Program Executive Office
Command, Control, Communications, Computers and Intelligence (PEO C4I)

PEO C4I Overview
NDIA San Diego Information Dominance Conference

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PEO C4I Strategic Priorities

Vision
Information Dominance: Anytime, Anywhere ...

Mission
Provide integrated communication and information technology systems that enable information dominance and the command and control of maritime forces

Strategic Goals

MINIMIZE COST, DELIVER CAPABILITY
“Minimize total ownership cost, while delivering integrated C4I capabilities”

RAPID CAPABILITIES TO THE WARFIGHTER
“Foster focused innovation to rapidly field relevant capabilities to meet existing and emerging warfighter needs”

DEVELOP WORKFORCE, ACHIEVE EXCELLENCE
“Develop an aligned, agile workforce equipped to achieve acquisition excellence in a dynamic environment”
Battlespace Awareness & Information Operations (PMW 120)

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Active ACAT Programs and Rapid Deployment Capabilities

- Distributed Common Ground System-Navy (DCGS-N) – ACAT I AM
- AN/ULQ-31(V) ICADS – RDC
- Maritime Domain Awareness (MDA) Spiral 1 – Project
- Ship’s Signal Exploitation Equipment (SSEE) Increment F – ACAT III
- SSEE Increment E – ACAT III
- Naval Integrated Tactical Environment System (NITES-Next) – ACAT III IT
- Automatic Identification System (AIS) – ACAT IVT
- Cryptologic Carry-On Program (CCOP) – Multiple AAPs
- Joint Services Imagery Processing System-Navy (JSIPS-N) – ACAT III
- Meteorological Mobile Facility (Replacement) Next Generation (METMF(R) NEXGEN) – ACAT IVT
- Littoral Battlespace Sensing - Unmanned Undersea Vehicles (LBS-UUV) – ACAT IVM
- InRelief.org – Collaborative on-line site for Humanitarian Assistance and Disaster Relief
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Active ACAT Programs and other programs and initiatives

- Computer Network Defense (CND) Inc 2 – Pre-ACAT IV
- Electronic Key Mgmt System (EKMS)/Key Mgmt Infrastructure (KMI)
  - Component of DISA – ACAT I
- Public Key Infrastructure
  - Component of DISA – ACAT IAM
- Cryptography
- Radiant Mercury
- Tactical Key Loader (TKL)
- Information Assurance (IA) Services
  - IA Architecture & Engineering
  - IA Readiness

PMW 130 aligns to U.S. Cyber Command and 10th Fleet
PMW 130 Priorities

- Protect the ability to share information
  - Assure the integrity of our information
    - Crypto Modernization
    - Radiant Mercury
  - Ensure we have the proper key infrastructure
- Rapidly field Computer Network Defense (CND) systems
- Improve the speed of the Acquisition process
CND
Mission Operations Support

Efforts to Support Navy, Joint, and National Demands

- **Joint Task Force-Global Network Operations**
  
  *Directs Command & Control operations to defend the Global Information Grid* to assure Net-Centric capabilities across strategic and tactical boundaries in support of DoD's full spectrum of war fighting, intelligence, and business missions.

- **Navy Cyber Defense Operations Command**
  
  Designated Navy CND Service Provider to Monitor, Detect, Analyze and Respond in the defense of Navy computer networks and systems. Coordinates Navy Cyber Defense Operations, including telecommunications and CND missions as assigned by JTF-GNO.

- **PEO C4I PMW 130.2 Network Security - CND**
  
  Designated Navy Program of Record for acquisition technical authority for CND Protect, information assurance, and enterprise security services. Procure secure net-centric enterprise capabilities for the Navy in support to joint coalition war fighter mission operations.
Command and Control Systems (PMW 150)

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Active ACAT Programs and other programs and initiatives

Maritime C2
• Global Command and Control System-Maritime (GCCS-M) – ACAT IAC

Tactical C2
• Link-16 Network – ACAT II
• Command and Control Processor (C2P) – ACAT II

Support C2
• Naval Tactical Command Support System (NTCSS) – ACAT IAC

Other
• Command & Control Rapid Prototyping Continuum (C2RPC)
Command & Control Rapid Prototyping Continuum (C2RPC)

Drop 1 (MAR10)

- **Readiness COP**
- **Halo COP**

Drop 2 (SEP10)
- Command
- Relationships
- CDR’s Intent/Strategy
- Decision Points
- Procedures

Drop 3 (MAR 11)
- COA Sketch
- Synch Matrix
- Lines of Operations

- Being developed by PEO C4I in partnership with ONR and COMPACFLT
- Develop applications and data for exposure /consumption
- COMPACFLT sponsored prototype evaluation venue
Tactical Networks (PMW 160)

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Active ACAT Programs
and other programs and initiatives

• Consolidated Afloat Networks and Enterprise Services (CANES)
  ➢ Pre-MAIS/ACAT IAM
• Automated Digital Network System ADNS
  ➢ ACAT II
• Integrated Shipboard Network System (ISNS)
  ➢ ACAT II
• Combined Enterprise Regional Information Exchange System – Maritime (CENTRIXS-M)
  ➢ ACAT III
• Sensitive Compartmented Information (SCI) Networks
  ➢ ACAT III
• Submarine Local Area Network (SubLAN)
  ➢ ACAT III
• Wireless Reach Back System (WRBS)
  ➢ AAP
• Patrol Coastal Networks
  ➢ AAP
CANES Program Overview

Why CANES?

- CANES directly addresses critical IA / CND requirement - provides more secure and reliable afloat network infrastructure
- CANES is the logical continuation and technological enhancement of existing afloat networks
- Provides a secure, scalable common computing environment across all platforms
  - Reduces installations and sustainment costs across consolidated networks
  - Adds efficiency value to manpower challenges
  - Reduces overarching network maintenance

Capabilities

- **Systems Management**
  - Performance, Availability, & Service Level Mgmt
  - Fault, Problem, Incident, & Service Desk Mgmt
  - Configuration, Change, & Release Mgmt
  - Security Mgmt, IA, CND
  - Capacity Mgmt
- **Data Services**
  - Network Support
  - Information Management
  - Core Infrastructure Services
  - Network Access (IPv4/IPv6 Capable)
  - Information Delivery
- **Voice Services**
  - IP Telephony
  - Mobile and Stationary
  - Secure and Un-Secure
- **Video Services**
  - Video Teleconferencing
  - Video/Graphics Distribution
Communications (PMW 170)

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Active ACAT Programs and other programs and initiatives

SATCOM
- Navy Multiband Terminal (NMT) – ACAT IC
- Commercial Broadband Satellite Program (CBSP) – ACAT III
- Super High Frequency (SHF) (WSC-6) – ACAT III
- Global Broadcast Service (GBS) – ACAT III
- Navy Extremely High Frequency (EHF) SATCOM Program (NESP) – ACAT IC

Tactical Communications
- Digital Modular Radio (DMR) – ACAT III
- Battle Force Tactical Network (BFTN) Inc 1 (formerly SNR/HFIP) – RDC
- Communications Data Link System (CDLS) – ACAT III
- Airborne/Maritime Fixed Joint Tactical Radio System (AMF JTRS) – Project
- Portable Radios Program (PRP) – Project

Navigation
- Navigation Sensor System Interface (NAVSSI) – ACAT IVT
- GPS-based Positioning, Navigation, and Timing Service (GPNTS) – Pre-ACQ
- Navigation Warfare Sea (Sea NAVWAR) – ACAT III
- Navigation Warfare Air (Air NAVWAR) – ACAT III
International C4I Integration
(PMW 740)

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FMS Case Totals
• In Execution: 243 cases
• Case Value
  ➢ Total: $3,512,198,805
  ➢ Remaining: $613,927,933

Major Countries
• Taiwan
• Saudi Arabia
• Japan
• South Korea

• Products:
  ➢ Integrated C4I
  ➢ GCCS-M
  ➢ CENTRIXS
  ➢ UHF SATCOM
  ➢ Mini-DAMA
  ➢ COMSEC Equipment
  ➢ UHF/VHF Radios
  ➢ Link 11/16, Coastal Surveillance Stations
  ➢ Multimodal Biometric Jump Kits
  ➢ Border Surveillance Systems (Mobile & Site)
  ➢ Automated Fingerprint Identification System (AFIS)
  ➢ X-Ray Inspection Systems
  ➢ Non Intrusive Inspection Equipment (NIIE)
Carrier and Air Integration (PMW 750)

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Active ACAT Programs and other programs and initiatives
- Force-level New Construction & RCOH
- Force-level Modernization
- TacMobile – ACAT III
- Theater Battle Management Core System (TBMCS) – USAF ACAT III

Other Programs and Projects
- JSF ALIS (JSF JPO) – ACAT 1D
- ARC
- Air Networking Integration IPT
Ship Integration (PMW 760)

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Active ACAT Programs and other programs and initiatives

• Common Radio Room – Pre-Acq

New Construction Ships Supported
• CG(X)
• DDG 1000
• Littoral Combat Ship
• DDG 51
• LPD 17
• T-AKE
• Mobile Landing Platform (MLP)
• USCG National Security Cutter
• Cobra Judy Replacement (CJR)
• Joint High Speed Vessel (JHSV)
• LCAC (SLEP)
• Ship to Shore Connector (SSC)

Modernization
• Design Center
• NMP
• Execution
Submarine Integration (PMW 770)

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Active ACAT Programs and other programs and initiatives
• Communications at Speed and Depth (CSD) – ACAT III
• Low Band Universal Communications System (LBUCS) – ACAT IVT
• Nuclear Command, Control, Communications Long Term Solution (NC3 LTS) – Pre-Acquisition
• OE-538/592 Multi Function Mast – ACAT III
• OE-562/USC-38 Submarine High Data Rate (SubHDR) – ACAT III
• Advanced High Data Rate (AdvHDR) – Pre-Acquisition
• Common Submarine Radio Room (CSRR) – ACAT II

Other Programs and Projects
• Submarine 2Z Cog Equipment Restoration - Project
• Submarine Antenna Modifications and Sustainment (SAMS) – AAP
• Submarine Broadcast – AAP
• Submarine Satellite Communication - Project
• Submarine Operating Authority Modernization – AAP
Shore and Expeditionary Integration (PMW 790)

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Active ACAT Programs and Rapid Deployment Capabilities
• Deployable Joint Command and Control (DJC2) – ACAT IAM
• Tactical Switching – ACAT IVM
• Tactical Messaging – ACAT IVT
• Naval Expeditionary Combatant Command – Naval Coastal Warfare NECC (OCF) – ACAT IVM
• Defense Messaging Service (DMS) – ACAT IVM
• Joint MILSATCOM Network Integrated (JMINI) – ACAT IVT

Other Programs and Projects
• Shore Integration
• Maritime Operations Center (MOC)
• Shore Telephony
• Tactical Gateways
• Teleport/BMDS/Aegis
• P-173 (NCTAMS PAC Relocation Project)
• Expeditionary Integration
• NAVFAC Transition
The Technical Diversity Debate

Does commonality equate to greater vulnerability?
Challenges

• Integrated Capability

• Shaping the Portfolio

• Acquisition Process
Integrated Capability

Individual Systems
- NMT
- DCGS-N
- CBSP
- CANES
- ADNS
- GCCS-M

Integrated Package
- CBSP
- NMT
- DCGS-N
- CANES
- ADNS
- GCCS-M

Seamless Capability

Example: Common Submarine Radio Room
- Centrally managed, open architecture
- Common across all submarine classes
- Leverages existing acquisition programs
- Integrates GOTS, COTS, NDI
- >$700M avoided
- Eliminated multiple:
  - S/W development, sustainment & accreditation
  - Test & integration processes
  - Training pipelines

C4I Integration Programs
Portfolio Overview by Life Cycle

Programs Assigned: 127

ACAT IC/D 2  ACAT III 24
ACAT IAM 2  ACAT IVM 5
ACAT IAC 3  ACAT IVT 9
ACAT II 6  NON ACAT/AAPs 76

*Color highlights indicate incremental acquisition of programs
*Not included above: Non-ACAT Programs and Programs managed by other services
*Updated as of 15 Sep 2010
Shaping the Portfolio

- **Networks**
  ISNS, SubLan, CENTRIXS, ADNS Inc II, SCI LAN, etc.

- **Applications**
  SSEE, DCGS-N, GCCS-M, OOMA, OIMA, NTCSS Patriot, etc.

- **Communications**
  MILSATCOM, Commercial SATCOM, Tactical Comms

“Deliver more, without more”
DSB Task Force March 2009
Proposed Acquisition Model

Rapid COTS Insertion
New capabilities fielded incrementally
Prototyping and Experimentation

Acquisition Model: Continuous Technology/Requirements Development & Maturation
Information Dominance Priorities

• Drive more agile acquisition

• Influence coordination and synchronization of ISR/IO and Cyber Investments and strategy

• Champion top objectives of senior Navy leadership in the C4ISR/IO domain
What Industry Can Do
We get IT.
We also integrate it, install it and support it. For today and tomorrow.

Visit us at www.peoc4i.navy.mil