Department 50
Cybersecure Machinery Control Systems and Networks Department Overview

Presented to:

NSWCPD Industry Day

Presented by:

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Dept 50 Acquisition Manager

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MISSION:
The Cybersecure Machinery Controls Systems & Networks Department is the principal provider of life cycle management (LCM) and full spectrum engineering support for cybersecure surface ship machinery information, sensors and control systems; mission-critical networks; steering and integrated bridge/navigation systems.

VISION:
We are the Navy's leader for integrated cybersecure surface ship machinery information, sensors and control systems; mission-critical networks; steering and integrated bridge/navigation systems.
Cybersecure HM&E Control Systems & Networks – Department 50
Expanding the Advantage

- Machinery Controls LCM
- New Acquisition Support
- ISEA and SSA Support
- Modernization Support
- GOTS/Navy owned control systems development

- HM&E Cybersecurity
- Installing Non-Permanent Changes (NPCs) & developing SCDs for SA and Boundary Defense
- Cyber-safe Program Development/Execution
- CSWF

- Electronic Damage Control Plotting
- Advanced Damage Control System (ADCS)
- Damage/Casualty Control Automation
- Advanced Hardware Integration

- Monitoring & Condition Assessment Systems
- Enterprise Remote Monitoring (eRM)
- Integrated Condition Assessment System (ICAS)
- Consolidated Machinery Assessment System (CMAS)

- Auxiliary Machinery Control Systems
- Fluid & Steam Systems Automation
- Thermal Management
- Smart Valve Actuators
- Tank Level Indicators (TLIs)
- Automated Heat Stress System (AHSS)

- CVN Networks, Navigation & Ship Controls
- CVN Ship/Steering Controls, Displays and Interfaces
- Navigation Distribution Systems
- Digital Ship Control System (SCS) RDT&E

- Mission Critical Interior Communications (IC) Data Networks
- HM&E/IC Data Networks/Networks Infrastructure
- USQ-82 GEDMS/FODMS/DMS/SDMS
- Fiber Optic Cable Topology Standards & Qualification

- Ships Navigation & Integration Bridge Systems
- Navigation Systems
- HM&E Certification
- Integrated Bridge Controls
- Electronic Charting Display Information

- OBT & Sim/Stim Capabilities
- Object-oriented, C++ machinery models
- Simulated control system (ship specific)
- Software-Based Machinery Plant Trainers
- Machinery Simulations

Dept 50 is the Navy’s leader for integrated cybersecure surface ship machinery information, sensors and control systems; mission-critical networks; steering and integrated bridge/navigation systems.
## Department 50 Anticipated Competitive Contract Requirements

<table>
<thead>
<tr>
<th>Brief Description</th>
<th>ROM</th>
<th>Anticipated Announcement Date (FY/QTR)</th>
<th>Requiring Technical Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMF and Cyber Security Support</td>
<td>$30M-$40M</td>
<td>FY21Q1</td>
<td>52</td>
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<tr>
<td>MCS DDG 1000 and LSD 41 Class ships; Damage Control for all surface fleet ships</td>
<td>$15M-$20M</td>
<td>FY21/Q1</td>
<td>51</td>
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<tr>
<td>MCS for LCS, SSC and INLS vessels</td>
<td>$15M-$20M</td>
<td>FY21/Q1</td>
<td>51</td>
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<tr>
<td>Navigation and IBS Engineering Support</td>
<td>$25M - $30M</td>
<td>FY21/Q1</td>
<td>52</td>
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<tr>
<td>Mission Critical Interior Communication HM&amp;E Networks</td>
<td>$10M-$15M</td>
<td>FY21/Q2</td>
<td>52</td>
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<tr>
<td>Navy ECDIS HW</td>
<td>$40M-$50M</td>
<td>FY21/Q2</td>
<td>52</td>
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THANK YOU!