54000 Competency Overview

Computer Applications, Services, Integration and Infrastructure

Presented to:
Small Business and Industry Outreach Initiative (SBIOI),
CDCA Industry Outreach Symposium
April 18, 2013

Kathryn S. Murphy
Competency Lead
Overview

- Organizational Structure
- Our People
- Our Work
- Pillar Contracts
- Our Demands
  - 54100
  - 54200
5.4 Competency Organization

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Our Organization

Geography

- Pax River, 15
- DC, 42
- Tidewater, 160
- Charleston, 171
- NOLA, 94

Funding

- 28% Mission Funded
- 72% NWCF

Current CIV Occupational Series Profile / Key Positions Needed

Primary Series
- Information Technology Specialists (APPSW, DATAMGT, OS, SYSADMIN, SYSANALYSIS)
- Computer Scientists
- Computer Engineers
- Electrical Engineers

Key Positions Needed from Contractors
- Information Technology Specialists (APPSW, DATAMGT, OS, SYSADMIN, SYSANALYSIS)
- Computer Scientists / Computer Engineers
- Software Developers (front-end & back-end)
- Software Integrators
- SOA Architects
- Software Engineers

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Our Mission

Our Mission: Successful coordination across all aspects of software and computer engineering to provide the right solutions to our customers.

Applications & Services Engineering (ASE)
- **Apps**: Computer software designed to interact with users to perform tasks within a specific domain
- **Services**: Software components which provide underlying capabilities to computer applications enabling processing, communication, security and similar functions

Computing Infrastructure (CI)
- Assessing, designing, implementing and administering computer systems to properly support computer/software capabilities

Software Systems Integration (SSI)
- Amalgamating disparate computer system and software components to operate as a coordinated whole

Our Customers:

<table>
<thead>
<tr>
<th>BFS</th>
<th>EXP</th>
<th>TCI</th>
<th>PII</th>
<th>D&amp;I</th>
<th>ICO</th>
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<tbody>
<tr>
<td>Force Protection Solutions</td>
<td>VA</td>
<td>VIS</td>
<td>Ashore (790)</td>
<td>Fleet Readiness</td>
<td>DARPA</td>
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<td>N-ERP Sustainment</td>
<td>Special Operations</td>
<td>Afloat (160/170)</td>
<td>FMS</td>
<td>STEM</td>
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<td>Business Solutions</td>
<td>Exped Intel &amp; Info Ops</td>
<td>GIG Support</td>
<td>PII Stand Alone SP</td>
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<td>PMW 150</td>
<td>MAGTF C3</td>
<td>EUCOM/AFRICOM</td>
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<td>PMW 240</td>
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<td>Network Security</td>
<td>Navy Mobile</td>
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<td>DLA Sys &amp; Applications</td>
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| | | | | | MDMS
| | | | | | Data Center Services
| | | | | | Command IT

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### Portfolio & Sponsor Alignment

#### Portfolio Summary
- **Business Solutions**
- **Force Protection Solutions**
- **Health Systems**
- **Veterans’ Affairs**
- **PMW 150 / Logistics Systems**
- **PEO EIS (PMW 240 & N-ERP Sustainment)**

#### Active IPTs & Supported IPTs

<table>
<thead>
<tr>
<th>Portfolio</th>
<th># Active IPTs</th>
<th># IPTs Supported</th>
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<td>NPW</td>
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#### Service Center
- **SABRE Command IT**
- **Afloat (160/170)**
- **EUCOM / AFRICOM**
- **FMS Navy Mobile**
- **ATC Mission Command**
- **SRSE NCR IDS**
- **MAGTF C3 Solutions**
- **Vehicular Integration Solutions**
- **Expeditionary Intelligence Solutions**

#### Distribution
- **Naval**: 67%
- **Joint**: 19%
- **Federal**: 15%

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# Contracting Resources

## Pillar Business and Technology Areas

<table>
<thead>
<tr>
<th>Battlespace Awareness</th>
<th>Business &amp; Force Support</th>
<th>Decision Superiority</th>
<th>Integrated Cyber OPS</th>
<th>Transport &amp; Computing Infrastructure</th>
<th>Production, Installation &amp; In-Service Support</th>
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<tbody>
<tr>
<td>BA Advantage (8a)</td>
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<td>DS Advantage (8a)</td>
<td>ICO Advantage (8a)</td>
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### Business & Force Support
- Software Development of Business Solutions
- Non-Tactical Business Solution Network Support for DoD & Other Gov Agencies
- Command and Control Tactical System and Application Dev and Support
- Command and Operation Centers
- Information Assurance Cyber Security
- Computer Network Defense, Exploitation And Network Attack
- Cloud Security
- Satellite Comms
- Software Defined Radios
- Large scale C5ISR integration efforts
  - Surface
  - Sub-Surface
  - Shore Sites
- Foreign Military Sales (FMS)
- CASREPS
- ISEA Supp / Tech Assist
- Shipboard Grooms
- E2C & Integrated Systems
- Testing / Test Events

### Decision Superiority
- Command and Control
- Information Assurance
- Cyber Security
- Computer Network Defense, Exploitation And Network Attack
- Cloud Security
- Satellite Comms
- Software Defined Radios

### Integrated Cyber OPS
- Information Assurance
- Cyber Security
- Computer Network Defense, Exploitation And Network Attack
- Cloud Security
- Satellite Comms
- Software Defined Radios

### Transport & Computing Infrastructure
- Local, Wide Area & Wireless Networks
- Data Center Design
- Terrestrial-Based Communications
- Satellite Comms
- Software Defined Radios

### Production, Installation & In-Service Support
- Local, Wide Area & Wireless Networks
- Data Center Design
- Terrestrial-Based Communications
- Satellite Comms
- Software Defined Radios

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Enterprise Engineering

54100
Transformation Engineering

- aXiom team
- Open Source, reusable code
- Rapid concept demonstrations
- Service Oriented Architectures
- Legacy systems – net-centric
- Semantics and ontologies
- Agile development
- Virtual Machines
- Cloud integration

MAJOR PROJECTS:

- Marine Corp ISR
  - Distributed Common Ground Support (DCGS-MC)
- Marine Corp Logistics
  - Global Combat Support System (GCSS-MC)
- ASN RDAIS
  - Navy Acquisitions
- OSD AT&L (ARA)
  - OSD Acquisition Visibility
- TRANSCOM
  - Common Development Environment
- AIR MOBILITY COMMAND
  - Air Crew Scheduling & Mgmt
- Veterans Affairs (VA)
  - VBMS, iEHR
- DISA
  - GIG Enterprise Services
- Command IT Programs
  - Logistics, Data Center, GafG

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Operational Engineering

- Service-Oriented Architectures (SOA)
- Knowledge Management (KM)
- Business Process Engineering (BPE)
- Collaborative Technologies
- Enterprise Technologies
- CONOPS Development
- Decision Support Systems
- Web Portal Development
- C2 Capability Development
- Operations Research
- Agile Methodologies

MAJOR PROJECTS:

- Marine Corp ISR
  - Distributed Common Ground Support (DCGS-MC)
- Marine Air-Ground Task Force (MAGTF) C3 Solutions
  - Global Combat Support System (GCSS-MC)
  - Joint EOD Decision Support System (DSS) Engineering Agent (PMS-408/EOD)
  - DoD Explosive Safety Board (DDESB) Engineering Support
- COCOMs and OPS Centers
  - USAFRICOM, USEUCOM
  - Knowledge Management and Collaborative Information Environment (CIE) Development
- Air Traffic Control (ATC)
- Vehicular Integration Solutions
- Command IT Programs
  - Google Apps for Gov (GaaF)
Software Architecture Design

- Engineering design
- Data Engineering
- Application development
- System Integration
- Deployment, sustainment, program management and life cycle management
- System administration
- Facility support

**MAJOR PROJECTS:**

- **TacMobile**
  - Global Command & Controls System – Maritime (GCCS-M)
  - Maritime Patrol Aircraft (P-3C & P-8A)
- **Broad Area Maritime Surveillance – Demonstrator (BAMS-D)**
  - Ground C2
  - Tactical Auxiliary Ground Station (TAGS)
- **ONR**
  - Retrospective Analysis and Post Flight Inspection Database (RAPIDS)
Our Demands

Knowledge, Skills and Abilities (KSAs):

- Agile Development Best Practices (e.g., SCRUM)
- Web Development, Technologies & Standards (e.g., HTML5, Java, CSS, AJAX, etc…)
- Service Oriented Architecture (SOA)
- JAVA, Flash/Flex, Red Hat, Jboss, HTML, Oracle, SQL, etc..
- Identity Management / LDAP
- Cross-Platform Interoperability (e.g., different hdw/OS/browsers/etc…)
- VMWare / Virtualization
- Knowledge Management (KM) / Business Process Engineering (BPE)
- Cloud Computing / Cloud Integration(e.g., CCO and/or CCA Certification)
  - Infrastructure as a Service (IaaS) (e.g., Amazon)
  - Platform as a Service (PaaS) (e.g., Google Apps Engine)
  - Software as a Service (SaaS) (e.g., Google Apps for Business/Government)
- Mobile Apps Development
- Publish / Subscribe

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Enterprise Data Systems Engineering

54200
Enterprise Data Systems Engineering

Top Tech

- Mobile Platforms
  - Android
  - iOS
- Advanced Architecture Infrastructure
  - Service Oriented Architecture
  - Virtualization
  - Cloud Based Infrastructure
- Knowledge Management
  - Distributed Data Stores
  - Data Mining

Engineering and Process Methodologies

- CMMI
- Agile / SCRUM
- LSS

Major Customers

- Navy
  - Commander Navy Installations Command (CNIC)
  - Consolidated Afloat Networks and Enterprise Services (CANES)
  - Afloat Core Service (ACS)
  - Fleet Forces Command
  - Office of Naval Research (ONR)
  - Navy Medicine
- Marine Corp
  - Global Combat Support System
  - Digital Integration Facility
  - Theater Medical Information Program
- Veterans Affairs (VA)
  - VBMS, iEHR
- DARPA
  - UAV Forge

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Our Demands

▼ Data engineering & Data Warehousing
- Data Architecture Planning and Design
- Normalization of Data
- Data-Centric Performance evaluation and enhancement (Strong SQL development skill as well as platform configuration “tuning”)

▼ Application & Systems Development
- Multi-Platform Database Administration - Oracle & SQL Server Expertise
- Multi-Platform "Middleware" Expertise - Oracle (OC4J, Weblogic) & Red Hat (JBoss)
- Mobile Computing Development (iOS, Android framework)

▼ Architecture / Infrastructure Installation & Configuration
- LDAP & Active Directory for systems (permissions and group settings)
- SharePoint (installation, configuration, and development)
- Server configuration and port exceptions
- Data system port exception requirements for database and applications
- SAN/NAS and/or media application backup and disaster recovery
- Build and configure virtual environments
- Linux/Windows Monitoring & Performance Tuning

▼ Security Requirements
- Current Secret or higher
- Cyber Security Certifications (e.g. Security+)
Questions