Product Line, Core Technology, Command Logistics

July 2010
Embedded Shared Services Personnel
Report to Shared Services Divs as follows:

ALD: Comptroller /Budget - LT Rea
BOD: Business Performance - GS12 Hamm
CPD: COCO Staff - GS14 Ellis
WFD: Admin Support - 4 YN’s
Spiral Development Process

A. Customer Communication
   - Prioritize STRs/SIRs
   - Revise Support Plan
   - Revise Project Plan
   - Modify Requirements (if Nec)

B. Planning
   - Draft Project Plan
   - Draft Support Plan
   - Draft Risk Assessment
   - Change Requirements
   - Feedback from Operators (STR/SIR)

C. Risk Assessment
   - Update Risk Assessment
   - Review Risk Assessment
   - Joint Management Review
   - Joint Management & Technical Review

D. Joint Management and Technical Reviews
   - Update Requirements
   - Requirements CCB
   - Review Contractor's Test Procedures
   - Software Implementation
   - Software Unit Integration and Testing
   - CSCI Testing
   - Software Delivery
   - HW Unit Verification

E. Engineering Design
   - Develop Spec for HW & SW
   - Software Development Plan
   - Update Block Diagram
   - Review Detailed Designs
   - Develop Spec for HW & SW
   - Design Walkthroughs with Contractors
   - Engineering System Testing
   - System Integration
   - LCCB

F. Engineering Development
   - Award
   - Draft Test Plan
   - Draft EILSP
   - LCCB
   - CSCI
   - LCCB
   - STRs
   - System Testing
   - Technical Acceptance

G. Installation and Support
   - Prototype Installations
   - Draft Installation Plan
   - Draft EILSP
   - LCCB
   - CSCI
   - LCCB
   - STRs
   - System Testing
   - Technical Acceptance

H. Customer Evaluation
   - Customer Evaluation
   - Story Boards
   - Develop Prototype
   - Design Walkthroughs with Contractors

I. OT&E
   - Production Installations
   - CSCI
   - LCCB
   - CSCI
   - LCCB
   - STRs
   - System Testing
   - Technical Acceptance

J. End of Project
• **Product Line Manager** – CDR Joe Ponseti

• **CC PL Initiatives for 2010:**
  - WatchKeeper Segment 1: pre-deployment & hardware installation thru FY11
  - Replace unclass COP infrastructure
  - CC relocation projects: NC, Puget Sound, Astoria, San Fran & NOLA
  - WatchKeeper Segment 2: planning and development
  - VTS 4.6 upgrade at San Fran & Seattle
DGPS Product Line
• **Product Line Manager** – LCDR Mark Focken

• **DGPS PL Initiatives for 2010:**
  - DGPS MF Transmitter Replacement (27 installs scheduled FY10)
  - DGPS Product Line Standup (MOC June 2010)
  - Last NCS software release July 2010 then sustainment. Initiative to integrate NCS with WatchKeeper.
Remote Mission Systems Product Line
Remote Mission Systems Product Line

- **Product Line Manager** – CDR Joe Chop


- **RMS PL Major Systems:**
  - **NAIS** – Nationwide Automatic Identification System
  - **Rescue 21 (R21)** – Leading edge Very High Frequency (VHF) fixed facility communication network providing capability to conduct search & rescue (SAR)
  - **National Distress System (NDS)** – Legacy VHF fixed facility communication network providing capability to conduct search & rescue (SAR)
  - **Electronic Short Range Aid to Navigation (e-SRAN)** – includes sound signals, sound signal controllers, lighthouse control & monitor systems, range light controllers, etc
Remote Mission Systems Product Line

- **Location of RMS PL Systems:**
  - **NAIS:** Remote sites located in the continental U.S., Alaska, & Hawaii. System Operations Center (SOC) located in Alexandria VA. NAIS data used by daily by CG Sectors, Districts, Areas, and HQ command centers.
  - **R21:** Remote sites located in the continental U.S. and Hawaii. Control consoles used by CG Sectors and Stations.
  - **NDS:** Remote sites located in Alaska and along the Mississippi River and it’s major tributaries. Control consoles used by CG Sectors and Stations in CG District Eight.
  - **SRAN:** Remote sites located throughout Federally defined navigable waters including harbor and harbor approaches (HHA) in the continental U.S., Alaska, and Hawaii.
Remote Mission Systems Product Line

• Potential Products & Services required for RMS PL Systems:
  • NAIS: Contract maintenance (organization and depot) for NAIS remote sites. Replacement and/or upgrade of AIS hardware including AIS base stations. Contract system administration of NAIS servers & engineering mock-ups.
  • R21: Contract maintenance of R21 remote sites, R21 work stations, & R21 consoles. Replacement and/or upgrade of R21 hardware and software.
  • NDS: Contract maintenance of NDS remote sites and NDS consoles. Replacement and/or upgrade of NDS hardware and software.
  • SRAN: Contract fabrication and/or repair of electronic aid to navigation systems.
Remote Mission Systems Product Line

- Anticipated major programs or projects in FY11 – FY13 for RMS PL Systems:
  - **NAIS:**
    » Nationwide contract maintenance for NAIS remote sites.
    » Replacement and/or upgrade of AIS hardware including AIS base stations.
  - **NDS:**
    » Maintenance of NDS remote sites and NDS control consoles.
    » Replacement/upgrade of NDS control consoles
    » Upgrade and/or relocation of NDS remote sites.
  - **SRAN:**
    » Fabrication of Remote Sound Signal Control systems
    » Installation of Remote Sound Signal Control systems or repair of electronic aid to navigation systems.
CAMS Product Line
CAMS Product Line

- Product Line Manager: CDR Romy Domingo

- CAMS PL Initiatives for 2010:
  - Stand up CAMS Product Line at C3CEN
  - Transition CAMS SDA/SSA responsibilities from TISCOM to C3CEN
  - HF Antenna Recap (3 antennas scheduled for FY 10. 1 NOLA, 2 CAMSLANT)
  - Recap HF 80 and RF-755 with RT-2200 transceivers COMSTA Boston (8), CAMSLANT (12) and CAMSPAC (8)
  - Relocate COMSTA Kodiak’s HF ALE network and GMDSS listening guard from Attu to Shemya due to LORSTA closures
Command and Control Core Technology
• Core Technology Manager – CDR Amy Kritz

• Command and Control CT Initiatives for 2010:
  • SEAWATCH-FRC prototype and delivery
  • SEAWATCH-378 development
  • Integration of SEAWATCH and CGC2
  • SCCS-110 for PATFORSWA cutters
  • C3CEN/ALC partnership
  • MSP proposal
  • Legacy Deepwater sustainment
Core Technology Manager – CDR Thomas Linke

Navigation CT Initiatives for 2010:
- Vega INS delivery to SeaWatch
- AN/SPS-73 hardware refresh prototype
- IMO compliant high power radar prototypes
Communications Core Technology
• Core Technology Manager: CDR Michael Taffe

• RF Comms CT Initiatives for FY10:
  • Transition RF Comms SDA/SSA responsibilities TISCOM to C3CEN (begin planning lab transition)
  • WMEC (210 and 270) fleet MCX-1000 recap
  • Short Range Communications Systems Upgrade (SRCUS)
  • Complete GSB HF radio recapitalization (4 remaining 210’ cutters)
  • VHF Over The Air ReKeying (OTAR) roll out with consolidated code plug.
Training
• **Branch Chief:** LT Richard Blaszak

• **Courses:**
  • 13 Class “C” Schools (75 classes per year)
  • 3 deployable courses (VEGA/SCCS/Watchkeeper)

• **Other initiatives:**
  • Development of Just-in-time training for Seawatch
  • Development of Just-in-time training for Watchkeeper
  • Analysis for the new DGPS Transmitter

• **Student Throughput (annual)**
  • 538 resident “C” School Students
  • 631 students trained at their units
USCG

Enhanced Mission C4IT Capabilities

EMC²

Command, Control, and Communications Engineering Center
<table>
<thead>
<tr>
<th>Integrated Systems</th>
<th>Client Based/ Web Applications</th>
<th>Web Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG-C2 GCCS-J</td>
<td>SAROPS Seahawk Portal</td>
<td>SANS WebCOP</td>
</tr>
<tr>
<td></td>
<td>Oracle Financials C2PC</td>
<td>Homeport</td>
</tr>
<tr>
<td></td>
<td>MISLE</td>
<td>CGMIX</td>
</tr>
<tr>
<td></td>
<td>MHSOPS (MASI)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAGNet</td>
<td></td>
</tr>
<tr>
<td>CG Enterprise IT Infrastructure</td>
<td>SAROPS VISTOOLS Seahawk Portal C2PC MISLE Enterprise GIS MHSOPS (MASI)</td>
<td>SANS WebCOP Homeport CGMIX</td>
</tr>
<tr>
<td>VTS/PCSS JPSC2* ASU R21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG Enterprise IT Infrastructure</td>
<td>SAROPS CAP'N MISLE CGMS Vega* Aldebaran* C2PC</td>
<td>SANS WebCOP Homeport CGMIX</td>
</tr>
<tr>
<td>SCCS CASPER RF Comms Vega* CGC2*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* In Development

Representative sample of C4IT Capabilities not intended to be comprehensive
Representative sample of C4IT Capabilities
not intended to be comprehensive
EMC² Major Components

• **CoastWatch** (HQ, Area, District) - Strategic enhanced mission command and control across all deepwater and legacy command center systems.  **Example:** Common Operating Picture (COP)

• **PortWatch** (Sector-Local) - Scalable tactical command and control system with integrated sensors, display, analysis, and sharing capabilities/features that is tailor-able to specific port requirements.  **Example:** Search and Rescue Optimal Planning System (SAROPS)

• **SeaWatch** (Ship/Aircraft Operations) - Tactical enhanced mission command and control across all deepwater and legacy afloat and airborne assets.  **Example:** Shipboard Command and Control System (SCCS)
Challenges

- Project Management from HQ-details from CG-6,7,9
- New, more onerous process cost money & FTE (C&A, ITAR, etc.)
- Stand up of PLs and CTs
- Communications addition to C2CEN to create C3CEN
- Spending Money
- Building Space
Victories

- ALC C3CEN Relationship
- SeaWatch Sentinel C2 system is afloat NOW
- SeaWatch development and CG-9 buy in
- WatchKeeper-standardization of command centers
- Approved half funded DMSI
- Finalist in Alexander Hamilton Award
- Single Standard Navigation System (VEGA)