successfully plan, control and execute mine countermeasure activities in a range of scenarios... **MORE »**

BALTOPS 24 concludes in Kiel, Germany

June 22, 2024 — Twenty NATO Allies concluded the 53rd iteration of exercise Baltic Operations 2024 (BALTOPS-24) in Kiel, Germany, June 20, 2024... **MORE »**

NATO Allies Participate in Joint Personnel Recovery Exercise

June 19, 2024 — Service members assigned to Helicopter Sea Combat Squadron (HSC) 28, in coordination with British and Lithuanian allies, participated in a personnel recovery exercise June 10, 2024, in the Baltic Sea... **MORE »**



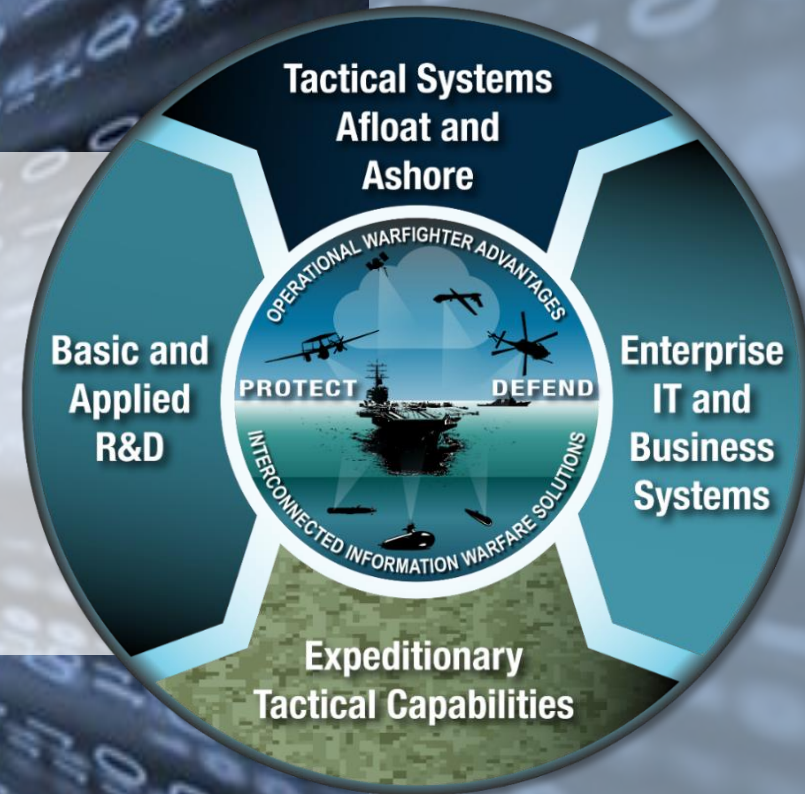
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Naval Information Warfare Center Atlantic **Command and Operations Centers Division Mission and Opportunities**

Mr. Donovan Lusk
Command and Operations Centers
Division Head



Command and Operations Centers Division Overview

Primary Customers

- 2nd/3rd/4th/5th/6th Fleets
- NAVCENT
- NAVEUR/NAVAF
- Fleet Forces Command
- NCTAMS LANT/PAC
- NAVWAR HQ 4.0
- PMW 790
- MARCORSYSCOM
- EUCOM
- AFRICOM
- NORTHCOM
- OSD
- USAREUR
- National Guard Bureau
- Shore C3

What We Provide to support the warfighter

- Naval and Joint Command and Operations Centers
 - Maritime Operations Centers (MOCs)
 - Joint Operations Centers (JOCs)
 - Area Defense Sectors
- MILCON C4ISR Engineering, Integration, and Testing
- C2 Capability Development
- Multimedia Collaboration and Display Systems
- Data Science and Engineering
- Exercise Planning (Solutions Development and Deployment)



Command and Operations Centers Division

Opportunities

▼ Looking Forward:

- DoD/Navy/Warfighter Solutions
 - Shore C3 PMO: Support to centralize Maintenance and Modernization of Shore IW Platforms
- Integrating with Science and Technology
 - Department to deploy capabilities to Fleet customers
- Blending of Mission Engineering, Systems Engineering, Data Science, and DEVSECOPS into unique C2 Capabilities
- Acceptance of Digital Engineering Products that are outside of current Standards
- How to prepare digital models for data analytics



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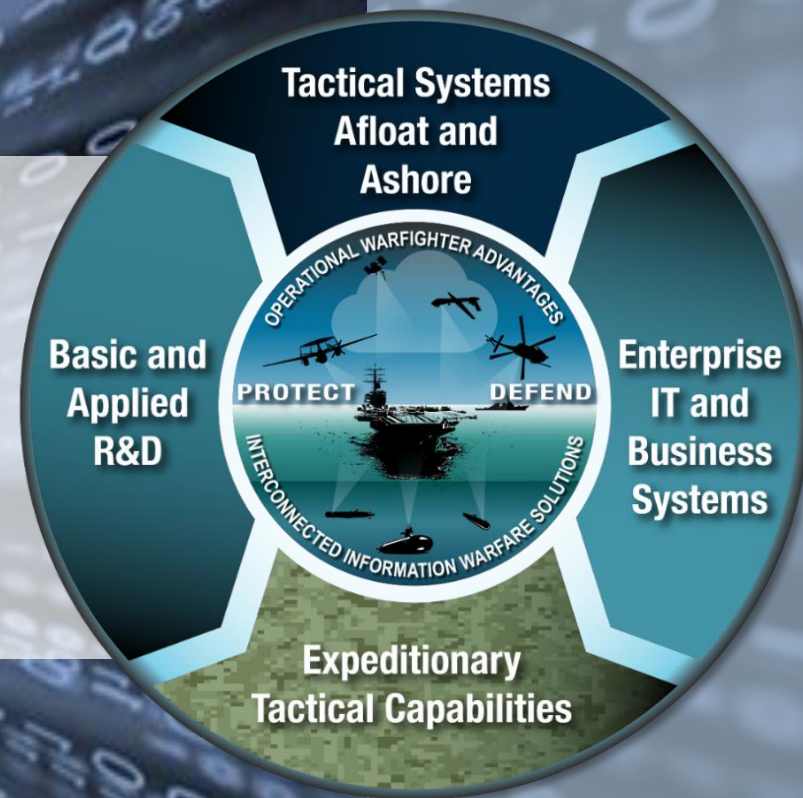
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Special Reconnaissance, Surveillance and Exploitation Division

Mission and Opportunities

Mrs. Christine Litwin

Special Reconnaissance, Surveillance and Exploitation
Division Head



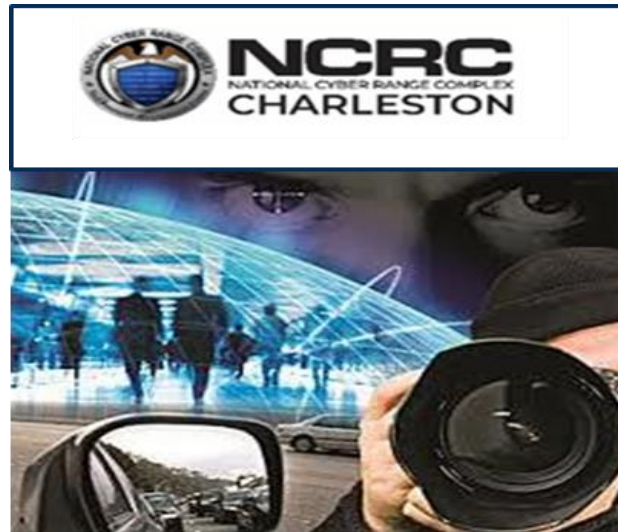
Special Reconnaissance, Surveillance, and Exploitation Division Overview

Primary Customers

- Joint Strike Fighter F35 Program Office
- National Security Agency (NSA)
- Defense Intelligence Agency (DIA)
- Test Resource Management Center (TRMC)
- Naval Air Systems Command (NAVAIR)
- Office of the Under Secretary of Defense (OUSD)
- National Reconnaissance Office (NRO)
- Space Systems Command
- Navy Tactical Exploitation of National Capabilities (TENCAP)

What We Provide to support the warfighter

- SIGINT: Sensor Integration and Software Defined Radio capabilities
- Artificial Intelligence: Data Generation, Data/Model Standardization
- Cybersecurity: Zero Trust and Penetration Testing
 - Cyber Range: planning and execution of large- scale, complex, distributed cybersecurity events satisfying customer requirements
- Cloud Computing and DevSecOps
- Infrastructure Engineering



Special Reconnaissance, Surveillance, and Exploitation Opportunities

▼ IWRP OTA Opportunities

- F-35 Joint Program Office: Combat Data Systems PMO
 - Mission Portable Server System
 - Inline Encryption/Filter Device
 - Mission Planning Environment Cross Domain Solution
- IC Sponsor (Classified - Aug 2024)
 - Identity, Credential, & Access Management (ICAM)
 - Disconnected Operations (DDIL)

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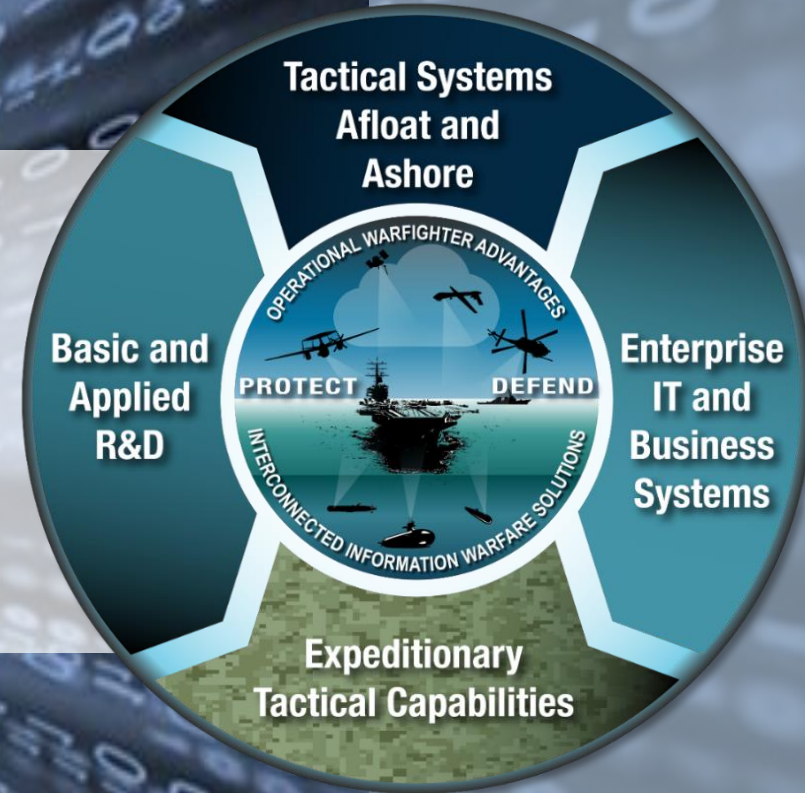
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Air Traffic Control Engineering Division Mission and Opportunities

Mr. Robert Heaton

Air Traffic Control Engineering Division
Chief Engineer



Air Traffic Control Engineering Division Overview

Primary Customers

- NAVAIRSYSCOM/
PEO(T) PMA-213
- 9th Air Force
(AFCENT)
- NAVWARSYSCOM/
PEO C4I PMW120
- National Science
Foundation (NSF)
- FAA
- HQ Air Combat
Command (ACC)
- HQ Air Force Life
Cycle Management
Center (AFLCMC)
- HQ Air Force Flight
Standards Agency
(AFFSA)

What We Provide

- Air Traffic Control facilities to include Radar, Towers, Communications, and Airfield Lighting Control
- ATC/METOC/C2 Design, Engineering, and Integration
- Aviation Command and Control (AC2) Services
- ATC Logistics and Configuration Management

NAVAIR 1992 MOA established SPAWAR Systems Center (now Naval Information Warfare Center) Atlantic as an ATC Center-of-Excellence to support shore-based ATC & Landing systems and programs worldwide



Air Traffic Control Engineering Division Opportunities

▼ Looking Forward:

- Appropriate cyber support and experience across all projects/products, to ensure they meet cyber compliance requirements and continuous monitoring (CONMON). Specifically, completing STIGS and Scans, and working with individual product lines to apply patches in the fleet, as well as providing the documentation to support Authorities to Operate (ATOs).
 - Experienced network engineers to help design a future network architecture for the VIDS, FOCIS, DASR (Eurocontrol ASTERIX IP), and Radios (Eurocontrol ED-137C) to maintain compliance with current ATOs and implement Zero Trust Authority where required.
- Innovative website architecture team to assist NIWC ATCED build and populate a comprehensive technical on-line repository for the Navy and Marine Corps ATC Enterprise.

▼ Successes:

- Polar Programs Operations Support Contract – Awarded Chickasaw Alliance Group – 8 Jul 2024
- Polar Programs Cyber Security Support (SeaPort TO) - Information Systems Solutions (ISS) - 1QFY24

▼ Future:

- ATC Special Programs [Aviation] Support Equipment Management System (SEMS) / Metrology and Calibration (METCALS) Support contract – planned FY25 award

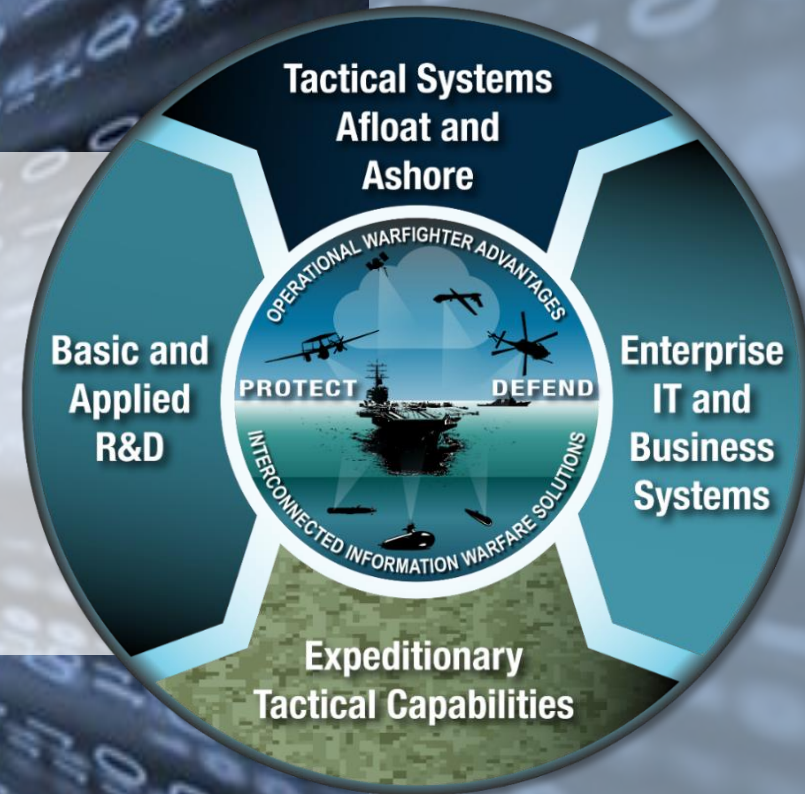
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Naval Information Warfare Center Atlantic **Force Protection Solutions Division** **Mission and Opportunities**

Mr. Greg Stevenson
Force Protection Solutions
Operations Manager



Force Protection Solutions Division Overview

Primary Customers

- Marine Corps Installations Command (MCICOM)
- Commander, Navy Installations Command (CNIC)
- U.S. Secret Service (USSS)
- National Geospatial-Intelligence Agency (NGA)

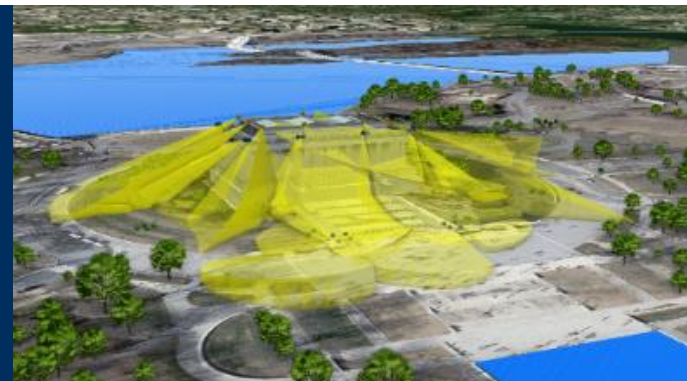
What We Provide to support the warfighter

- Integrated capabilities, situational awareness, detection and deterrence, command and control, and coordinated emergency response deploying ESS/EMS solutions around the globe
- ESS/EMS cyber secure, baseline configurations for installations while increasing the ease of maintainability
- Maintain Navy and USMC ESS labs to ensure standardization, systems configuration and cyber compliance
- ESS / MNS Technical Service Agency for USMC
- Designated Technical Manager for Navy ESS*; executing procurement, installation, training, and sustainment

* Per NAVADMIN 193/22

Executing Integrated Product Teams

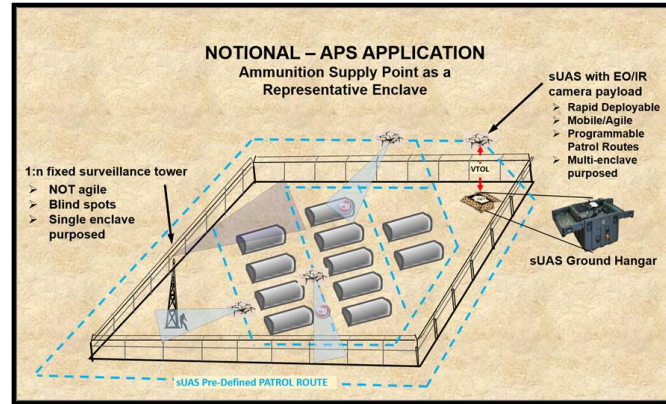
Navy ATPF
Naval Enterprise Solutions
Marine Corps ESS
Presidential / Joint Systems & Applications



Emergent Technology Implementation Efforts



Exploring the utilization of 5G to augment base wide network infrastructure for ESS/EMS



Testing the use of unmanned systems as a force multiplier



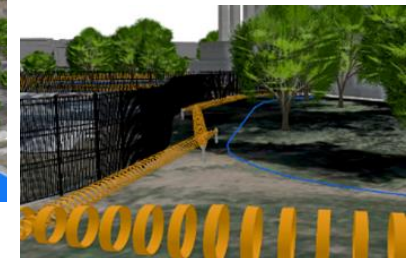
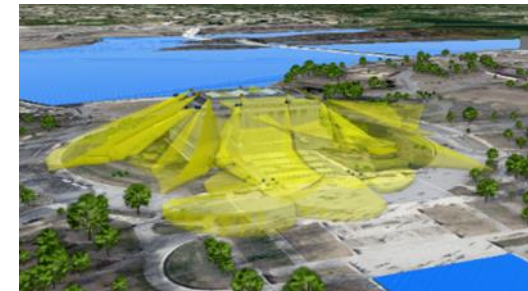
AR/VR - augment training and maintenance for ESS systems



Enable the use of ESS sensors and data to inform an integrated defense in depth strategy

Digital Engineering

- Utilization of LiDAR to create BIM facilities drawings
- Sensor detection zones gap/overlap analysis



Contract Actions

- ▼ IT-OT-Cybersecurity Engineering Support – Large MAC
- ▼ Emergent & Special Security Solutions – Large SAC
- ▼ ESS Global Security Solutions – Large MAC (30% SBSA Target)

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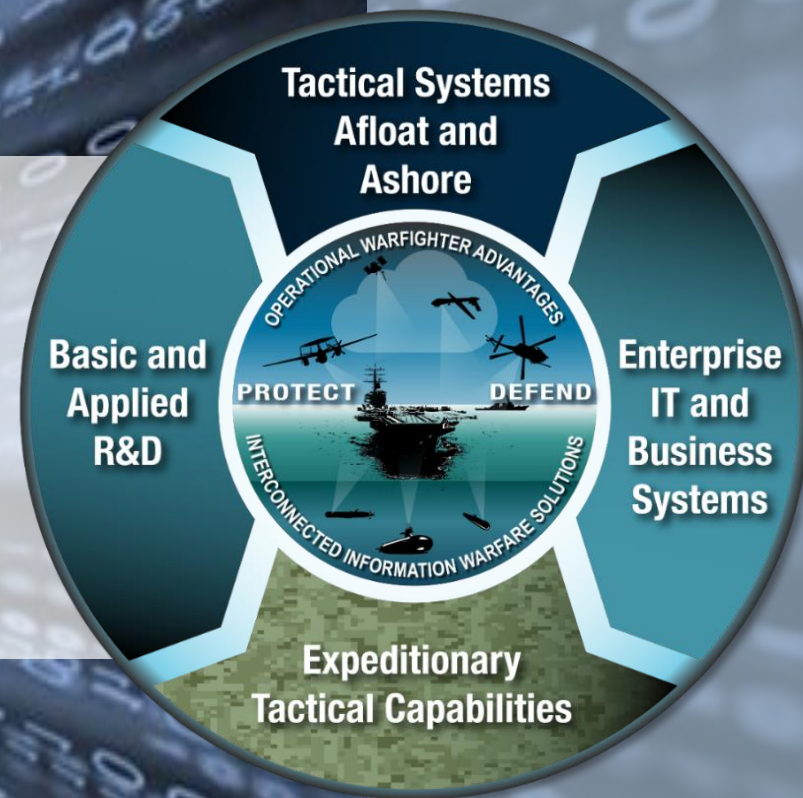


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Naval Information Warfare Center Atlantic **Defense Health Information Technology Division Mission and Opportunities**

Mr. Myke Payne

Defense Health Information Technology Division
Operations Manager



Defense Health Information Technology Division Overview

Primary Customers

- Defense Health Agency (DHA)
- Program Executive Office Defense Healthcare Management Systems (PEO DHMS)
- USMC/PEO Manpower Logistics and Business Solutions (MLB)
- Navy Bureau of Medicine
- USAF

What We Provide to support the warfighter

- Provide full life-cycle development and support of military health system enterprise IT systems and capabilities in order to support and improve warfighter readiness.
- Division's Key Focus Areas:
 - Hosting & NetOps
 - Engineering & Services
 - Defensive Cyber Operations
 - OpMed Capability
 - Deployment and Integration
 - Surge and Rapid Responses Capability



How We are Reshaping to better support the warfighter

- Enhanced focus on being Innovative and Transformative
- Selectively reshaping work to engage and progress critical Naval and NAVWAR initiatives
- Continue strategic effort of "divest to reinvest"
- Expand beyond a solely medical focus
 - Medical/DHA is not going away or losing importance!!!



Defense Health Information Technology Opportunities

▼ Looking Forward:

- AI Capabilities and Systemic Enterprise AI Adoption Strategies
- Innovative technologies and ways to improve battlefield medical technology and care
- True cost-saving strategies and capabilities

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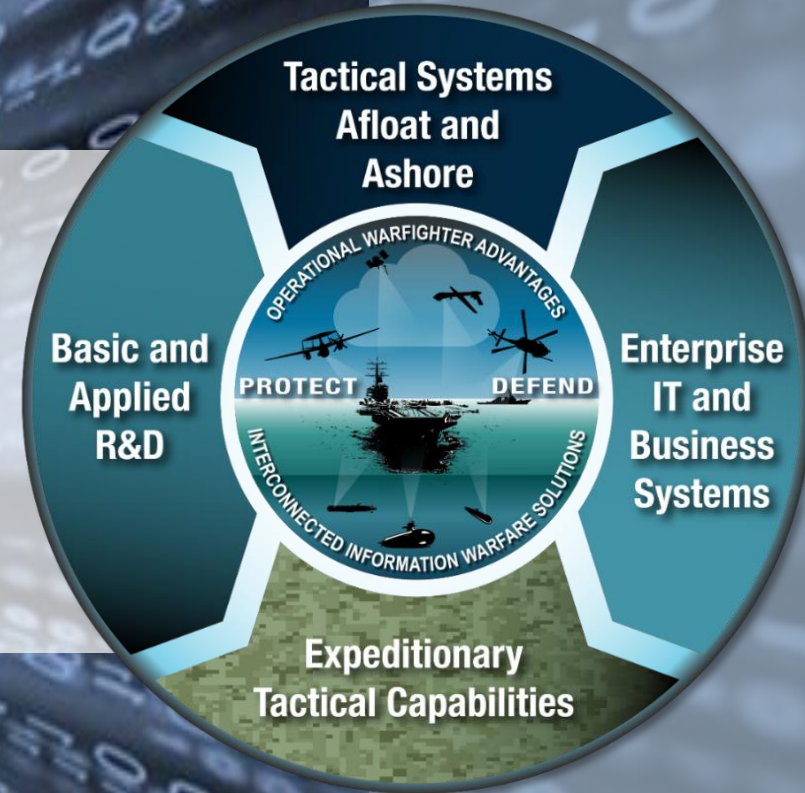


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Naval Information Warfare Center Atlantic **Industrial Control Systems and Applications Division Mission and Opportunities**

Mr. Billy Rollins

Industrial Control Systems and Applications
Division Head



Industrial Control Systems and Applications Division Overview

Primary Customers

- Defense Logistics Agency
- USCG

What We Provide to support the warfighter

- Advances innovation, science, and technology for the DLA Distribution/Disposition network through major research & development of new technologies, ideas, business practices, and processes.
- Ensuring the cybersecurity of control systems that may handle sensitive and classified information and are responsible for managing critical USCG logistics operations.



USCG/Automated Fuel Inventory Accountability and Management

Sponsor: USCG-46

Use Case: Automatic Fuel Inventory and Transaction Monitoring



Goals:

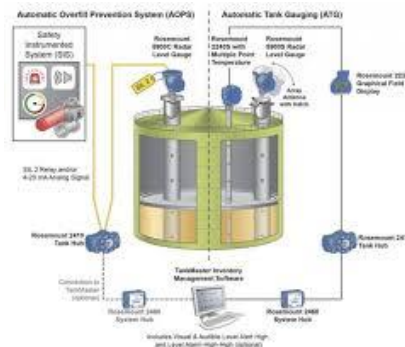
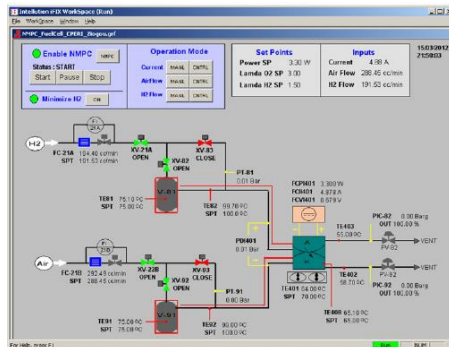
- Advanced fuel sensor integration (Automatic Tank Gauging (ATG), Electronic Meter Register Systems)
- Generate custom dashboards/comprehensive reporting
- Provide system training



Technologies Employed: Sensor Integration, Centralized Data Access, Electronic Point of Sale (EPoS) systems and enterprise fuel accounting.

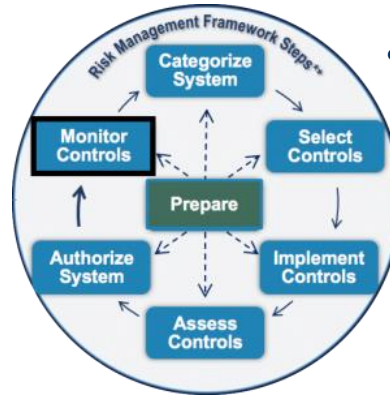
Locations:

- 16/25 USCG Air Stations



USCG/Shore Infrastructure Logistics Command

Sponsor: Shore Infrastructure Logistics Center (SILC)
Tasking: Cyber Program and Facility Related Control System (FRCS) support



Goals:

- Full Cyber Program for FRCS
 - Accreditation using RMF of FRCS starting with advanced metering infrastructure (AMI)
 - Obtaining a level 2 maturity model using the Cybersecurity Capability Maturity Model (C2M2)
- Provide cybersecurity consultation, analysis, remediation, site assessments, inventory collection and vulnerability assessments



Technologies Employed: Network Segmentation, Secure CS Devices, IDS for Control Systems



Locations:

- 50+ sites with AMI
- FRCS = USCG wide



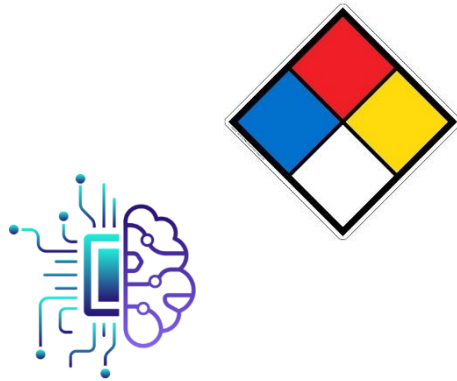
Cybersecurity Capability Maturity Model



DLA/5G Smart Warehouse

Sponsor: Defense Logistics Agency

Use Cases: Indoor, Outdoor, Hazmat, and Classified Inventory Management



Technologies Employed: 5G Networks, Augmented Reality, Autonomous Vehicles, Aerial Drones, Machine Learning, Optical Character Recognition, RFID and Low Power Bluetooth



Goals: Automated inventory management, asset visibility and tracking, audit readiness

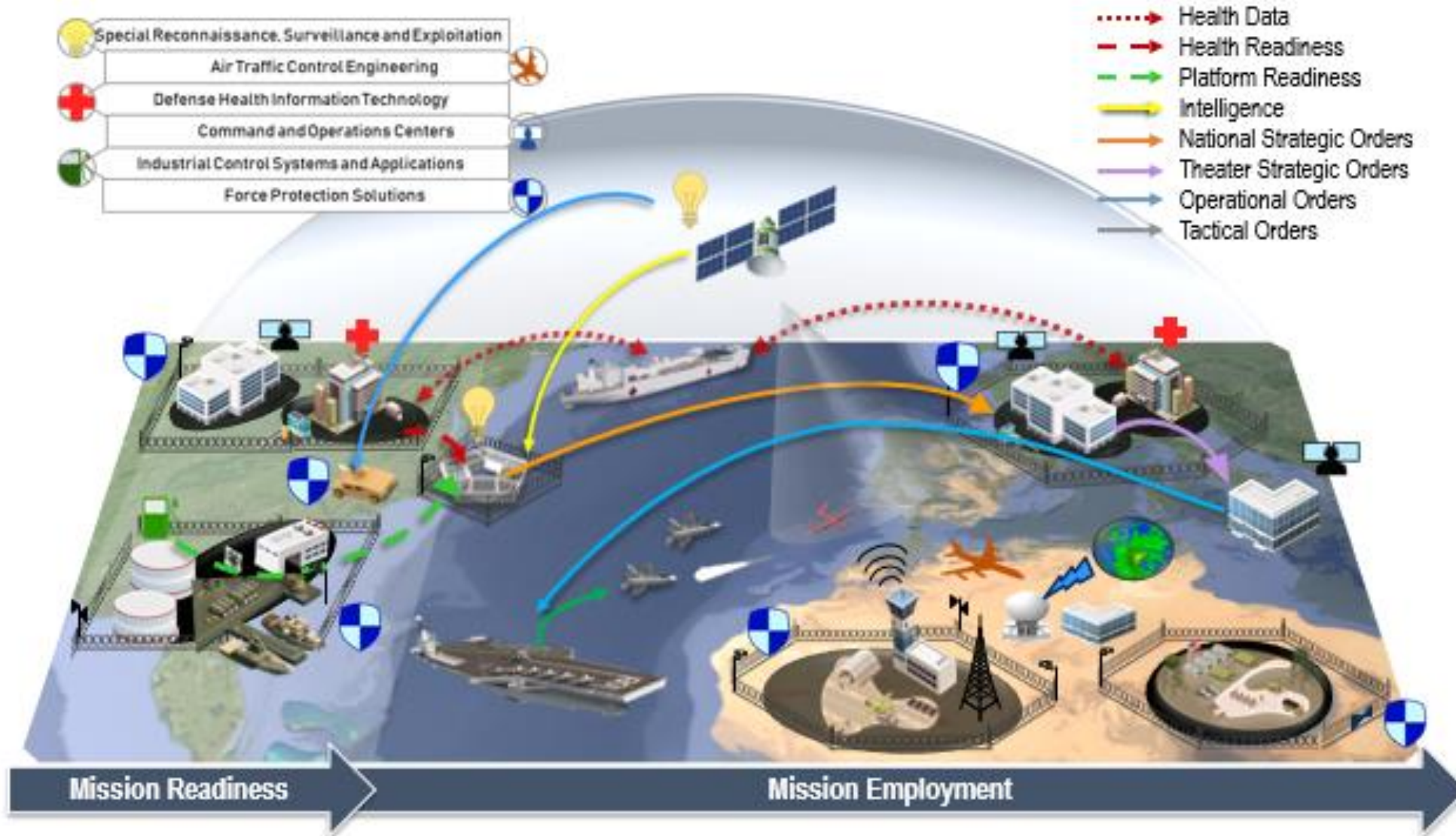


Locations:

- Oklahoma City, OK
- Albany, GA
- Anniston, AL



Shore C2ISR Department Operational View



Questions?

"It follows then as certain as that night succeeds the day, that without a decisive naval force we can do nothing definitive, and with it, everything honorable and glorious."

"President George Washington, 15 November 1781, to Marquis de Lafayette.
[*The Writings of George Washington from the Original Manuscript Sources 1745-1799*.
vol.23. (Washington, D.C.: U.S. Government Printing Office, 1937): 341.]



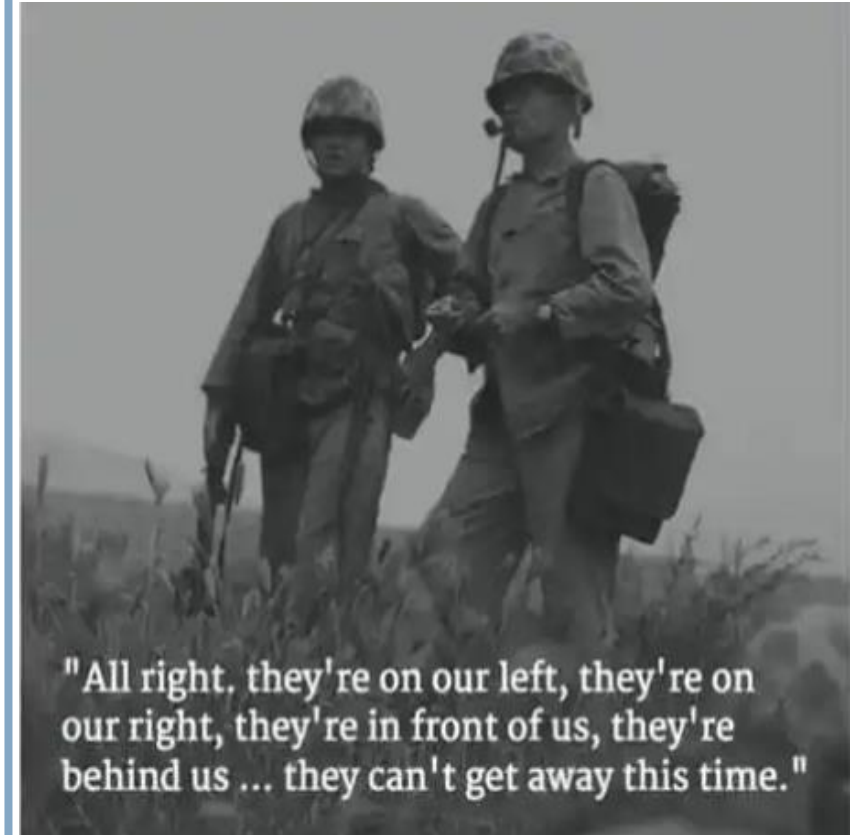
George Washington.

"I wish to have no Connection with any Ship that does not Sail fast for I intend to go in harm's way."

Captain John Paul Jones, 16 November 1778, in a letter to le Ray de Chaumont.
[Morison, Samuel Eliot. *John Paul Jones: A Sailor's Biography*. (Boston: Little, Brown and Company,



Lt. Gen. Lewis "Chesty" Puller, USMC



"All right, they're on our left, they're on our right, they're in front of us, they're behind us ... they can't get away this time."

(Original photo: US Marine Corps Staff Sergeant M. Shutak)